



2020

Edition 23

Sponsored by



IT & Technology

targetjobs.co.uk/it

A large, abstract graphic composed of various colored triangles and polygons in shades of blue, purple, red, and grey, arranged in a dynamic, upward-pointing composition. The text "DISCOVER PLAN SUCCEED" is overlaid on this graphic in white, bold, uppercase letters.

DISCOVER
PLAN
SUCCEED



Experience the commitment®

Bringing the next gen in to STEM. That's top of our agenda.

We want to encourage the best and brightest to build their careers with us. That's why we're investing heavily in the talents of tomorrow's thought leaders.

To learn more about the opportunities available at CGI, visit

cgi-group.co.uk/careers

Be part
of our story.

#ExperienceCGI





Editor's column


.....

The reach of the IT and technology sector has never been wider, and it is used throughout all industries. As new technologies arise and become part of everyday life, new jobs and career routes are opening up. Plus, more employers are actively looking to employ students who haven't studied a science, technology, engineering and mathematics (STEM) degree at university. It's an exciting time to be starting your job hunt, and this 23rd edition of *TARGETjobs IT & Technology* is here to guide you through it.

- Learn more about the different roles you could have in the technology sector on pages 67–74. While you're there, don't miss our interview with Jack Sawyer, where he talks in depth about life as a software engineer, on page 62.
- Make sure you've got the skills that employers are looking for, including programming languages (page 24) and soft skills (page 22). We've also broken down the research you need to do before you apply (page 28).
- Turn to pages 38–51 for advice on putting together a strong application and what to expect at interviews and assessment centres.
- Want a career in tech, but not studying computer science? Never fear, we have advice on how you can enter the sector on pages 8–9. Then, take a read of our profile of Ben Montgomery, who turned his economics degree into a career as a developer (pages 10–11).

Wherever you are in your job hunt and whatever your degree background or experience level, this publication and targetjobs.co.uk/it are your essential guides to this sector. Technology careers are for everyone, and TARGETjobs is here to help you start yours.

Ashley, Editor

 @TjobsEng_Tech



- 5 *Welcome to IT & technology*
- 15 *Internships & work experience*
- 21 *How to get hired*
- 37 *Applications & interviews*
- 55 *Further study*
- 61 *Roles & sectors*
- 77 *Employers who want to hear from you*

Digital fix

Register with targetjobs.co.uk to:

- get job and internship alerts
- be headhunted
- save your favourite roles and advice to your personal dashboard.



Why work in IT & technology?

The IT and technology sector is a fast-moving and exciting place to start your graduate career. We asked recruiters for their top reasons why a career in tech is for you.

1. You're in demand

Technology is a growing part of people's lives, in and out of work, and this trend isn't going to slow down or stop anytime soon.

'If you look at the key skills sets that are in demand at the moment, technology, and the ability to use technology to be productive and build solutions, is a top priority. Even roles that wouldn't traditionally be thought of as a "technical job" are starting to use technical skills, such as coding.'

Iain McFadyen, global graduate recruiting manager, **London Stock Exchange Group**

2. IT's evolving... and you can too

The blockchains, internet of things and neural networks of today will soon become part of everyday life, to be replaced by the new developments. If you're motivated by change and opportunities to learn, technology is for you.

'The tech sector is fast-paced, ever-evolving and provides great career opportunities for people who like to solve problems, want meaningful work with lots of variety and to continually develop their skills.'

Kirsty Smith, graduate and apprentice recruitment manager, **Capgemini**

3. Pay and perks to shout about

Graduate salaries in the IT and technology sector tend to be quite good. The students who expressed an interest in IT and technology employers in The Graduate Survey 2019* expected to earn just under £29,000 after graduation – a realistic figure for larger tech employers. IT and tech employers are also at the forefront when it comes to workplace perks. Free food, sleep pods, gym memberships and work/life balance initiatives are commonplace in larger technology organisations.

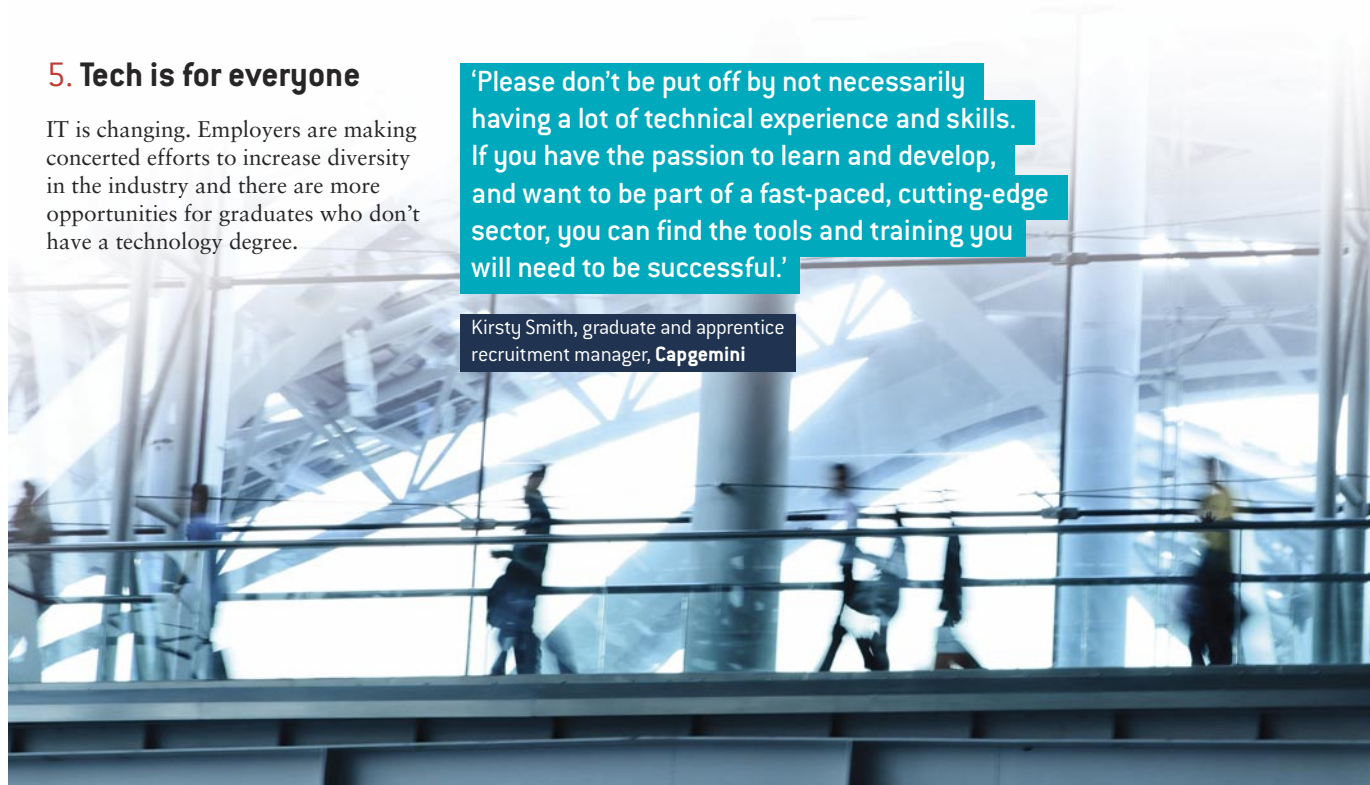
*Conducted by Trendence UK, a GTI business

5. Tech is for everyone

IT is changing. Employers are making concerted efforts to increase diversity in the industry and there are more opportunities for graduates who don't have a technology degree.

'Please don't be put off by not necessarily having a lot of technical experience and skills. If you have the passion to learn and develop, and want to be part of a fast-paced, cutting-edge sector, you can find the tools and training you will need to be successful.'

Kirsty Smith, graduate and apprentice recruitment manager, **Capgemini**



4. IT roles are everywhere

'Working in IT puts you at the core of any industry and allows you to develop a world view that can be applied to any sector or business. IT isn't a new industry; it's a way of creating new industries and hugely increasing the output of old ones.'

Francesca White, technology graduate recruiter,
Deutsche Bank

'The sector is fast-growing and complex. You get to solve some of the biggest (and most publicised) problems of our time. It is a sector that underpins every aspect of modern-day life.'

A technology recruiter at MI5

'The work often spans various technical disciplines and has the potential to have far-reaching implications. Nowadays, an increasing proportion of research is being undertaken in new and exciting facets of science and technology, such as artificial intelligence, cyber and space.'

James Dean, senior aerospace engineer,
DSTL

Students' top ten tech employers

74,746 voted for their favourite graduate recruiters in The Graduate Survey 2019, conducted by Trendence UK, a GTI business. Here are their favourite IT and technology employers.

Google

1

Google

amazon

2

Amazon

Microsoft

3

Microsoft

SAMSUNG

4

Samsung



5

Apple

IBM

6

IBM

Bloomberg

7

Bloomberg

sky

8

Sky

accenture

9

Accenture

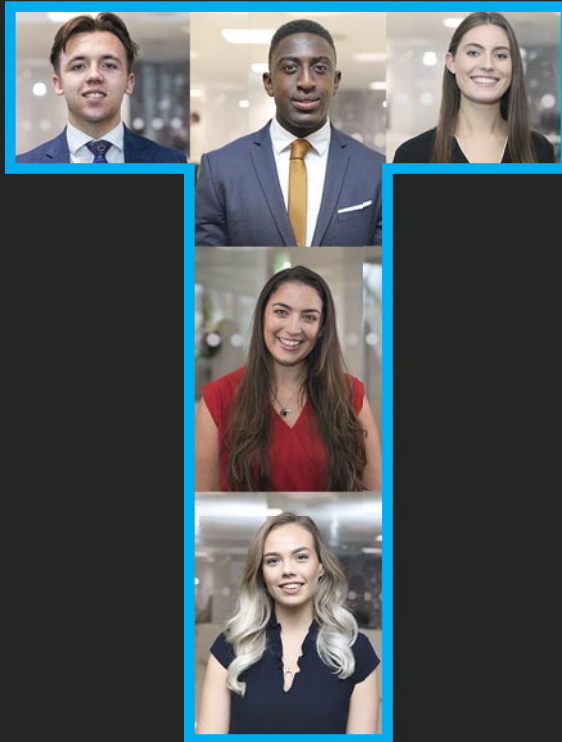


10

Rockstar

Find out more in *The UK 300 2019/2020*

YOU CAN DO



Award-winning training to the latest industry standards

Work with some of the world's leading brands

Ongoing career development and support

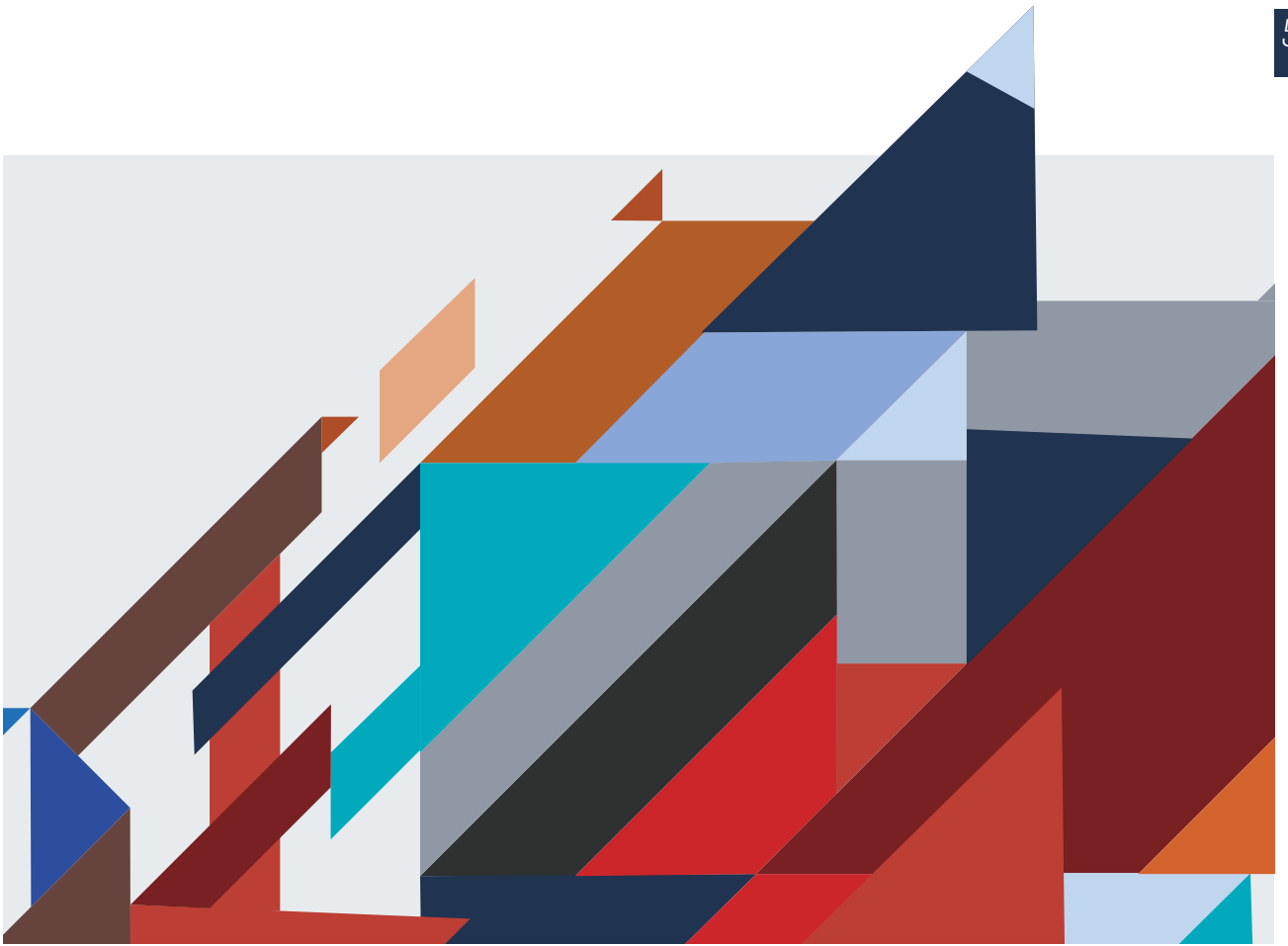
2 years + commercial experience

Join the team to become an IT
or Business Consultant now.

Apply at fdmgroup.com/targetjobs

#FDMcareers | fdmgroup.com





Welcome to IT & technology

IN THIS SECTION

- 6 Browse your options in tech
- 8 No computer science degree? No problem
- 10 From economics student to software developer
- 12 Your career action plan

Browse your options in tech

The IT and technology industry is made up of a wide range of employers that operate in all types of business sectors.

Understanding this space can help you identify a good assortment of companies that would suit your skills set, career aims and lifestyle. Plus, you'll impress graduate recruiters much more if you can show you have considered your options.

Know what you want from your job

With a wide range of options on offer, you need to know how to search for the right IT employer and career. Get started by considering two key factors:

- 1. What type of work would you like to do?** Do you want to do loads of coding or none at all, but still use your technical reasoning? Would you prefer to be business focused, or enjoy the best of both the technology and commercial worlds? Do you want to be troubleshooting daily, or working on projects with longer deadlines? If you're not sure that you want to focus on one particular area from the outset, explore employers offering graduate programmes that allow you to work in different roles or business areas before you specialise.
- 2. How mobile are you prepared to be?** Technology careers vary widely in

'It's essential that you think about the requirements of the role and what the employer wants from you as an individual.'

terms of how mobile you need to be. If you're looking to become a consultant, expect to spend your working week wherever your current client is based, maybe catching a plane home for the weekend. Likewise, graduates in IT services may be required to spend the week on their clients' premises. In contrast, if you choose a very technical role such as developer or software tester, you're likely to spend the vast majority of your time in the same office with perhaps the odd trip out. Business and management-focused roles (eg project management) tend to fall somewhere between the two – they often require a degree of travel but this can vary depending upon the

precise role and company. Try to assess honestly how mobile you are prepared to be. Several IT professionals have previously told TARGETjobs *IT & Technology* that travel and spending weeknights in hotels were their least favourite aspects of the job. Regular travel may seem glam at the start, but are you really happy to put week-time evening pursuits on hold?

Know what the employer wants from you

As you begin to establish what you want from your job and the type of organisation you'd like to work for, it's essential that you think about the requirements of the role and what the employer wants from you as an individual. This will help you to determine whether you are truly a good match for the job and your chosen employer. It'll also make apparent the 'extra' skills and attributes that you'll need to bring to the table, as some

students mistakenly assume they'll be able to walk into any graduate IT job because they have a computer science degree, for example.

Recruiters report that students applying for graduate jobs in technology roles are particular culprits for not taking applications and employability seriously enough.

We asked final-year students interested in careers in the IT & technology sector when they started researching graduate careers: 46.4% said they had left it until the final year of their course*.

Even if you've studied computer science and have been planning your career from day one of university,

Types of IT employer

Large IT employers include technology solutions providers, IT services organisations, telecoms companies (technology and service providers) and technology consultancies. Other significant IT employers include finance and professional services firms, such as investment banks, retail banks, investment management firms, insurers and accountancy firms.

Retail, media, games development and public services organisations as well as engineering firms are also major recruiters in the IT employer landscape. And there are many smaller technology employers, such as specialist software companies and niche consultancies. But, potentially, you could start your IT career in any type of business.

there are still some extra steps you can take to give yourself the best chance of securing a graduate job with your chosen company.

During your job hunt, make sure you think about the employers' needs – not only your own. Remember that:

- Demand for technologists is greater at experienced-hire level than entry level.
- IT recruiters tend to have requirements that go beyond what's taught in lectures.
- Many major players now demand at least a 2.1 degree, and in some cases a minimum number of UCAS points.
- Even if you've got the right skills, you still need to sell your understanding of and enthusiasm for a particular employer.

How to research sectors and employers

Read through the business sector overviews on pages 67–74. These will give you a snapshot of the key technology sectors, and there are more online at targetjobs.co.uk/it.

On page 64 you can find descriptions of ten of the most typical roles in IT. If you are considering jobs with smaller firms, read up on how to find roles with them on page 30.

Attend careers events, such as TARGETjobs' *IT's not just for the boys!* and Be Inmarsat, to find out about areas of IT from current employees. Once you are ready to start looking at specific employers, turn to the A–Z of employers, which starts on page 77. You can also find more employer profiles and immediate graduate vacancies online at targetjobs.co.uk/it. @

*The Graduate Survey 2019, conducted by Trendence UK, a GTI business

No computer science degree? No problem

You can still start a graduate career in IT and technology if you're not studying computer science or an IT-related subject at university. 'We take graduates from any background,' says Gillian Bray, HR manager at **Alfa Financial Software Limited**, in conversation with **TARGETjobs**. 'Most of our graduates are from a STEM (science, technology, engineering and mathematics) background, such as physics or engineering. Only a small proportion of our intake has come from a computer science or similar degree. We always have a small number of graduates with a non-STEM background, but it is important that these people are able to convince us they have the desire and ability to learn.'

Why consider this route?

In fact, there are advantages to going into IT with an uncharacteristic background. If you think about it, different degree subjects tend to

develop different skills sets and ways of thinking. For example, a music graduate is likely to have strong pattern recognition skills, while an English graduate may have strong analytical skills and be able to spot mistakes.

Technology skills are also applicable to every sector and industry. Choosing a technical career does not rule out working in a non-STEM-related industry. Starting your career with a tech company can set you up for future career success. Gillian explains: 'Technology is the future. It's such an essential skill to have and will give them excellent career choices in the future.'

Many companies appreciate that hiring graduates from a range of degree backgrounds brings its own benefits. 'We work in teams to find solutions to problems. If a team had six computer scientists, we would likely have six similar solutions,'

Gillian explains. 'If we have a range of past experiences and thought processes, we are more likely to find the best solution.' Businesses can generate more ideas and outsource less if they have a diverse workforce, as opposed to everyone having the same skills set.

What training do graduates receive?

Having the right technical skills as a graduate is still essential, but employers who take on non-IT graduates are willing and prepared to invest time in training you. 'All graduates go through the same first ten weeks of induction. This allows new joiners to go at an appropriate speed and have a safe environment to ask questions and have the right level of support before moving onto a project,' says Gillian.

How employers choose to train their graduates varies but usually involves a combination of 'classroom' learning and working on projects. Gillian describes how graduate



'If candidates don't have an IT degree, they need to give us confidence that they will be able to pick up software development and enjoy that part of the job.'

developers are trained at Alfa: 'We teach all our graduates how to code in Java during the ten-week induction. There are four weeks of classroom training, followed by six weeks on a hybrid team where we have one trainer to every two graduates.'

What are employers looking for?

Entry requirements vary from employer to employer so it's important that you look at individual job descriptions for each job you apply to. Alfa asks for all applicants to have a 2.1 at degree, for example.

Crucially, pay attention to the skills the employer wants to see evidence of. 'The most important skills we look for are problem solving, collaboration, innovation and teamworking,' says Gillian. 'Having an inquisitive mind is also crucial.' These skills don't have to be developed through technology-related experiences, you may have already picked them up through your degree course, extracurricular activities or other work experience, such as part-time jobs. Don't neglect these experiences when you're looking for evidence of skills to mention in applications and interviews. Find out more about the soft skills that IT recruiters look for on page 22.


Even if you've not studied a STEM-subject at university, it's still important that you show recruiters that you have an interest in, and a passion for, technology. 'If candidates don't have an IT degree, they need to give us confidence that they will be able to pick up software development and enjoy that part of the job,' explains Gillian. 'Therefore we would be looking for that person to have tried to learn the basics through one of the

many avenues available.' Being able to point to classes, online courses, events, volunteering or work experience that show you are taking opportunities to learn more about technology will help prove to recruiters that you are the right person for the job. Take a look at page 24 for more ways that you can start growing your coding skills. Gillian reassures: 'it's definitely a good thing to have some experience of software development before starting with Alfa as it makes those early months a little easier, but it's not essential.'

Confirm your choices with work experience

Keep a look out for technology-related internships and work experience opportunities that accept applications from non-STEM students. 'Once they have learned the basics, research internships or work experience options,' advises Gillian. Not only will a tech internship on your CV show recruiters that you're seriously considering a career in IT, work experience will help you to confirm whether a technology graduate career is the right choice for you. 🎯





From economics student to software developer

Despite not having any experience of coding, Ben Montgomery started a career as a developer that has taken him around the world. He shares some of his challenges, highlights and advice so far.

Ben's career timeline

2012–2017

Carried out various part-time jobs during summer holidays, including volunteering, working in a bar and in a café.

2016

Completed a summer internship with property firm CBRE.

2016–2017

Worked in Windsor Racecourse's events team over summers.

2017

Graduated from the University of Bath with a degree in economics.

2018

Started working as a graduate software developer at TPP.

A career in technology wasn't something that I initially considered. When it came time to apply for university, I chose to study economics: I was interested in pursuing it beyond A level and the variety of modules on offer, from mathematics to international development and health economics, appealed to me. I thought it would be good to study something that could be broadly useful across lots of industries.

It wasn't until my final year of university that I knew what I wanted to do for a career. In my second year I looked into careers in the property sector, but it was never really my 'ambition' to work in that area. I even

'I realised that I still had a very 'technical' way of thinking: I enjoyed thinking about problems and looking for different ways to apply my skills.'

carried out an internship at property firm CBRE. While I enjoyed my time there and learned a lot, it also helped me to understand that a career in property was not for me.

It was when I stumbled across representatives from TPP at a careers fair that I first considered a career in technology. I realised that I still had a very 'technical' way of thinking: I enjoyed thinking about problems and looking for different ways to apply my skills and solve problems. I left the job fair with a new career path and started researching more technical roles and jobs. Eventually, I came full circle and applied for TPP.

Proving a passion for tech

The application process was relatively straightforward. After sending a CV and covering letter, I was invited to complete an aptitude test and two interviews. The interviews were fairly

relaxed and I never felt that I had to compete with tech graduates. Instead, I tried to convey my passion for technology. Not only do I think that a passion for your work is essential for job satisfaction and wellbeing, but demonstrating this during interviews helped me to prove that, even though I didn't have any experience of technology, I would be excited to learn as much as I could going forward.

Picking up programming

I joined TPP in January 2018 as a software developer. My main responsibilities are designing, writing and implementing new code. A typical day in the office begins with a short meeting with my team where we discuss our current projects, and the rest of the day will be spent writing code. The teams are quite fluid, so I quite often help out on other projects.

Unlike many STEM (science, technology, engineering and mathematics) students, I had no experience of writing code when I first started. In my first week I was put in a team of developers and began coding (with a lot of help). This approach was quite full-on and, to be honest, was quite scary, but feeling myself improve and able to do more on my own was definitely satisfying. Having to ask a lot of questions felt a bit strange to begin with, but it soon became second nature. One thing that did come as a surprise was the level of creativity we get to express when designing and writing code.

One key skill from my economics degree that I use every day as a software developer is problem solving and looking at the 'bigger picture'. It's a common trap to get caught up in minor details, but the ability to step back and analyse problems from a high level is a huge help in day-to-day life in the IT sector. I'd advise any non-tech students interested in technology roles to think closely about how your skills could apply. For example, artistic and creative skills easily translate to strong attention to detail and inventive methods of solving technical problems.

From tangible change to trips abroad

My working environment is fairly relaxed, but the job isn't without

stress. TPP is a healthcare IT company, which means that we sometimes have tight deadlines and always need to make patient security our number one priority. However, it also means that the code I write can directly improve the lives of clinicians and patients in tangible ways. It's nice knowing we're making a difference, particularly when we get feedback from users.

'One thing that did come as a surprise was the level of creativity we get to express when designing and writing code.'

Despite being a developer, I'm not chained to a desk. I am currently working on tailoring our products to the requirements of various countries. I've been on a couple of trips to China and South East Asia to scope out how our system would fit into their model of healthcare. As opportunities for international business increases, trips are bound to become more common.

I've also been able to travel for training courses and company events abroad. For the last few years, these have been sailing trips to Croatia and the Caribbean, which were an incredible experience (sun, sea and cocktails), and in January 2020 we're going to the Alps for a skiing trip.

Give it a go!

Since starting work in technology, without a doubt the biggest thing I've learned is how to code. It's a hugely valuable skill that will continue to be useful throughout my career. If you're a non-STEM student or graduate and you think that a career in technology could be for you, my advice is simple: give it a go! Look carefully and you can find a job that's right for you. If you enjoy solving problems and puzzles, and find gadgets and new tech fascinating, then a career in this sector could well be a perfect match for you. ☺

Your career action plan

Non-finalists

Final-year students

2019

2020

Autumn

- Apply for summer internships or placement years for 2020. Some employers won't take students until their penultimate year. Application deadlines can be before Christmas and many recruiters will not wait till the closing date to start filling places.
- Grow your skills by joining a university club or society. Committee or leadership positions will develop valuable transferable skills. You can also show off your passion for IT and learn technical skills through extracurricular activities – find out more on page 34.
- Register on [targetjobs.co.uk](https://www.targetjobs.co.uk) to receive job alerts, save your favourite jobs and internships to your personal dashboard and maybe even get headhunted if you upload your CV.

- Apply for graduate jobs and schemes. Some have application deadlines before Christmas, but apply early – many schemes will start filling places as they receive impressive applications.
- If you want to pursue postgraduate study, applying in the autumn term is ideal. Popular courses fill up quickly and for some universities you need to accept a place before you can apply for funding. Funding deadlines vary widely so getting onto a course earlier may give you more options. Learn more about your postgrad options on page 56.

Autumn

Winter

- Some internship and placement years will still be open for applications. If you've not secured work experience yet, don't miss out on applying.
- Do a skills audit. Make a list of the technical and transferable skills you already have and where you gained them (eg personal projects, group work, volunteering). Use this publication to find out where your skills gaps are and actively look for opportunities to work on them.

Spring

- Got any choice as to your modules or projects for next academic year? If so, find out which options would tie in best with the work of employers who interest you. You can always phone the company's recruitment team if this information isn't provided on its website.
- No luck finding an internship? If you want a trip abroad this summer, organising some independent travel is likely to develop your planning and problem-solving skills, which employers will like. It may also provide job interview-appropriate experiences to talk about.
- Investigate other options for the summer vacation. Top of your list should be technology-related experience such as a temp job in IT support or a few days of work shadowing. However, any job or voluntary role will help you to develop transferable skills.

Summer

- Doing an internship, job or voluntary role? Keep a record of what you do, who you work with, any improvements you make and any challenges you help overcome. This will help with applications and interviews later on.
- If you've not had any luck finding work experience, consider initiating your own IT project for the summer – could you design and develop a website, app or database that would be useful to you or your family and friends? This is also a great way to gain evidence of your passion for tech.
- Research the employers that interest you for internships or graduate jobs and check when their applications open so you are ready to apply in the autumn.

- Keep applying for graduate schemes. Some will accept applications into the new year or have 'open' deadlines (though they will still close once they've recruited enough people).
- Make any remaining applications for postgraduate study or funding.
- Prepare for interviews and assessment centres. Ensure you factor in time for assessment centres and interviews alongside your university work. Have a respectable interview outfit at the ready. Turn to pages 45–51 for more interview and assessment centre tips.

- Ensure you do your absolute best in your exams – take a break from job hunting if needs be. With a 2.1 you will be eligible to apply for many more jobs than with a 2.2.

- Look out for immediate vacancies with small employers that might pop up. You can read about the benefits of starting your career small on page 30.
- Don't neglect internship opportunities just because you're about to graduate. If you still feel like you need to gain experience before applying for jobs, keep an eye out on TARGETjobs or check organisations like Step (step.org.uk).
- Got a job? Congratulations! Give yourself a decent break but make sure you're prepared for work so as to make a good impression from day one.

Winter

Spring

Summer

#LGHTHS_ITjobs

#wellknownbrands

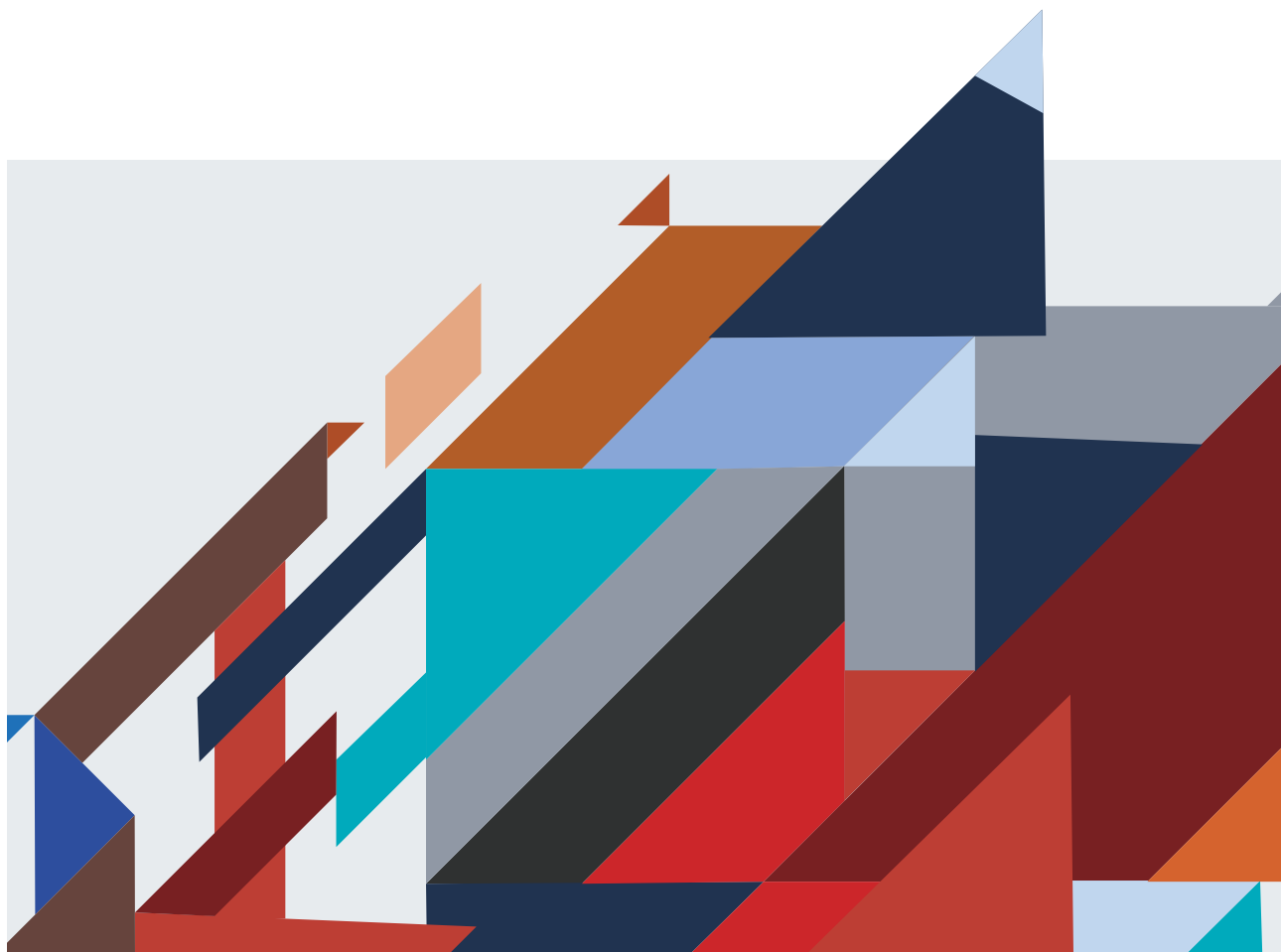
#working

Join us for the
Lighthouse Experience
personal development, challenges, team work,
training and travel.



Apply at: www.lighthousesystems.com/careers

 Lighthouse



Internships and work experience

IN THIS SECTION

- 16 Your tech work experience options
- 18 The benefits of a placement year

**Your tech work
experience options**



No matter how outstanding your results, a degree, whether it's in a technology-related discipline or not, probably won't be enough for you to secure a graduate job. That's where **work experience** comes in. There are many different types of work experience that you can gain to give your graduate tech job hunt a boost.

For the best selection of internships and placements, it's best to apply in the autumn term for roles beginning the following summer. Some roles, however, will remain open throughout the spring and into the summer. Other forms of work experience can pop up throughout the year.

Internships

These typically last between six and twelve weeks and are designed to fit into the summer vacation between your penultimate and final years at university. Some internships might also be open to applications from first-year students.

Internships tend to be paid, structured schemes at larger employers where you will have a defined role for the duration of the scheme. You will have the opportunity to experience working life as a tech professional and develop your technical skills in a practical setting.

Placement years

For a really in-depth experience of what your career could be like, you could do an industrial placement. This involves working at an employer full time for twelve months and is intended to fit into a sandwich degree course. However, if you think you'd benefit from a placement year, you may be able to take a year out from your degree with your university's permission. Turn to page 18 for more on placement years.

First-year schemes

An increasing number of employers (especially in the finance and professional services industries) are



Don't miss:
[targetjobs.co.uk/
internships](https://targetjobs.co.uk/internships)
for more help and
opportunities.

now offering short work experience schemes for first-year students. These are also known as insight weeks or open days. They typically last for either a day or a week and offer first-year students the opportunity to get an initial taste of technology careers and meet IT professionals. Some employers also run similar schemes for specific groups, such as for women interested in tech careers.

DID YOU KNOW?

You can also develop your tech and soft skills through **extracurricular activities** – turn to page 22 to find out more.

IT temp jobs

Small and medium-sized enterprises (or SMEs) sometimes have paid temporary positions suitable for students that aren't labelled as 'internships'. These may be a good choice if you've not been able to secure a more structured internship scheme. You may be able to find these jobs through a temping agency, your university careers service or through approaching an employer directly with

Why do an internship or placement?

- Develop your technical, business and interpersonal skills in a workplace setting.
- Explore your career options.
- Gather evidence of your interest in a career.
- Build a network of industry contacts.
- Practise for applications and interviews.
- Earn money and experience the perks that employers offer.

a speculative application. Find out more about working at an SME on page 30.

Work shadowing

While it might not be as impressive in a graduate job application as an internship, work shadowing is a way to show employers that you are actively exploring IT careers. Work shadowing is a form of informal work experience where you will observe a professional doing their day-to-day job, and will likely be unpaid. You might be able to find work-shadowing opportunities by approaching local employers or through your network, friend and family connections, or your university careers service.

Part-time jobs and non-tech experience

You don't need to focus all of your work experience attention on the tech sector. A part-time job or an internship in another sector are sure-fire ways to develop your **soft skills** and workplace experience. While all experience will be a benefit to your CV, any job that is client facing or involves explaining technical concepts to non-technical people will be particularly useful for many tech careers. See what other soft skills you'll need on page 22. ☺

Getting the most out of work experience

Put the most into your internship or placement to get the most out. If you are particularly impressive, your employer could even fast-track you through the application process for graduate jobs – for example, by inviting you to attend an assessment centre straight away.

- Be seen as a proactive team member – for example, if you report a problem, try to also suggest a solution.
- Request feedback on the work you do and on your overall performance.
- Put yourself forward for opportunities.
- Keep notes of what you do and who for – these will serve as a helpful reminder for future applications.
- Don't just hang out with other interns – chat to people from across the business and make the most of social events.

The benefits of a placement year

Completing a placement year (or a 'year in industry') is a way for students to significantly improve their prospects after graduation: they'll gain practical workplace experience and have the opportunity to get their foot in the employers' doors before the competition. We spoke to Rebecca Cackett, student recruitment manager at CGI, to find out what exactly is giving placement students the edge in the graduate job hunt.

Gain experience that employers like

Placements are opportunities to work full time for a business for 10 to 12 months and are typically completed between the second and final year of your undergraduate degree.

'A placement gives you extra experience to add to your CV that makes you stand out,' says Rebecca. 'Other experiences such as part-time jobs are good, but industry experience can be even better.' This is because placements allow you to take skills learned on your degree and find a real-life application for them. Rebecca gives an example: 'A student applying to us might say that they learned about Java in group work at university, which is great. Even better is when they can describe how they wrote Java code for a client's system during their placement year.'

Other recruiters told TARGETjobs that graduates who have done placements tend to be more at ease in a business environment, and may show a particularly good work ethic during their final year of university.

Find out what you want to do

You don't need to have a fixed idea of your career plan when you go on placement. 'It's an opportunity to get a feel for the company and industry,' explains Rebecca. 'It's a year out of university to use your skills in the real world and think seriously about what you want to do as a future career.'

Get a job lined up for graduation

The big draw of placements is that they can lead to a job offer for after your final year. Rebecca describes how



it has worked in recent years at CGI: 'While student placements enable you to experience what it's like in a job, industry and employer, one of *our* aims is to identify future talent. There is the real possibility that we will offer graduate positions before students leave their placement.'

A job offer certainly isn't guaranteed, though. Getting one depends both on your performance and the needs of the business – your placement employer may not yet know how many graduates it can afford to

take on or may prefer you to re-apply when graduate applications open. But even if you don't end up with a job offer, your time on placement should equip you with plenty to talk about when applying to other employers during your final year. Rebecca explains how best to sell your experience: 'Applicants with placement experience from other companies and industries need to show us what they have learned and how this can apply to working for our business. For example, they might have developed communication skills at client meetings that would be applicable to our client-facing graduate roles.'

What if I'm not on a sandwich course?

This doesn't usually mean you can't do a placement year. In the first instance talk to your course tutor about any opportunities you want to apply for and see if you could convert to the sandwich course or be allowed to complete your final year a year later. Universities always want to boost their students' employability and will usually encourage even an unplanned placement, but the earlier in your second year that you can arrange this, the better. ☺

'It's an opportunity to get a feel for the company and industry... It's a year out of university to use your skills in the real world and think seriously about what you want to do as a future career.'


Looking to make a difference?
We're looking for you

From stealth submarines to supersonic fighter jets, radar technology to cyber security, we design and build state-of-the-art defence technology that protects people all over the world.

If you're looking for opportunities in engineering, project management, technology and finance, we're looking for graduates with passion, commitment and a desire to make a difference.

Apply your talent **where it counts.**

baesystems.com/graduates

 BAE Systems Graduates
 @BAESGraduates



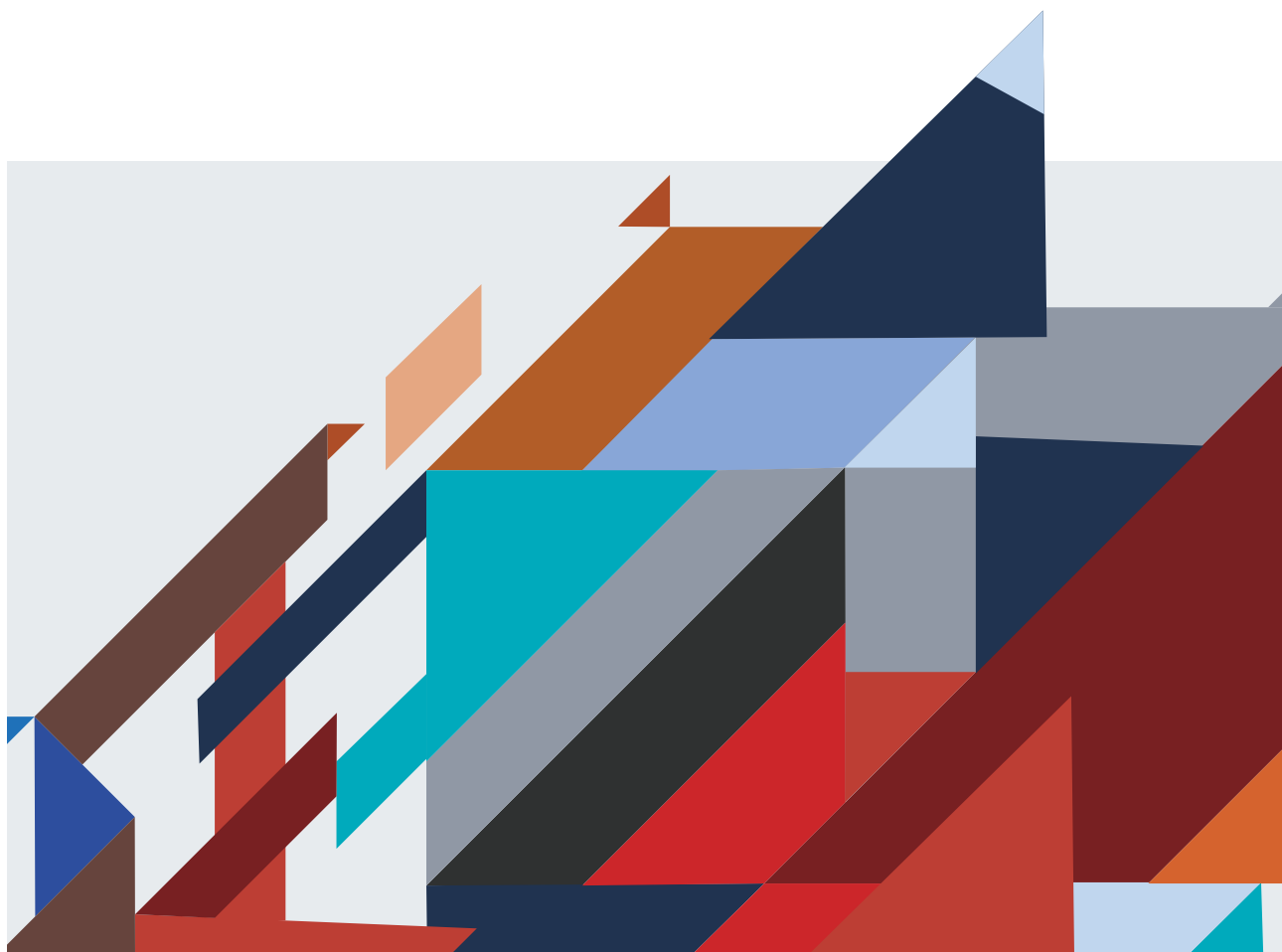
'Anytime is showtime'

Natalie, technology graduate at Sky

Technology Graduate Programme

Analysis. Project Management. Scrum Master. Operations. You'll try it all on our Technology programme. Embedded in our agile and collaborative tech team, over two years you'll learn how new technologies are connecting customers to more of what they love like never before.

© 2017 Twentieth Century Fox Film Corporation. All rights reserved.



How to get hired

IN THIS SECTION

- 22 The soft skills IT employers want
- 24 Programming languages employers want... and how you can learn them
- 26 Proving that you have a passion for technology
- 28 Before you apply: your research checklist
- 30 Big opportunities in small IT companies
- 32 The four best ways to network your way to a job
- 34 Extracurricular activities to develop your skills and passion



The soft skills IT employers want

Skills such as communication and teamwork are just as important for IT employers as they are for employers in any other sector. Many technology companies acknowledge that soft skills might be lacking among some graduates and will therefore test these capabilities in prospective employees. You should make sure you have the full range of soft skills and be well equipped to demonstrate them during interviews and assessment centres.

Whether or not an employer is explicitly looking for particular soft skills, they will improve your chances of securing a graduate job. For example, communication skills will be beneficial during interviews, as they will enable you to clearly and confidently showcase your knowledge and experience. You will be required to work with other people at assessment centres, and the ability to cooperate with others will not only show that you're a team player but it will mean the work you produce will be of a higher standard. At their core, soft skills allow your technical knowledge and abilities to translate smoothly to the workplace, and applications and interviews will test your suitability for the workplace as well as your technical expertise.

Communication

IT professionals communicate with people across all levels of an organisation. In client-focused roles they must communicate verbally with clients to understand and define system requirements.

How do you demonstrate this skill?

- Keep verbal and written communication clear and appropriate for the audience.
- Listen to and consider the views of others.

Problem solving

To work in IT you need to be able to identify, discover the reasons for and develop strategies to overcome problems. You may also suggest enhancements to existing processes to deliver improved service and a better product.

How do you demonstrate this skill?

- Show you take a logical approach to problem solving.
- Highlight your ability to anticipate and avoid pitfalls.



How to stretch your soft skills

- **Take an active role in a club or society at university**

This will give you plenty of experience in communicating with others and working cooperatively as part of a team. Many positions in student societies will require you to think strategically and to solve problems, too. For example, as a treasurer for a sports club, you might work out ways to plan trips with limited funds.

- **Take on responsibility when doing activities in a group**

Even when you're carrying out activities with friends, you can develop your organisation and problem-solving skills. Try to take a proactive attitude and consider how you can use your talents to play a useful role. You might help to organise a friend's surprise birthday party by creating

'It's important to be able to listen and understand, as well as explain technology at an appropriate level for the audience.'

a spreadsheet and logging progression (eg who has been invited and who is bringing food or decorations).

- **Get a part-time job while you're at university**

One of the ways you can show prospective employers that you're able to organise your time effectively is by balancing studies with a part-time job. Work in a café, bar or

shop will also allow you to demonstrate teamwork and communication skills.

- **Think strategically about how you might/will overcome problems you come across in your everyday life**

By being curious and considering potential approaches, you will improve your problem-solving ability. During a work experience placement, take in what is going on around you – think about how other industry professionals are tackling complications and what you would do similarly or differently.

- **Think about the aspects of IT you find interesting and carry out extra research on these subjects**

It's a good idea to keep a regular log of the things which interest you about IT and technology – including ideas and information you come across at university, in your everyday life, in the news and through extra research. By reading back through these notes during preparation for an interview, you will be able to demonstrate passion and enthusiasm for IT. ☺

Planning and organisation

You will have to balance different projects as part of an IT job, each with a different deadline and level of priority. Planning will also help you to anticipate challenges and gauge how to deal with them.

How do you demonstrate this skill?

- Highlight how you scope out an activity and allocate time to individual tasks.
- Demonstrate your ability to anticipate challenges and plan contingencies.

Teamwork

Teamwork is essential for sharing knowledge and making sure your colleagues feel supported enough to contribute their skills and efforts. A strong team player works cooperatively and can manage others when needed.

How do you demonstrate this skill?

- Show how you have worked well in a team to achieve a final goal.
- Consider what motivates others and respect alternative views.



Programming languages employers want...

Studying a computer science course or a related degree? The topics and modules that are taught across computer science degrees, as well as how they are taught, are likely to vary quite widely between universities. So, there is always room to improve your skills beyond the classroom.

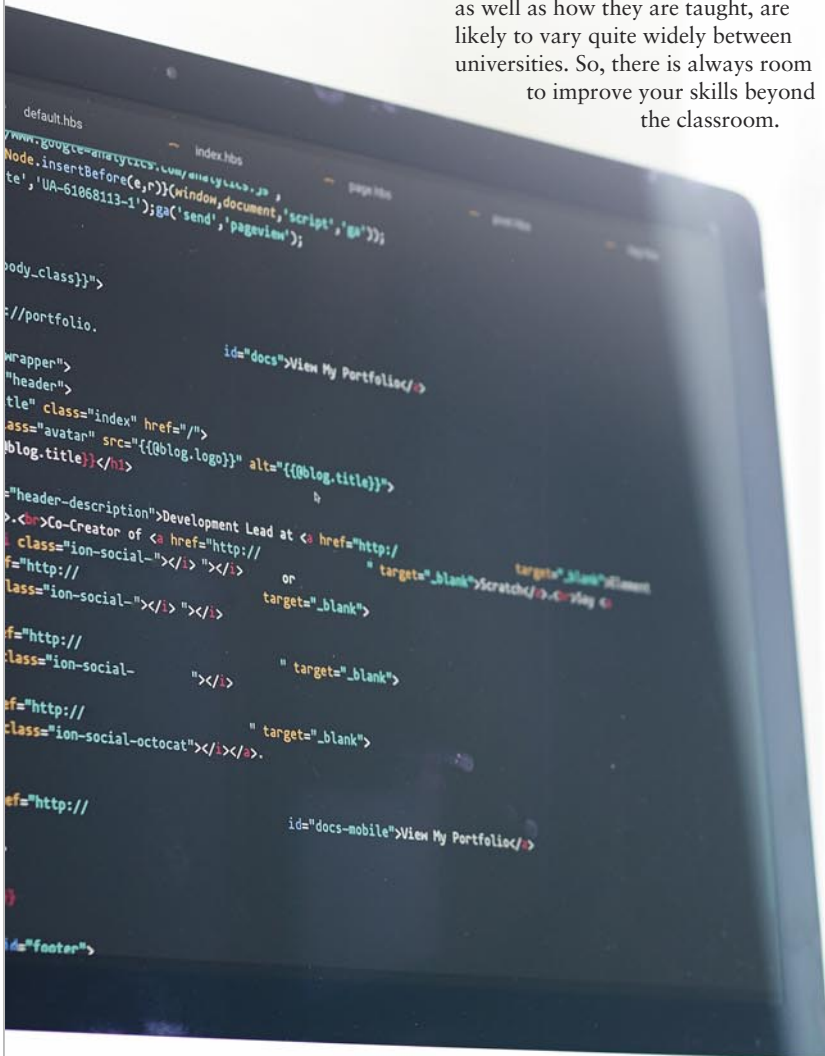
If you're not studying for a computer science-related degree, a career involving coding is still an option for you. A handful of employers will train graduates with no coding experience in the languages they need for the role (see pages 8–9).

You can also increase the number of employers you can apply to by learning a programming language in your own time. Attending classes and meetings or learning through online courses is also a great way to build up evidence of your passion in technology – a key quality that recruiters want to see in graduates.

What languages do employers look for?

Different employers' requirements vary widely, so always make sure you've done your research before applying.

- 'It's definitely beneficial to have knowledge and experience of some programming languages,' comments Kirsty Smith, graduate and apprentice recruitment manager at **Capgemini**. 'Specifically, knowledge in Java, JavaScript, Python, SQL, C#, Ruby and PHP would be of value. It not only demonstrates that the individual has the capability of picking up coding skills, but it also shows the passion and desire to learn them.'
- **BlackRock** has previously told TARGETjobs that, while they primarily work with Java, any object-oriented language (such as Python, JavaScript or C++) would be beneficial.
- **Morgan Stanley** specifies that its graduate technical analysts need to have an understanding of Linux/Unix and Windows, as well as good knowledge in at least one programming language, offering C, C++, Java and C# as examples.
- **Tesella** states that its data scientist and software developer graduate roles require applicants to have experience in one of the following languages: Java, Python, C, C#, C++, R or Matlab.



Many of the employers we spoke to specified that, while they may not ask for specific languages, it's beneficial for graduates to have learned the fundamentals of at least one language.

- Francesca White, technology graduate recruiter at **Deutsche Bank** explains: 'Programming languages, toolsets and techniques allow you to build systems and explain solutions and are something all developers need to keep on top of: learning a common language is a good idea. However, tools and frameworks go out of date very fast, so the key is to be able to think algorithmically without tying yourself to a specific tool.'
- 'I wouldn't say we're looking for graduates who know a specific coding language or technology,' states Iain McFadyen, global graduate recruiting manager at **London Stock Exchange Group**. 'What we're looking for is people who have taken the opportunity to familiarise themselves with, and have a passion for, technology in general.'

...and how you can learn them

You can develop your knowledge of coding languages in a number of ways. If you want to learn a language from scratch, try out one of the many free courses and resources available online, on websites such as Coursera, Codecademy, or FutureLearn. A technology recruiter at MI5 advises, 'There are free online coding courses and YouTube channels that can take you from "zero to hero" in a matter of weeks. Think of a project you want to create or build, and just do it!'

Even if you are not studying computer science, there may also be opportunities for you to gain experience of programming languages as part of your course. 'More and more students that are studying physics or engineering have used Python,' explains Iain. 'If you have the opportunity to do modules that give you an exposure to programming, take them. Some business degrees even offer business programming courses. It won't make you an expert, but it'll allow you to start building an understanding.'

Develop your skills further

Once you've got the basics of a language down, what you want to do is develop and deepen your knowledge of it. Iain advises, 'Once you have the basics, you can progress from there. Start coding in your spare time, building your own solutions and gradually increasing the complexity.' If you already know one language, learning another can be fairly straightforward. 'Learn at least one programming language to a higher level, so that you can fall back on that as a solution when pressured for time,' adds Francesca.

When choosing an additional language to learn, it's worth taking some time to think over your options and select a language that is likely to be useful in your future career. 'Research what different languages could be used for your projects, think about how that code could bring something a bit different to what you are working on and how this could add value,' advises Kirsty. She adds,

'For example, R is used for more statistical data. Join groups so you can compare your findings and experiment with what works well.'

Students developing their skills should 'never build two systems with the same architecture and tools, and work in teams wherever possible,' advises Francesca. 'Developing in a team is a challenge to master, but it's as important as having a strong knowledge of toolsets.' Look out for hackathons, open-source projects and coding competitions that you can get involved in and gain experience of coding in groups. As well as developing your skills, you will also be able to talk about these during applications and interviews. 'There are many student hackathons to take part in, which fully cater for complete beginners to very experienced programmers. Make use of the mentors at these events, as they'll help you design and build on an idea,' was the advice from a technology recruiter at MI5. They also added that, 'free pizza and soft drinks are usually on offer at these events.'

Work experience, placement years and internships are excellent ways for you to learn more about coding languages and how they are practically applied in the workplace. This is also an opportunity to build your network and experience first hand what the culture and values of the different employers are: an important thing to keep in mind when choosing who to apply for.

Promote your coding skills

However you develop your coding skills, you should make sure that recruiters know about it. You can talk about attending hackathons and events, or completing personal projects, on applications or in interviews. Upload examples of projects onto a GitHub profile and including a link on your CV so that employers can take a look at your code. Recruiters will be impressed to see and hear evidence of how you've approached a problem and how you've applied your technical knowledge in practical situations. ☺



Proving that you have a passion for technology



Whether you're applying for a technical role or a more business-focused role, there is one thing that technology recruiters will definitely be looking out for: passion for technology. Demonstrating your enthusiasm for technology throughout the application process will show recruiters that you can be a strong ambassador for their company's products and services.

What is passion for technology?

Passion for technology is not the same thing as technical experience or knowledge: you don't necessarily need to know a programming language or have studied computer science.

Instead recruiters want to hear about how you have responded to, and appreciated, experiences with technology in your own life.

How do recruiters assess it?

Some employers may ask you directly about your passion for technology, either as a written question in an application form or during an interview (IBM has previously done this, while BlackRock has previously asked about 'passion' as one of its company values), but for other employers you may have to demonstrate your enthusiasm through your CV, covering letter and assessment centre exercises.

Be warned: don't be tempted to stretch the truth or exaggerate your interest. Any experiences you write about in your application are likely to be brought up again throughout the application process, and recruiters will be able to tell when you're making something up on the spot.

What can you do to make your passion shine?

Make sure you can convince recruiters that you are passionate about tech by following these four tips:

1 Think about how you use technology

Consider how technology has made your life better or easier, or transformed how you approach problems. Think about everyday challenges that you have encountered and how technology has helped you to

overcome or bypass these. This can be as simple as using a health tracker to track your progress while exercising, reading digital versions of course books on an e-reader or using apps to keep track of your budgets.

Think about how your experiences have informed your decision to work in technology and at the employer you are applying for. In interviews and assessment centres, you can extend this to thinking about potential technology solutions. For instance, in a case study exercise, you might come up with a new way in which the employer's technology can be used to solve an existing everyday problem.

'Talk about all those times that you have had a problem to solve and used technology to do so. However small the example may seem it will still be relevant.'

Kirsty Smith, graduate and apprentice recruitment manager, **Capgemini**

2 Think about how you share technology

When you're passionate about something, you want to share it with others, so using examples of how you have shared technology is another way to demonstrate passion. You might have volunteered to teach coding skills to school students, been involved with tech literacy workshops for elderly

people or you might have bonded with strangers over a coding challenge at a hackathon. Communicating technical concepts to people without a technical background and being able to work in a team are key facets of many jobs in the sector. As well as proving your passion, examples such as these show that you'll be able to succeed as a graduate employee.


3 Demonstrate how you've applied your tech skills

If you have taken the time to learn a programming language or other technical skills, either in your own time or during your degree course, show that you've used these skills in real-life situations at home, during a part-time job, or in personal or university projects. Recruiters want to see that your passion for technology extends outside of the lecture theatre and into extracurricular activities and your spare time. Perhaps you've offered your services making websites for friends and family, used technology to organise group work on your course or developed and sold apps on online marketplaces.

4 Strengthen your answers by giving details

'I can't really stress enough how important it is to give as many examples as possible,' explains Kirsty Smith, graduate and apprentice recruitment manager at **Capgemini**. 'Anybody can say they can code or that they have great technical skills, but being able to demonstrate this is key.' For each example you pick out, elaborate on why this experience in particular was important for you and why it motivated your decision to work in IT and for the employer you are applying to. ☺





Before you apply: your research checklist

There's no getting around it, before you start writing up an application for a graduate job or internship, you need to do your research. Not only will it help you to feel confident about the job-hunting decisions you make, but recruiters will expect you to have an understanding and awareness of their organisation and industry and may even directly ask you 'What do you know about the company?' at interview. But what exactly do you need to know? Check our handy checklist for an idea of

what questions about an employer you want to be able to answer before you apply.

What do I do with this information?

Once you've done this research it can be tempting to just parrot statistics back during interviews. 'It is not just about telling us how many employees we have in different countries and our core values,' states Kirsty Smith, graduate and apprentice recruitment manager at **Capgemini**. 'Find out how we do things different to other companies: what projects we've

worked on, who are our clients, what sectors we work in.'

The best candidates will use their research as a springboard to explain **why they want to work at this employer in particular** in their own words. Look at the results of your research and combine this with your own thinking to decide what in particular about a company appeals to you.

Don't just wait to be asked about your research; thread the conclusions from your research throughout your application form answers, CV, covering letter and interview answers. ☺

Company basics...

- What does the company do (products made or services provided)?
- Where is it located (where is its headquarters and its other offices)?
- What are the key moments in the company's history?
- Who are the company's main competitors? How do they differ?
- Where does it operate and in which markets?
- How, where and why is it growing?
- What does it offer that makes it unique in comparison to its competitors?

In the news...

- Are there any major news stories that are likely to affect the work of the employer, and how?
- What is the company's big news from the last year or two: new launches, current projects, mergers and acquisitions?
- Are there any patterns (such as annual cycles) that the industry follows?

The graduate job...

- What roles are available for graduates? What does the scheme or job involve?
- What are the minimum job requirements: are specific degree backgrounds or classifications required?
- What are the general competencies and specific skills that are asked for?

- What technical knowledge or skills would be beneficial? For instance, do you need to know a programming language?
- How does the role fit into the overall business?
- What training will you receive in the graduate scheme? How do these help your overall career ambitions?
- Are there any opportunities for travel or secondments with other businesses?
- What have previous graduates at the company gone on to do?
- What does the recruitment process involve: a CV, application form, interviews, assessment centres?
- What are the contact details for applying?

About the company culture...

- What are the company's 'core values' and aims?
- How is the firm's reputation within the sector?
- How does the firm portray itself – what image does it put forward in the media and on social media?
- Are there opportunities for socialising at the employer? Do they have sports teams, networking groups or team events?
- How do you view the organisation – what attracts you to it?
- Why does working for the employer appeal to you?

Where to start your research

- **Your own notes:** if you've done an internship or placement at the employer you're applying to, look back over your notes from these experiences. What stood out about its culture, work and people?
- **Visit TARGETJobs' employer hubs:** the employer hub pages at targetjobs.co.uk/employer-hubs provide information about employers, their graduate jobs, and expert 'how to get hired' advice on navigating their application processes.
- **TARGETJobs Insider Reviews:** visit targetjobs.co.uk/insider-reviews to find out what recent graduates and interns really think about their employer. It's a great way to learn about an employer's culture and work.
- **Employers' websites:** look at press releases, product overviews, projects, information about the company's culture, and market information.
- **Newspapers:** build up a fuller picture of employers and industry trends, and follow stories over a number of weeks – don't just read the front page, check out the business and technology pages.
- **Industry websites:** sites such as techrepublic.com, wired.co.uk, itpro.co.uk and computerweekly.com are good industry insights.
- **Social networks:** follow technology news providers, websites, employers and professionals on Twitter. Join relevant groups on LinkedIn and join in discussions to deepen your knowledge.
- **Your university careers service:** your university will have information on employers and will interact regularly with recruiters and alumni. Check out when careers fairs and employer presentations are happening on campus.
- 'It's also key to talk about technology in general, so keep yourself up to date by signing up to **email newsletters** or reading good **technology blogs**,' advises a technology recruiter from **MIS**.



Big opportunities in small IT companies

Small- to medium-sized enterprises (SMEs) are vital to the UK economy and the job-hunting graduate.

In 2018, the Federation of Small Businesses reported that there were 5.6 million small businesses in the UK, which employed around 16.3 million people. In fact, many new graduates are more likely to get their first IT and technology job at a small employer, rather than at a larger graduate employer. So, it's important that you don't neglect this rich vein of future job opportunities.

Tracking down SMEs

Finding entry-level jobs in technology SMEs requires you to look in the right place. Look on specialist IT job boards and, of course, on targetjobs.co.uk/it for trainee and junior positions.

University careers services are also an important port of call for SME job hunting. Many build close links with local employers for both full-time and work experience vacancies. They may be advertising technology opportunities or they might be able to let you know how to get in contact with a local employer. You can also find temporary placements in SMEs via Step (step.org.uk) and Scotgrad (scotgrad.co.uk).

It's also worth checking out the local science/business park. Many small tech firms reside in business parks outside of major city centres. Go to the United Kingdom Science Park Association website (ukspa.org.uk) to track down those near you.

Networking can be a big help when looking for a job with an SME: speak to your friends, family, tutors and



people on your course to see if you can get any leads. You can find out tips on how to start networking on page 32.

Applying to small companies

Speculative applications are one of the main routes into smaller companies. Your covering letter will be your first point of contact, so it's important that it's concise and gives details of what you can offer the organisation, rather than what you want to get out of them. Find out who's responsible for recruitment and address the letter to them directly. Read our advice for writing covering letters on page 38. Always follow up on a speculative applications with a call a few days later. Find more advice on making speculative applications at targetjobs.co.uk/careers-advice.

When responding directly to advertised positions, carefully read the instructions about how to apply and make sure you match your skills to those requested in the advert or job description. Take a look at the technical CV and interviews advice on pages 40 and 45 for tips.

SMEs are likely to take into consideration your experience, individuality and creativity rather than simply your academic achievements. As such, it's important to sell yourself and your skills well in your application. Make the effort to tailor it to the specific company and role that you are applying for and you'll have more success landing the job. ☺

Why start your career small?

As SMEs will hire fewer people than large multi-national tech companies, you can expect a closer-knit working environment, more accessible managers and more open working culture. At the same time, you'll likely find that employees at smaller employers are often given more autonomy and responsibility early on in their career and that it can be easier for their individual contributions to be recognised.

SMEs are characteristically agile businesses and their employees may be more adaptable and capable of working across a range of roles or business areas.

Training tends to be more informal than on a large graduate programme and most of it will likely be done on the job. As such, it can be a great way to build a broad range of experience and knowledge quickly. For instance, at a tech start up, you might also get an insight into the business side of running a company.

You may also be able to work in a more specialised field at a smaller employer. If you are interested in, and want to gain experience in, a specific area of software or hardware, you may be able to find a smaller employer (such as a niche software house or start up) which focuses on just that.

The four best ways to network your way to a job

Networking can help you find a job for when you graduate. That's the ultimate aim, but other benefits include picking up some of the technical and soft skills that you'll need in an entry-level IT job. The great thing about networking as a student is that there are multiple ways to go about it. Here we outline four of the best if you want to go into IT and technology.

'It's worth utilising these unique opportunities to connect with technology employers.'

1 Network with employers on campus

A number of IT employers are involved with on-campus graduate recruitment fairs where they set up a stand or exhibit at the university and meet its students. For example: Accenture, CGI and Spark have all previously visited a number of universities across the country, where they have held informal networking and skills sessions. You can usually find out about an employer's activities on its website (some, for example, have an events calendar) and through your university's careers service.

It's worth bearing in mind that on-campus activity is usually carried out by large IT organisations that recruit a lot of graduates each year. For instance, CGI has had 100+ vacancies over the past two consecutive graduate recruitment intake years. A smaller organisation, on the other hand, that takes on five graduates each year, is unlikely to use events, on-campus or otherwise, as part of its student/graduate engagement and recruitment drive.



2 Network during internships and employer events

Don't neglect work experience (such as internships or placements) when it comes to building your network. Grab hold of opportunities to meet new people from across the company – don't just talk to other interns or placement students. Make a note of the people you worked with and, at the end of your time at the employer, drop them a thank you note and ask if you could stay in contact.

Similarly, make use of insight events at employers. These events are designed to allow students to find out more about IT roles, the employer and to start building up their professional network. For example, Deloitte run a two-day 'Spring into Deloitte' programme and KPMG run a 'Women in Technology' insight scheme. These events typically comprise of networking with a range of staff (from graduate hires to partners), business games and skills sessions. Find out what events are being run near you, and what the entry requirements are, through looking online, visiting your university careers service or talking to friends.

3 Network by joining specific groups

IT employers are keen to increase diversity within their workforce, so they hold events, both on campus and off campus, to engage with groups that are underrepresented in their organisation. Some IT employers have held events for students from less advantaged backgrounds, for example.

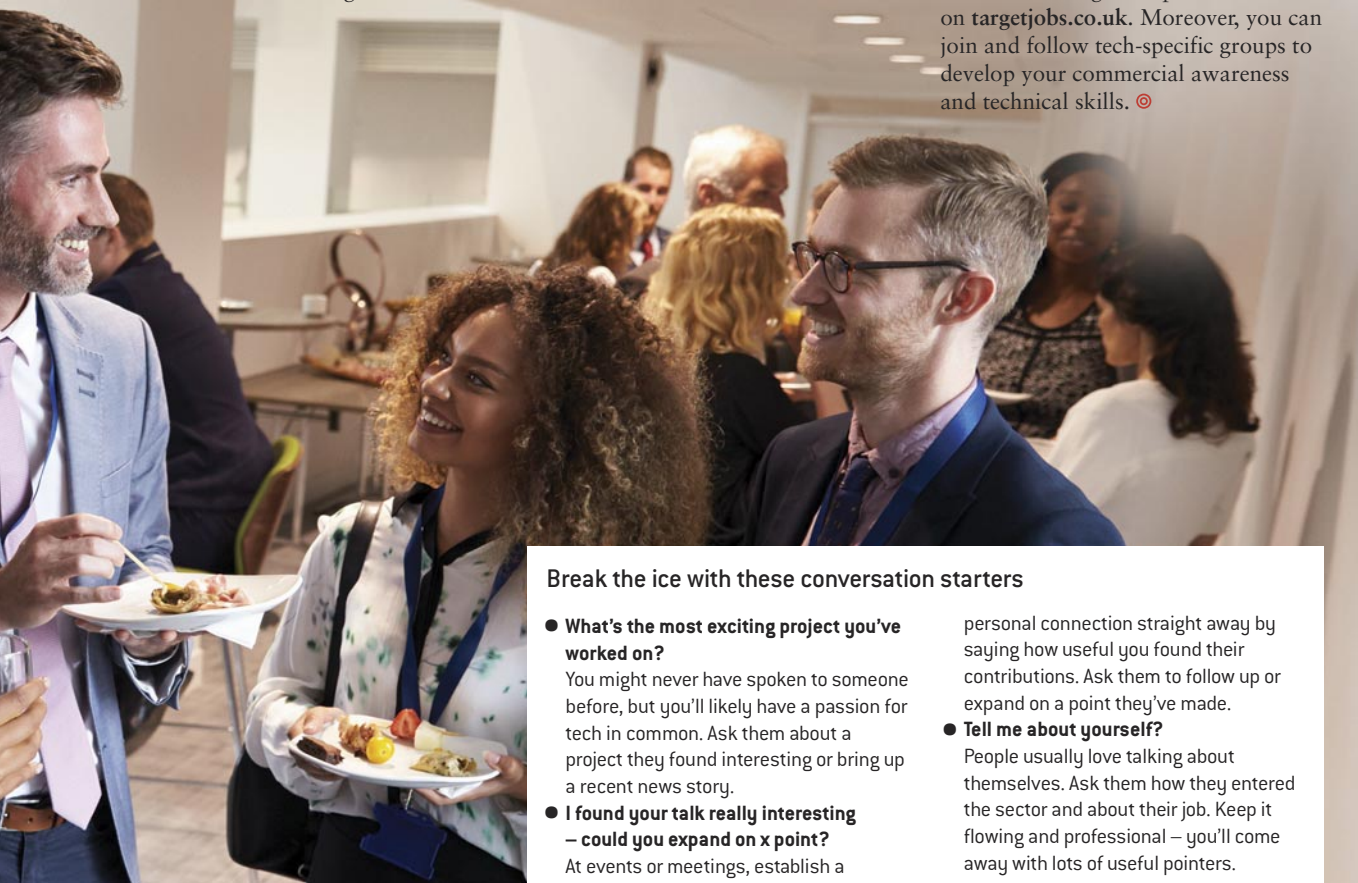
Getting more women into technology roles is something that many IT employers are putting their weight behind. As mentioned previously, KPMG runs a 'Women in Technology' event. Meanwhile, BlackRock, GSK, KPMG, Amazon, J.P. Morgan and ThoughtWorks have previously partnered with our own *IT's not just for the boys!* event, during which senior female technologists encouraged more women to enter the industry and gave valuable careers advice. It's worth utilising these unique opportunities to connect with technology employers, so make sure you find out more.

4 Network on social media

As well as using social media to connect with professionals and recruiters, TARGETjobs *IT & Technology* encourages students to use it as one way of staying abreast of industry trends.

You could, and should, follow your favourite IT employers/recruiters, technologists and technology journalists on Twitter; doing so will help you to stay on top of current employment opportunities (most employers have a recruitment/ marketing team that tweets about spring weeks, internships, industrial placements, graduate jobs etc, as well as their events and talks) and industry trends (recruiters will expect you to know, to an extent, what's going on at the company and in the wider industry).

And then there's LinkedIn. Do you have a LinkedIn profile? If not, think about creating one – it's a useful platform to connect with the people you meet at events (students as well as recruiters), and showcase your skills, experiences and projects. There's advice on setting one up as a student on targetjobs.co.uk. Moreover, you can join and follow tech-specific groups to develop your commercial awareness and technical skills. ☺




Break the ice with these conversation starters

- **What's the most exciting project you've worked on?**
You might never have spoken to someone before, but you'll likely have a passion for tech in common. Ask them about a project they found interesting or bring up a recent news story.
- **I found your talk really interesting – could you expand on x point?**
At events or meetings, establish a

personal connection straight away by saying how useful you found their contributions. Ask them to follow up or expand on a point they've made.

- **Tell me about yourself?**
People usually love talking about themselves. Ask them how they entered the sector and about their job. Keep it flowing and professional – you'll come away with lots of useful pointers.

A close-up photograph of a musician playing an acoustic guitar on a stage. The musician's hands are visible, strumming the strings and holding the neck. A large, silver, mesh-covered microphone is in the foreground, partially obscuring the guitar. The background is blurred, showing other musicians and stage lights. The overall lighting is warm and focused on the performer.

Extracurricular activities to develop your skills and passion

Developing the skills you need to get a graduate tech job doesn't need to be a chore, and it doesn't need to be through work experience either. Take a look at the following ideas for developing your technical and soft skills in your spare time through extracurricular activities. These opportunities are open to you whatever stage you are at through your degree course or whenever it is in the academic year – although you may find more chances to get involved during the summer or at the beginning of academic terms.

TECHNOLOGY-SPECIFIC OPPORTUNITIES...

Joining a tech community

Where better to learn the skills of a developer than from developers? Tech communities are about meeting other people interested in technology, either online or in person, to share knowledge. Examples of tech communities you could join include GitHub (a website for storing your projects and connecting with likeminded individuals), Stack Overflow (a forum for programmers) and hackathons (events where people come together at a venue to solve technology problems, often in teams). Many of these groups are actively welcoming to newcomers so don't be shy about joining up and developing your knowledge, brushing up your communication skills and sharing your ideas.

Learning a new programming language

Not only will teaching yourself a programming language expand your technical vocabulary, it'll also show recruiters that you can motivate yourself and are willing to learn. It's a great way to show off your interest in technology too. If you're not sure which languages to learn, have a look at our article on page 24. Once you've learned a language, cement your new skills by finding yourself a project to apply it to.

There are loads of free online resources and tutorials, as well as open-source software that you can download and play about with. If you are coming from a non-technical background and simply want to learn to code, you could use sites such as Coursera and Codecademy to develop your skill. You may want to include the courses you complete on your LinkedIn profile.

'Taking on other challenges, whether they be sporting, musical or social activities, will help you better understand other people and balance your time and focus across multiple tasks – something you're likely to have to do a lot in industry.'

Francesca White, technology graduate recruiter at **Deutsche Bank**

Volunteering

Recruiters want to see that you have strong communication skills and that you have a passion for technology. One way of doing both of these is sharing your passion for tech with others, which you can do through volunteering. You can join up with a tech initiative, which is an organisation that exists to benefit people's lives through technology – such as by teaching children to code or helping older people to develop their technical literacy. You could also volunteer by yourself – think of ways you can share your tech knowledge and passion with people in your life.

Entering technology competitions

Innovation and problem solving are fundamental to the technology sector and you can flex these muscles through competitions. These are often sponsored or run by employers and prizes can include internships and placements, trips abroad, cash and even graduate jobs.

OTHER EXTRACURRICULAR ACTIVITIES...

Be a part of sports teams and uni societies...

Taking responsibility for organising events and activities as part of a society or sports teams will build your teamworking and communication skills, which are crucial for any job role.

Try your hand at enterprise

IT recruiters are keen to see graduates who have entrepreneurial skills – the ability to spot an opportunity and make the most of it – it's not just for students who want to start their own businesses. The mindset you'll develop capitalising on opportunities will be applicable when it comes to developing technology solutions, as well as being more directly related in business-focused roles. You may want to consider setting up your own business (which can also show off your tech skills), get involved with student enterprise at university, or start your own university society.

Get involved in presentations and public speaking

Having strong communication and organisation skills can really make you stand out from other aspiring technologists in the recruitment process, and you may not have the opportunity to develop these skills through your degree. Look for opportunities to be involved in presentations, debates or public speaking opportunities and you'll be able to gain experience of organising arguments and grow your confidence in communication. ☺

The Graduate Benchmark

Tests provided by Assessment Day  Delivered by TARGETjobs 

Test yourself. Compare your score.



FREE for
TARGETjobs
members

Do you want to know how well you can do in standard employer aptitude tests? Use the Graduate Benchmark to get an employer's-eye view on how your performance compares to your peers.

- 1) PREPARE** with three practice tests to warm up.
- 2) TEST YOURSELF** on the assessments most used by graduate recruiters: numerical reasoning, verbal reasoning and inductive reasoning.
- 3) REVIEW YOUR RESULTS** in a personalised report and compare your scores to students in your uni, your year, your subject or across the whole country.

Sign in to targetjobs.co.uk and go to your dashboard, or search 'Graduate Benchmark'.


Your Graduate Benchmark result

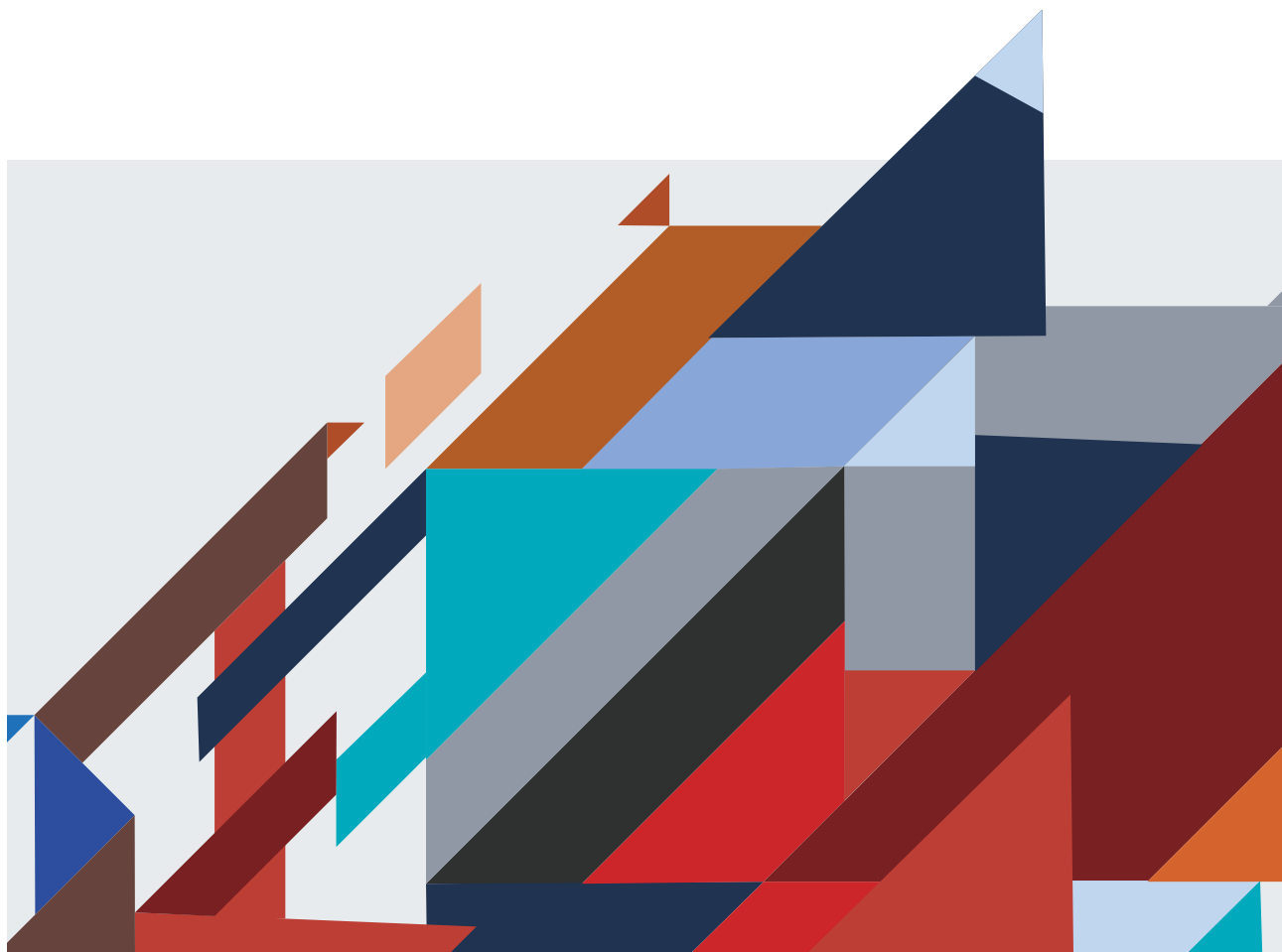
You scored higher than 68% of 1,475 people.

68 Percentile score

1,475 Comparison group



Built by 



Applications & interviews

IN THIS SECTION

- 38 Five steps to a stellar covering letter
- 40 Stand out with a strong technical CV
- 42 Seven golden rules for online application success
- 45 Get up to speed with technical interviews
- 46 Dos and don'ts for tech interview success
- 48 How you should answer 'Why do you want to work for us?'
- 50 What to expect at assessment days

Five steps to a stellar covering letter



any IT employers, from large multinational corporations to SMEs, request a covering letter along with a CV as part of the online application form. This is an additional opportunity for you to showcase your skills and enthusiasm, as well as highlight specific points that you want to expand on from your CV.

A covering letter (or cover letter, as it's otherwise known) is not always requested, however, so if an employer doesn't ask for one don't include it.

'How do you sell your experience and skills, and convince the recruiter that you really want the job in three or four paragraphs?'

A covering letter shouldn't be longer than one side of A4. How do you sell your experience and skills, and convince the recruiter that you really want the job in three or four paragraphs?

1. Research the employer

Before you start writing your covering letter, spend a good amount of time reading up on the company you're applying to. You should research its business strategy, culture and company values, and familiarise yourself with the list of products and services it provides. You can do this by looking at the employer's website and the employer hubs on targetjobs.co.uk.

It would also be a good idea to reflect on relevant work experience, presentations you've attended, conversations you've had with employees and recruiters on insight days, or to speak with friends who have done placements there.

2. Be selective

It may be tempting to fill your covering letter with all your technical skills, achievements and examples from university, work and elsewhere.



Don't do this – your covering letter complements your CV and should not exceed one Word document page or three to four paragraphs. Be selective about the information you choose to include.

Pinpoint the top three or four attributes that the employer seeks. For example, these could be a genuine interest in technology, practical knowledge of databases and programming, and excellent communication skills. Then focus your covering letter around these requirements.

3. Include examples

Include examples from your academic, work and personal life to prove to recruiters that you have the skills, qualities and experience they're looking for. If they seek a graduate who's interested in pioneering technology, for example, and you attend fairs and conferences to find out what's new in the tech space and blog about it, mention that.

4. Make them feel special

Remember to include the reasons why you have chosen this specific employer – and avoid clichés, such as 'you are a world-leading company'. Your employer research is critical here, as you will be

able to make specific points about the company's culture, strategy, or any opportunities for career progression.

For example, perhaps the organisation appeals to you because it constantly works on cutting edge developments and this will enable you to apply and increase your technical skills. Including this will show recruiters that you want to join the company as opposed to just getting a job.

5. Check before you submit

Once you have written your covering letter you should ask a friend, family member or member of staff from your careers service to check it for sense, style and grammatical mistakes. Covering letters with errors leave a bad impression and will cast doubt over your attention to detail and professionalism.

See 'Example one-page IT covering letter' opposite. ©



Employer hubs
targetjobs.co.uk/employer-hubs
 Find out more about individual employers.

Example one-page IT covering letter

Luke Riley
129 Lime Street
Liverpool L1 1JN

5 August 2019

Marcus Humphrey
Graduate recruitment manager
Innovation Technology Group
100 Orchid Building
Third Floor
Bristol BS31 4UJ

Dear Mr Humphrey,

Please consider my application for the customer support engineer position at Innovation Technology Group, as advertised on TARGETjobs. My conversations with current graduates at your open days in autumn 2018 have reinforced my interest in the organisation and cemented my belief that I have the technical skills and personal attributes that the group is looking for. I enclose my CV for your consideration.

Through my four-year sandwich degree, which comprised a one-year placement as an IT support technician at ExxonMobil, I have developed a practical understanding of key programming languages and databases, including PHP, Ruby and MySQL, as well as network construction and administration. At ExxonMobil I worked closely with suppliers and a varied client base to overcome operational obstacles, and gained experience solving customer issues and providing first-level analysis. I resolved 88 % of the cases I handled on the placement.

I have also demonstrated, outside university and formal placements, that I have a genuine interest in computer programs and cutting-edge technology. I have designed and developed three mobile phone applications, which have been downloaded a combined 1,389 times since they were uploaded to Google Play in February. This also proves that I have the creative and design skills that you seek in a graduate recruit. My stint as a volunteer at Plymouth & District Disabled Fellowship, where I worked in a close-knit team to organise outdoor fundraising events, shows that I can work effectively with others to achieve group-wide objectives.

I am keen to discuss this opportunity and my experience with you in person, and am available for an interview at any time. I look forward to your response.

Yours sincerely,

Luke Riley

Address the recipient by his or her title and surname. If these details aren't stated on the job ad, contact the employer and ask.

State clearly which position you are applying for.

Show that you have made the effort to find out about the company and meet employees.

Mention academic and practical experiences that relate to the role.

Highlight the technical skills the employer seeks.

Include the results of the contributions you made.

Non-academic and non-IT experiences should be included if you've developed relevant transferable skills.

Prove that you're passionate about IT and technology.

Link your skills and experience to the employer's requirements.

State your availability for interview.

You should sign off your letter with 'Yours sincerely' if you have addressed the letter to a named person.

Your covering letter should not exceed one page of A4 or three to four paragraphs.

Stand out with a strong technical CV

Online application forms may have stolen their thunder a bit in recent years, but for many employers (particularly smaller organisations) CVs are still king. Your CV will be how you introduce yourself to many prospective employers, so it needs to catch an IT recruiter's eye, showcase your technical skills, be tailored to the employer you're applying for and show you understand the role you're applying for.

Structure that suits you

Employers notice when a CV is well structured and it's clear that you've put some thought into the process. Your technical CVs should be either one full-page or two full-pages and should follow a clear and logical structure. You need to capture the reviewer's attention with facts and information that show you meet the minimum requirements and have the right skills for the job.

Your graduate technical CV needs to include the following information: personal details; education background and academic details; relevant technologies and skills; information on work experience and projects; and your further interests.

How you structure the above information and what you choose to focus on is up to you. In our example we've gone for quite a simple structure and have used bullet points to organise information. If you do want to use a more elaborate design, make sure that the information is clear and legible. You can see other examples of potential CV formats online at targetjobs.co.uk/careers-advice/job-hunting-tools-downloads.

To bio or not to bio

We've not included a profile or biography in our example CV. At graduate level, the information you're likely to include in the profile is unlikely to significantly differentiate you from other candidates, so we'd advise skipping the bio and giving the rest of your CV a bit more room.

Let your technical skills shine

Your CV is your opportunity to show off your key technical skills (such as programming languages, platforms,

systems, etc.) and so we'd advise giving them pride of place rather than burying them on the second page. Focus on the skills that the employer and the role require: list them first in your skills section and, where appropriate, highlight how you've used them throughout your work experience and projects. Conversely, if a technical skill isn't relevant at all or is outdated, you don't need to include it in your CV.

Indicate your level of ability with each technical skill and include some brief information of how you've applied each skill. Don't shy away from using examples from university, work experience, hackathons or events and personal projects. Recruiters have told TARGETjobs that they really want to see practical examples of candidates' skills, so it's worth considering creating an online portfolio of projects you can link to (just make sure that the content of these sites is suitable for viewing on a company's network!)

It's also worth considering how your CV might look to someone without a technology background. The first person to look at your application might be someone from the HR department after all. Spelling out how you've used technical skills through examples will also help your skills and qualities to be appreciated by a non-technical audience.

Include all relevant qualifications

Not all computer science degrees and technical degrees cover the same content, so it can be helpful to include information about the modules and projects that you have completed. You don't need to list every module you've taken, but pick out a few examples that are relevant to the role you're applying for.

Your qualifications don't have to be from university either; if you've taken the initiative to get some additional computing and technical qualifications, make sure that you include these on your CV. These can be from online courses or classes that you've taken in your free time.

Prove your passion

Recruiters want your CV to show how much you love the tech industry. One way of doing this is through the

'Interests' section on your CV. What you do in your free time can tell recruiters a lot about your motivations, so include details of any hackathons, codejams or relevant groups you've attended. You can find out more about what recruiters mean by 'passion for tech' on page 26.

Highlight your soft skills

While technical aptitude is obviously essential for technical positions, employers place equal importance on your soft skills. Recruiters particularly want to see whether you can:

- communicate well
- work well with others
- complete tasks on time
- adapt and learn quickly
- think commercially
- be innovative.

'When we look at a CV, we're trying to see the narrative behind their application. What are their motivations, what do they want to do and, based on what's in front of me, what can they contribute to our business in the future?'

Iain McFadyen, global graduate recruiting manager, **London Stock Exchange Group**

Don't forget to talk about your soft skills on your CV. Include information on how you used these skills through your work experience, projects and extracurricular activities.

Don't exaggerate

Be ready to talk about the details you mention on your CV during your interview. So, don't overstate your abilities or experience. Expect your application to be reviewed by people with significant technical knowledge, who will quickly be able to spot any inconsistencies or errors.

Finally, before you send off your CV, you should **always** check through the text. Make sure that everything you've written makes sense and that there aren't any spelling and grammar mistakes. It's easy to let glitches slip through. IT employers look for smart, professional people; use your CV and covering letter to demonstrate that you fit the bill. ☺

Example one-page technical CV

Gabi Obiefune • gabi.obie@gmail.com • 07700 9003712 • github.com/gabiob • 45 Blue Avenue, Abingdon OX14 6ST

Technical skills

Programming

Java, JavaScript, C,
C++, C#, Python, PHP

Databases

MySQL, SQL Server,
Interbase

Microsoft Office

Windows Server 2019, Linux OS, UNIX utilities,
Microsoft Office (Access, Excel, PowerPoint, Word)

Education

- BSc (Hons) computer science with information systems; 1st class degree; Abingdon University (2015–2019)
Modules included: high-performance computing and distributed systems; database systems implementation; and advanced machine learning.
- A levels: maths (A), physics (A), English (B); Abingdon Sixth Form (2013–2015)

Work experience and projects

Placement developer, Question Technologies, industrial placement (2017–2018)

- Contributed to the development of the March 2018 update for Question Technologies' flagship software, Question Answerer 4, primarily coding using **C** and **C#**.
- Responsible for implementing improvements to the user interface and conducted in-depth research into methods to increase the software's accessibility functionality.
- Demonstrated strong **teamworking skills** with colleagues in the development team, which was necessary for discussing requirements and solutions to complex problems.
- Communicated with, and offered technical support to, a wide and varied client base.

FindMyGlasses, Android application (2019) github.com/gabiob/glasses

- Working in a team of two at a hackathon, developed an application for Android OS in 36 hours. This app used GPS tracking to find a user's glasses. This was written in **Java**.
- This demo was later fleshed out and released on the Play Store in April 2019. Downloaded 1,467 times since release.

Volunteer, Tech4Kids (2015)

Assisted in teaching the basics of coding to students at St Benjamin's School, Didcot.

Interests

Grade 8 Oboe. Performed as part of the University Woodwind Band. Served as treasurer from 2016–2017.

Seven golden rules for online application success

Nowadays, instead of just submitting a 'traditional' CV and covering letter, many employers will opt to ask you to fill out a bespoke online form as the first step in the application process.

Before beginning an online application, consider what graduate employers want to see. Recruiters are looking at the overall quality of the application: so they're not just seeing whether you match the job requirements, but whether your application is written in a clear, concise way. If writing isn't your strongest point, ask someone you trust for help. You don't want to give the impression you're careless or won't be able to communicate with clients and customers.

1 Put in the time

Online applications take time and preparation, so don't try to rattle them off in breaks between lectures. Schedule in some blocks of undisturbed time to conduct research, work on your responses and submit your form.

Before you start, make sure you understand the job or graduate scheme you are applying for and what the organisation does. Turn to page 28 for more on the research you should do before applying. Check your skills and qualifications match the requirements for the position or the graduate programme. Most graduate IT employers will also have specific core

competencies they seek. These typically include communication skills (written and verbal), organisation and planning skills, teamworking ability, etc. See the articles on technical skills and soft skills on pages 24 and 22 respectively and the employer hubs at targetjobs.co.uk/employer-hubs for more details.

If possible, print off the application form so you can read it properly without the temptation to start typing. Prepare your long answers in a word-processing document so that you can more easily review and spell check your responses.



2 Tailor each application to the employer

A seemingly simple question might be ‘What attracts you to applying for a graduate position within IBM?’ or ‘Why do you want to work at CGI?’. The company does *not* want you to parrot back statistics and facts from its website about how great it is. Instead, it wants you to show that you understand its business and the graduate job you are applying for, and link these to your own interests or experiences. For example, you might want to highlight a technology that is particularly important to the organisation and outline how you are enjoying using it in your final-year project or explain how your work experience has helped you confirm that you want to work in the company’s particular area of business.

3 Never cut and paste

The questions may seem similar from form to form but there can be subtle differences, so avoid cutting and pasting in responses from other applications. It may seem easier, but it also makes it easier to miss the point of the question, or leave in another employer’s name. Moreover, each employer has different expectations and may place greater or lesser importance on different aspects of a competency or skill. Look at the questions carefully and make sure you understand exactly what they mean.

4 Include a variety of examples

What you’ve done in the past is usually a good indicator of how you will perform in the workplace, so use real-life examples and experiences

when responding to competency-based questions that ask you to discuss when you used a particular skill, rather than making general statements about yourself (eg ‘I am highly organised’). The examples you use don’t have to come just from your academic experiences. Work experience, IT-related or not, is always a good source to draw upon. Even the most routine summer job can show an employer how you react under pressure, deal with people and solve problems. Internships or part-time jobs can be particularly useful when you are asked to provide an example of a time when you demonstrated strong commercial awareness.

You can also demonstrate your competencies through your hobbies, family situations you’ve dealt with or other personal experiences. For example, you might want to draw on an inspiring personal project to help answer the question ‘Tell us about a time when you showed drive and enthusiasm’. Use a different example for each question – recruiters like variety.

5 Make your responses structured and concise

Applications often have a word limit for longer responses to questions on competencies and skills. Keep them relevant and concise. Use the STAR acronym to help you structure your response to this type of question. Write a brief description of the Situation and Task, devote more space to describing the Actions you took, and then briefly sum up the Result of your actions and any lessons you learned from the experience. Many applicants devote too much space to explaining the situation. It is better to use the space to explain the personal actions you took and what you learned from the experience.

Make doubly sure your responses are about what *you* did. If you use a group project or team-related example, don’t talk about ‘we’, ‘us’ or ‘they’.

6 Pay close attention to detail

Accuracy is really important in the life of a tech professional. If you were an IT employer, would you trust someone who didn’t have good attention to detail to code your flagship software application or document requirements for a business-critical system? It is important that candidates take the necessary care to ensure there are no spelling or grammatical mistakes.

You will also regularly use your writing skills in the IT business, so a well-written application is a good indicator of your ability to present a clear message. When you work online, it’s easy to slip into being informal and a bit too casual.

On an application form you can show your accuracy by:

- always writing full, grammatically correct sentences, using a capital letter for ‘I’
- including all the information requested, leaving no blanks
- checking that you have expressed yourself clearly and that your sentences make sense
- checking your spelling carefully.

7 Do final checks

Before you click submit:

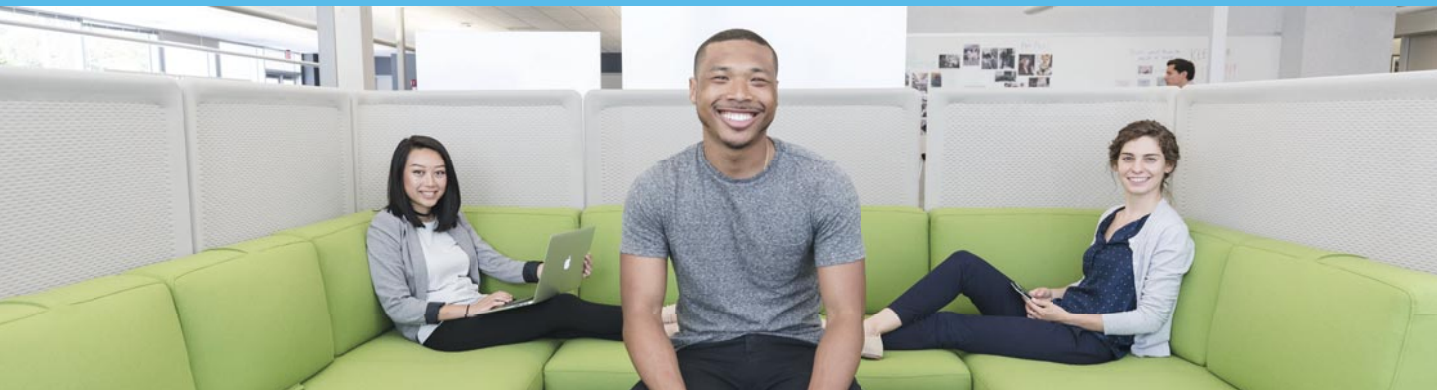
- go away and take a break. When you return, check through the responses again
- get someone whose opinion you trust to read through your responses
- paste your responses into the form and print out the completed copy
- proofread it and, assuming everything’s perfect, keep a copy – you’ll need to refer to it if you get invited to interview. ☺





Be You, With Us

#WeAreCisco



Engineering | Customer Experience | Sales
Corporate Functions | HR | Legal | IT
Marketing | Supply Chain | Operations

[cisco.com/careers](https://www.cisco.com/careers)

Follow @WeAreCisco



Get up to speed with technical interviews

Employers may invite you to a technical interview to take a closer look at your technical abilities. However, the aim isn't *just* to see how much knowledge you have amassed in a particular area: 'ultimately, at the graduate level, what we're looking for is potential,' explains Iain McFadyen, global graduate recruiting manager at **London Stock Exchange Group**. 'What they know on day one is important, but really, as a graduate recruiter, what you're trying to do is hire people who can be a technology leader in a few years' time.'

What can you expect?

You could be assessed through practical tests, design exercises, presentations or technical quotations – or a combination of all four. These assessments can happen throughout the application process; you might be asked to complete a practical test in an online application or a presentation during an assessment centre. For example, recruiters may ask you to comment on a range of scenarios or hypothetical situations of increasing complexity – or give you brain teasers – in order to assess your problem-solving skills. Another common technical interview practice is to get candidates to work on a short design exercise or code analysis activity before the main interview begins. Be prepared to present your solution and explain your findings to your interviewers, and expect them to ask how, given more time, you might revise the system or code and why.

Keep in mind that interviewers are unlikely to ask you to demonstrate skills that you don't have. Iain explains, 'we use someone's CV as a guide. If it states that they are an expert in a particular technology, we'll dig into that and ask questions to find out more about their knowledge. If it's clear from someone's CV that they are a beginner, we'll adjust the questioning.'

How to approach tricky problems

You're likely to face open-ended questions – eg 'How can we make this process run faster?' – to test how you react to unfamiliar situations and to problems that don't have a 'textbook' answer. In the workplace you'll have to quickly become familiar with new systems and technologies in a short space of time. Show recruiters you can do this by keeping calm and giving the problem your best shot by explaining how you'd approach finding a situation – you may not be expected to know the answer.

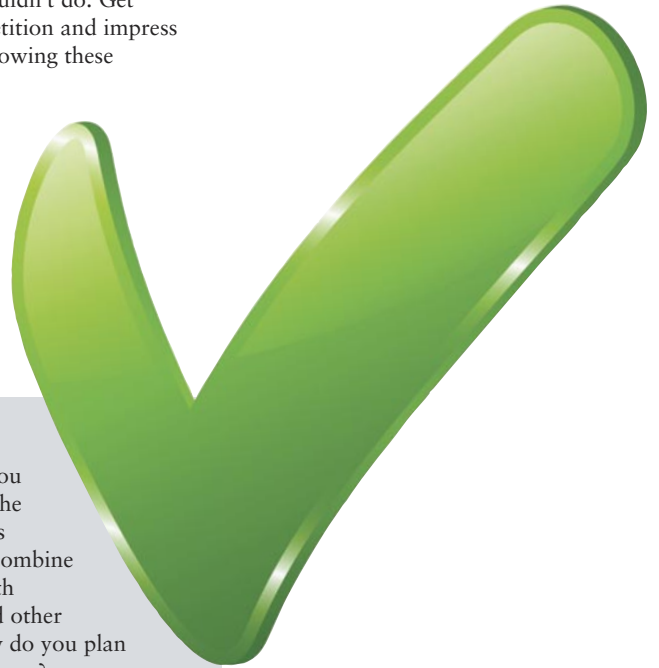
Ask the interviewer if you think further information is necessary to complete a task or if you need to check the scope and constraints of a problem before sharing your ideas. You may get a few pointers, and it is better to do this sooner rather than jumping straight in and finding yourself going off topic. And if you really don't know something, be honest. It is far better to admit this than to try and pretend that you do know. ☺



Dos and don'ts for tech interview success

A graduate interview shouldn't just be a Q&A session – it should be a conversation between you and the recruiters. And, like any conversation, there are some

things that you should do and some things that you shouldn't do. Get ahead of the competition and impress interviewers by following these simple rules.



Do...

... ask your own questions

An interview is your opportunity to decide whether you want the job, as well as the recruiters' chance to decide whether to offer it to you. What's more, interviewers want to be confident that you understand the position and know about the employer. Take all opportunities to ask questions about the role, as long as you can frame them in a positive way. Good topics include the precise nature of the role, training and development, what previous recruits have progressed on to do and your interviewers' own backgrounds (if they work in the sort of career you're trying to get into).

... treat your interviewers as human

Seeing your interviewers as normal people will make you feel better and could help you get ahead. A little 'polite-but-genuine' small talk at the beginning or end of the interview will help you stand out as a mature, thoughtful candidate who knows how to interact with others in a business context.

... highlight your wider skills set

As a technology or computing graduate your technical skills are clearly there on the page for your

interviewer to see, but what else can you bring to the role? The 'dream candidate' is someone who can combine technical ability with communication and other personal skills; how do you plan on demonstrating these?

... be honest

That said, your interviewer is not expecting the finished article, so there's no shame in revealing you lack experience or competencies in a particular area. The main thing is to show willingness to work on any areas of weakness and, ideally, evidence that you're taking steps to do this, perhaps by taking part in extracurricular activities.

... show enthusiasm

You shouldn't expect your technical skills and qualifications to speak for themselves. Employers want to see motivated candidates who can clearly express why they want the job. You might be the brightest person in the room, but it counts for little if you don't come across as enthusiastic and motivated.



Don't...

... be passive

Almost all recruiters have a set interview format that they need to stick to, asking particular questions in a specific order. Attempting to 'hijack' the interview and disrupt this will do you no favours; however, this doesn't mean you have to be passive, or that recruiters want you to be. Work within the framework they provide to sell your skills and experience as well as possible.

Before your interview, identify what relevant experience and attributes you possess and make sure you communicate all these at some point in the interview. If you're not asked about them directly, you may be able to include them in your responses to other questions, for example if asked to provide an example of a time that you've worked in a team or led a group. Towards the end of the interview, you may well be asked if there's anything you'd like to add – take advantage of this to mention any key points you haven't yet had a chance to cover.

Be aware that your interviewers may not be the same people who screened your application, particularly in large organisations or if they are not part of the HR or recruitment team. They may have had little or no chance to read your application beforehand, so don't assume that they'll know about your achievements if you don't mention them.

... be a know-it-all

Recruiters respect candidates who acknowledge gaps in their experience and knowledge, and deal with difficult questions in a positive way. If you need clarification about what you're being asked it's fine to say so, and it's

OK to take a few moments' thinking time before answering a tricky question. It's possible you'll be asked about a skill or experience you just don't think you possess yet – acknowledging this and indicating a willingness to learn is a safer bet than lying. Likewise, if you don't know the answer to a question it's wiser to admit this (perhaps outlining the steps you might take to find out) than to bluff it. Your interviewers are likely to be a lot more knowledgeable on the subject than you are and being caught out will do nothing for your job prospects.

... assume all technology roles are the same

You might have your heart set on a particular role or function, but top IT graduates have the flexibility to work in a range of different jobs, from programming and development to project management and analytics. Bear in mind that your employer may be evaluating your fit for a number of potential positions or rotations, even if you aren't.

... ignore the bigger picture

By the same token, where IT candidates sometimes fall down is not being able to look beyond their own area of expertise or interest, particularly when applying to a non-tech company. It's important to demonstrate your interest in, and understanding of, the organisation's wider business, whether that's banking, professional services or consumer goods. ☺



More

For more interview advice...

... go to the interview advice section on targetjobs.co.uk. We cover what to wear, how to deal with nerves, body language tips, tricky interview questions and more.

How you should answer

'Why do you want to work for us?'

This question may look short, simple and not something to waste too much valuable time on, but don't be fooled: when you're asked 'why do you want to work for us?', 'What attracts you to this position?' or 'Why do you want this job?', you're *actually* being asked:

- What do you know about the company and the position?
- What evidence can you provide that you have an interest in the sort of thing we do?
- What do you hope to get out of the job, apart from a salary?

That's not all – you'll also have to answer a number of 'unspoken questions' that recruiters will have in their minds while they are considering your answer:

- Are you serious enough about the job to have bothered researching us properly?
- Do you have a realistic understanding of what the job actually involves?
- Do you want the job?
- If you accepted the job, how long would you stick around for?

Why do recruiters ask this question?

Put yourself in your interviewers' shoes for a second: recruiting and training graduates is a very expensive and time-consuming business, so it's understandable that they want to be convinced that the graduates they hire

will be genuinely motivated to do the job and won't leave after a few months or a year. Recruiters have told TARGETjobs that they're not just looking for good current graduates, but good *future* employees.

You need to prove that you understand what the job you're applying for is and how it fits in with your interests and long-term career goals. A technology recruiter at MI5 shared this advice for aspiring technologists: 'It's important you've thought about your career aims and what you actually want out of a job. Being able to think about your career aims (not just "it sounded cool") is really impressive.' Your answer needs to convince employers that your decision to apply has been carefully considered and is genuine.

What makes a BAD answer

Skimp on your research and you'll end up resorting to empty waffle to fill up time in an interview or space on your application form. Generic, or unquantifiable statements, like 'I've always wanted a career as a software developer in a health informatics firm' won't hold water as answers – you

need to have strong evidence to back up your answers. Blatant flattery will go down badly: saying 'I'd relish the opportunity to work for such a prestigious organisation...' just screams 'I don't know the first thing about you.' Similarly, saying 'I feel my unique blend of skills, experience and academic achievement makes me the perfect match for the job' without actually stating what these are makes you anything but unique. Recruiters see enough cliché-ridden applications every day as it is. Ensure yours isn't one of them.

Answers that are too brief to be substantive won't impress either. This is especially a danger in online applications – a one-line answer to the questions 'Why do you want to work for us?' suggests to technology recruiters that your real answer is 'Actually, I don't.' Even worse, leaving in the wrong company's name, having copied and pasted the answer from an earlier application, screams out both 'I said the same thing to your competitors' and 'I'm really slapdash.' This might sound like an impossibly obvious mistake, but recruiters have told us that this is very common.



What makes a GOOD answer

So, now we know what not to say, we can work out what you should be saying. Your answer to ‘why do you want to work for us?’ therefore needs to include:

- evidence that you understand the employer’s business
- evidence of interests or experience that relate to this
- clarification of your career goal and, if necessary, how this job will help you towards this.

‘I think the first thing to do is be genuine and honest, telling us what you think we want to hear doesn’t work and, believe me, we will be able to see straight through it. This is where research comes in,’ explains Kirsty Smith, graduate and apprentice recruitment manager at **Capgemini**.

‘You need to be able to talk credibly about the sorts of projects we work on and why you want to be a part of that, what new technologies and

‘Say what you think!
 Why *do* you want to work for us?
 What drew you to the application?
 Nobody is trying to trip you up here.’

A technology recruiter at **MI5**

innovations we are using and why that interests you.’ Make sure your research goes beyond what’s easily available on the employer’s website. Use sources such as work experience, networking events and social media to go beyond the basics. You can find out more about what you need to research on page 28.

When finding evidence for your answers, the more details the better: make sure to name relevant internships, projects, university modules or active involvement in relevant societies, and go into specific detail about how this has informed your decision to apply. Support your answers further by linking this evidence to your research and your knowledge of the employer’s work, aims and culture. Finally, put your answer in the context of your own career goals and explain how the organisation and the role will realistically help you to achieve these. ☉



*For online application tips
 Take a look at pages 42–43.*





What to expect at assessment days

Assessment centres are a regular feature of the graduate recruitment process. Employers bring together a group of candidates who complete a series of exercises, tests and interviews that are designed to evaluate their suitability for graduate jobs within their organisation.

The group setting makes it much easier for recruiters to assess how well you work with others, how others respond to you and how you react to



different situations. And it's also much easier for you to showcase a broader range of skills and competencies than you would be able to demonstrate in an interview.

Graduate employers use assessment centres to test for the skills and aptitudes that are right for their own organisations. As well as interviews, expect to do a combination of group work exercises, presentations, aptitude and psychometric tests, or case studies linked to the job function. Ensure you showcase your commercial awareness, for example by considering the business context of a case study task and the commercial implications of your proposed solution. Employers will also give you the opportunity to find out more about them and to meet with current employees.

Group tasks

Group exercises are used to check out your communication and problem-solving skills, and to ensure that you can work effectively in a team. They include discussion groups, exercises that involve role-playing to a specific brief and, most commonly, working through a job-related scenario or case study.

You need to support the group in completing the task that has been set

while also promoting yourself. The best way to do this is to show yourself to be a good team player – flexible, full of ideas but willing to listen to and help expand the ideas of others.

Presentations

At some assessment centres you will be asked to give a presentation, usually to a mixed group of candidates and assessors. Here are a few ground rules:

- If you have a free choice of topic, choose something that you can talk about naturally and easily – don't choose a topic just because you think it will impress.
- A structure is helpful to prevent your mind from going blank and will help the audience keep track too.
- Use whatever form of notes you feel comfortable with.
- Don't attempt to fit in too much information or your audience will switch off. Five minutes is only enough time to present three big ideas or messages.
- Much of the message of your talk will be transmitted non-verbally, so your body language can make a huge difference to your presentation.
- You may be invited to use a flipchart or slides – use these to your advantage to support your presentation but don't just read off the screen or spend too long on them.
- Fit in time for a practice run before the real thing.

Psychometric tests

Many graduate employers use psychometric tests during recruitment as they give some quantifiable measurement of whether or not you possess certain aptitudes and abilities essential for the job. You may already have taken psychometric tests as part of the application process, but recruiters may do a double check.

Ability tests assess general intelligence and skills that someone with your level of education should possess. These are most likely to be numerical or verbal reasoning tests specific to the job you have applied for. Expect to use complex

information, including numbers and diagrams, to solve problems using logical or lateral thinking.

Aptitude tests assess your ability to learn something new. Employees are increasingly expected to be flexible and adaptable in the workplace, so those who show ability to develop new skills quickly are in high demand. If you are from a non-technical degree background and have applied to work in a technical role, you may sit a programming aptitude test.

Personality tests assess your typical behaviour and preferred way of going about things, especially when presented with difficult situations. There are no right or wrong answers: honesty is the best policy.

New assessments

Recently, a couple of employers (such as BT, Accenture and Lloyds Banking Group) have introduced technology assessment centre exercises that use virtual reality. Recruiters have previously reassured TARGETjobs that applicants won't need to have any previous experience with VR, as these exercises are used to look for the same

'Be a good team player – flexible, full of ideas but willing to listen to and help expand the ideas of others.'

skills and qualities as the rest of the assessment centre. Don't pay too much mind to the technology, instead focus on showing off your skills and your suitability for the role. However, if there any extenuating circumstances that mean you cannot take part in these exercises, make sure you let the recruiters know in advance.

Be professional

Always remember that you are being assessed against the employer's criteria and not against the other candidates. You need to find a way to work together with your 'colleagues' to achieve the goals and tasks set. Turn up with an open mind and be ready to get involved. ☺



Search:
TARGETjobs IT

Jobfinder

Find out what these IT and technology employers offer their graduates.

Advertisement Profile		www.	Type of organisation														
			IT services	IT vendor	Software	Hardware	Technology	Telecom	Financial	Games	Industry	Investment	Media	Outsourcing	Public sector	Retail bank	
OBC	78	Alfa	www.alfasystems.com/eu/careers	■	■	■	■										
-	79	American Express	www.americanexpress.com/campus	■	■	■	■	■									
-	80	Aon	www.aonearlycareers.co.uk	■		■	■								■		
19	81	BAE Systems	www.baesystems.com/graduates		■	■											
-	82	Baillie Gifford	www.bailliegifford.com		■			■	■								
-	83	Bank of America	campus.bankofamerica.com											■			
IFC	84	CGI	www.cgi-group.co.uk/careers	■	■	■	■	■	■						■		
-	86	Close Brothers	www.closebrothers.com						■								
-	87	Deutsche Bank	db.com/careers/technology	■	■	■			■	■		■					
-	88	DSTL	www.gov.uk/dstl			■	■									■	
-	89	FactSet	www.FactSet.com/careers	■	■				■	■							
-	92	FDM Group	www.fdmgroup.com/careers						■								
-	91	Fidelity International	https://earlycareersatfidelity.com							■							
-	93	Kerry Group	www.kerrygraduates.com														
14	94	Lighthouse Systems LTD	www.lighthousesystems.com	■	■												
-	95	London Stock Exchange Group	www.lseg.com/graduates	■	■			■	■								
-	96	Met Office	www.metoffice.gov.uk/about-us/careers/vacancies	■	■	■										■	
-	97	MI5	www.MI5.gov.uk/careers														■
-	98	Orbium Consulting Limited	www.orbium.com/careers	■	■	■	■	■	■			■			■		
20	99	Sky	www.skyearlycareers.com														
-	100	ThoughtWorks	www.thoughtworks.com/careers/uk			■											
IBC	101	TPP	www.tpp-uk.com/careers	■													

Key: IFC = inside front cover, IBC = inside back cover, OBC = outside back cover Other advertisers: GradJobs Live!, page 60

Retail / Management consultancy / Other	All degree disciplines / Business studies / Computer science/IT / Software engineering / Engineering / Mathematics / MSc/IT conversion / Minimum degree requirement	Minimum UCAS points requirement	Starting salary / Benefits	Pension scheme / Private healthcare / Days' holiday	Secondments to clients / Applications previous year	Vacancies previous year	Vacancies this year	Closing date	Summer internship / Placement year	Work experience / Closing date (WE)			
	2.1	£40,000		25		15-20	15-20	Ongoing					
	2.1	320	£40,000		22	600	24	48	17/11/2019				
	2.1	Competitive			25		75	90+	90+	See website		See website	
	Varies	£28,000 minimum			25	200	350	Varies			Varies		
	2.1	Competitive			34	6	6	29/11/19					
	2.1	Competitive						200+	See website		See website		
	2.1	240	Competitive		25		2,500	160	100	Rolling			Rolling
			£27,000				925	7	7	Open			
	2.1	Competitive						100+	Dec 2019				
			£24,000-£28,000		25		970	90	90	Nov 2019		Jan 2020	
	2.2	280	Competitive		25		70	70+	Open				
	2.2		£23,500-£27,500		20	50,000+	1,100+	1,100+	Open			May	
			Competitive		25	3,000+	40	30		Investment - 08/11/2019 Commercial - 17/01/2020		Investment - 08/11/2019 Commercial - 17/01/2020	
	2.1	Competitive					10	15	See web			See web	
	2.1	260	Competitive		20			7	Open				
 <small>Business Prog: all disciplines IT Prog: STEM only</small>	2.1	Competitive			25		30	30	01/12/19			01/12/19	
			£17,000		27.5			12	See profile				
	2.2		£34,500		25			TBC	Open				
	2.1	Competitive			25		5	5	Ongoing				
			£30,000-£35,000		25		1,138	48	90+	See website		See website	
			£32,000-£35,000		25		25	35+	Ongoing				
	2.1	A** at A Level	£45,000		25				Ongoing	Open		Open	



An invitation only event

For females

Studying any STEM degree

18.10.2019 • 22.11.2019

14.02.2020

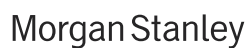
London

IT's not just for the boys!

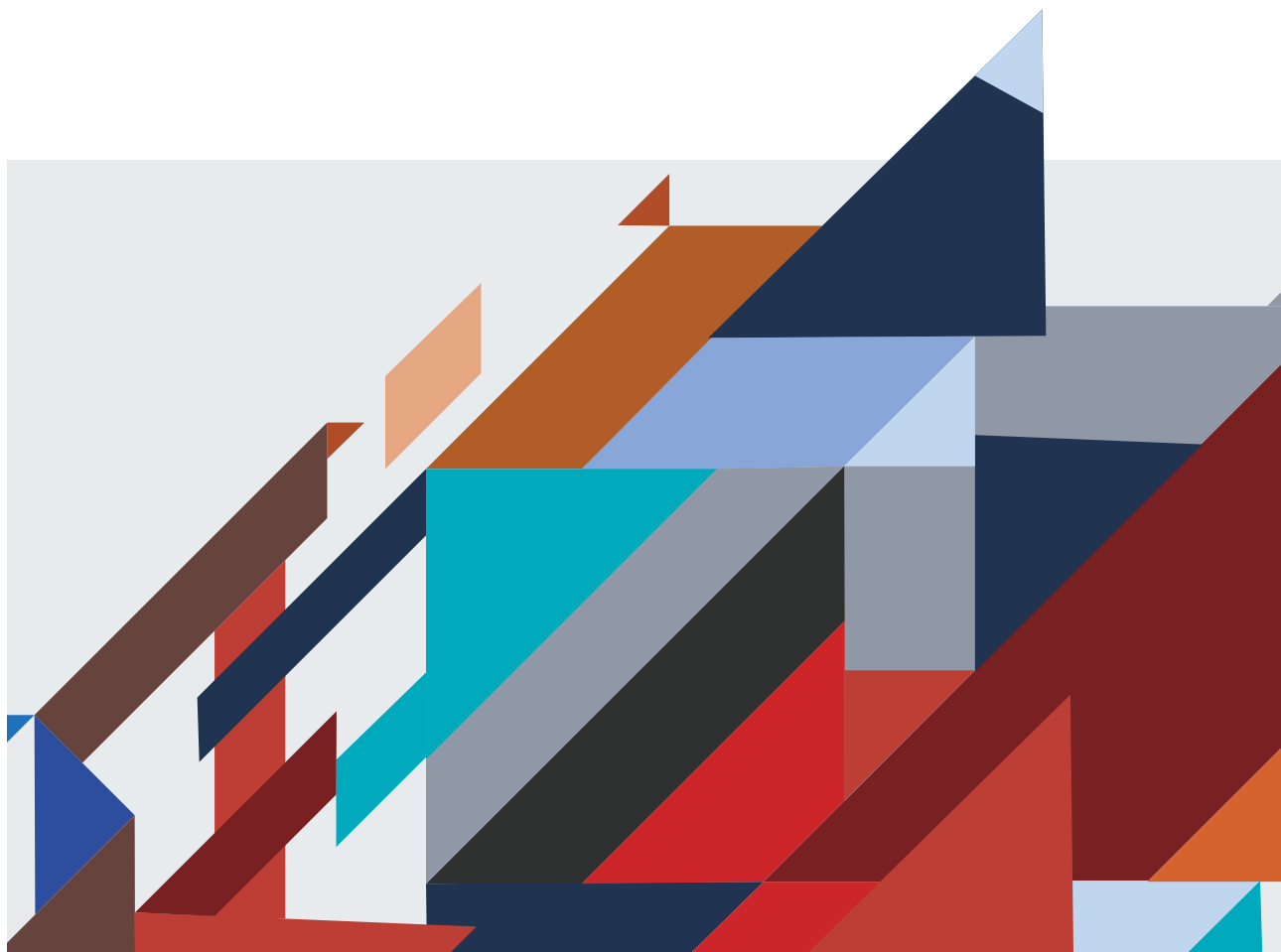
Apply now to fast-track your career, meet global employers and inspirational women, and build your CV, confidence and contacts.

ITsnotjustfortheboys.co.uk

Event partners



Delivered by STI



Further study

IN THIS SECTION

- 56 Browse your postgraduate options
- 58 Upgrade your degree with an IT conversion course



Browse your postgraduate options

Finding the right course or studentship requires thought and planning. You need to understand the different options, and also consider the long term, so that further study provides a springboard into employment. Think about your career options at the same time as considering postgraduate study and research the employers you might want to work for later on: some will value the right postgraduate degree, so you may increase your job chances or starting salary. However, others do not need postgraduate expertise, so will not place masters or PhD holders above other applicants or pay them extra.

MSc or PhD?

There are two main postgraduate study options for graduates from technical first degrees.

Masters degrees can be either a one-year taught course resulting in an MSc, or a research-based degree called an MRes (some research-based courses will result in an MPhil). Graduates typically choose masters courses to specialise further in a particular area of technology, for example software engineering, data analytics, cybersecurity, networking and machine learning. You'll find a wide range of different course options by looking at universities' online postgraduate prospectuses.

A doctorate (PhD or DPhil) is a research-based qualification. It's a full-time job and requires the same level of forethought and preparation as finding a graduate job. You will usually need a good first degree (typically a 2.1 minimum), a masters degree and to feel confident of your interest in a particular research subject as you will be focusing on it for three to four years.

You can also do an integrated PhD. This is a four-year programme that combines research with training in discipline-specific and professional skills. You may not need a masters degree before doing an integrated PhD.

Identifying relevant courses

Ideally, you should begin thinking about postgraduate study at least a year in advance of when you want to start. Academic departments usually promote their courses and programmes that begin in September/October as early as a year in advance. Keep an eye out for postgraduate fairs to attend.

If you already know what subject you want to pursue, read up on it thoroughly and track down the courses and academic research groups that are actively working in the area. Do a literature search to find recently published papers in key journals – your university library should be able to help, or try Google Scholar (scholar.google.co.uk)

for an initial search. Get further help and compare postgraduate courses and course providers at targetjobs.co.uk/postgrad.

Analysing course quality

Once you have a number of potential courses, you can compare the courses or programmes on their relative merits: course content, modes of study and university facilities. Also do some basic checks on the department so you know its research strengths.

Take every opportunity to talk to current postgraduate students and researchers when you visit a department for interviews or open days. They can give you a realistic view of life in academia and they will be able to tell you how their group functions practically. You can also ask what previous students have typically gone on to do.

A good number of postgraduates stay at their current university. This can be positive – you will be familiar with the department, its specialist fields, teaching staff and potential supervisors. However, don't choose it as a safe option: it needs to offer the course/research opportunities that are right for you. Keep in mind that moving to a new university could broaden your horizons and expand your network of contacts.

Keeping connected to the commercial world

Whether you do a masters or a PhD, make sure you stay up to date on what's going on in the commercial technology sector. While you study, find ways to develop general competencies that will give you an advantage in the workplace. Read more on pages 22–23.

There is an increased focus on providing professional skills training for postgraduates. Vitae (www.vitae.ac.uk) is a national organisation that facilitates such activities for UK researchers. It works in partnership with the UK's research councils to provide advice, resources, skills development programmes and networking opportunities, but schemes like this aren't the only way to develop your skills portfolio.

Take an active part in group discussions and seminars, and use undergraduate teaching opportunities and conference poster sessions to develop good communication and presentation skills. You can also make the most of university facilities to add some additional strings to your bow. For example, learn an additional programming language (see pages 24–25) to show your versatility and adaptability, and make sure you're competent in the basics of regular office software packages.

Selling your expertise to recruiters

Many IT employers value postgraduates for the qualities they bring to the workplace in addition to their specialist knowledge, but a PhD or MSc won't guarantee you a job. You'll still need to work hard on matching your key attributes to what recruiters want.

The benefits you'll be able to sell include your inquiring mind and the self-motivation that comes from defining and setting your own goals and from managing an extended project. Extra confidence and maturity can also be big assets. While your intellectual achievement will never fail to impress, you must be able to convince recruiters that your postgraduate skills are transferable to their environment. ©

Funding providers

- The Engineering and Physical Sciences Research Council (EPSRC) is the main funder of technical and science-related postgraduate research in the UK. Visit epsrc.ukri.org to find out more.
- Studentships and awards typically cover your course fees and pay your maintenance (stipend).
- EPSRC studentships and awards are allocated to university departments and research groups and not directly to postgraduate students. You need to apply directly to the department or research group for your research programme or course, and they then decide which successful applicants are put forward for funding awards.
- Commercial sponsorship may also be available for certain research projects. As well as boosting your EPSRC funding, these opportunities give you the chance to gain some commercial experience working alongside the sponsor organisation.

'A PhD or MSc won't guarantee you a job afterwards. You'll still need to work hard matching your key attributes to what recruiters want. The benefits you'll be able to sell include your inquiring mind, self-motivation, extra confidence and maturity.'



*Find more tips
on targetjobs.co.uk/postgrad*



Upgrade your degree with an IT conversion course

Conversion courses can help graduates without IT degrees integrate into the industry and increase their chances of securing jobs – particularly technical roles. They provide a grounding in the basics of IT and computing and are typically a year-long, taught masters course.

For many graduates the IT conversion course is the path to a completely new career, but it could also boost professional opportunities in areas related to your undergraduate degree. For example, if you are a biology graduate, extra computing skills could help you specialise in the growing field of bioinformatics, or healthcare technology. An economics graduate could gain the technology skills needed to get into financial modelling. But, as the business world becomes ever more reliant on technology, it's no bad thing for any graduate to have a good understanding of computers and IT systems.

Think about your career goals

To get the most out of a postgraduate conversion course you need to give some thought to what you want to do at the end of it. Conversion courses are intense. You'll be brought up to speed in a completely new discipline in a relatively short time, so you need to be motivated.

'Technologists need to possess strong people skills and business acumen. Conversion graduates frequently display these traits.'

Researching the IT business sector and listing the main employers that interest you is a good way to start – you need to make sure that you really

do want to work in the IT sector before you pay thousands or take out a loan to join it! Take a close look at the different roles offered by IT employers and identify which ones interest you (page 62 onwards can help). This will give you an idea of the skills and competencies you will need and it will help you compare the course content so that you find the masters that suits your career aims.

Find the best course for you

Pay attention to the fees, content and modules of different IT courses. An MSc in computer science or computing will typically cover core computing principles and be heavier on programming, development and networks, compared with an MSc in information technology. The latter could focus more on building IT applications within business and society. Both types provide invaluable skills but one may be better suited to your career intentions than the other. Look at the content and key modules carefully – while you'll want to be challenged by your postgraduate studies, why struggle with loads of programming if that's not your long-term IT interest?

Where to find funding

- If you have already found a masters course that interests you, check what financial help may be available through the university or department, eg scholarships or bursaries. Make enquiries before or when you apply.
- You may be eligible for a postgraduate loan of up to £10,906 from the government. Find out more about repayment terms and eligibility at [gov.uk/funding-for-postgraduate-study](https://www.gov.uk/funding-for-postgraduate-study)
- Visit your university's careers service to find directories of funding organisations and more information on postgraduate study.
- Start planning your postgraduate study as soon as possible to increase your chances of finding and securing funding.
- Also visit [targetjobs.co.uk/postgrad](https://www.targetjobs.co.uk/postgrad) for information on funding.

To maximise the benefits of converting to IT you also need to choose the right place to study. Different institutions will have different emphases and provide a variety of learning environments, so you will need to decide what suits you best.

Visit the departments, and talk to students and staff – this is a good way to assess a course's quality. If you are taking a conversion course to boost your employability, make sure you find out what previous students have gone on to do and in what IT areas they have typically found work.

Getting onto a course

Check the minimum requirements carefully. You need to make sure that your undergraduate degree will allow you entry onto the course and that your degree classification meets the minimum requirements. Many courses accept graduates from all disciplines, but may ask for a minimum of a 2.2 or a 2.1. You may also need to have evidence of numerical ability (such as an A level in mathematics), and courses with a deeper technical element may only accept graduates from numerate, technical or science degrees.

If you have any prior experience in computing or IT-related work

experience, mention this in your application along with the strength of your mathematical and analytical skills. This will help admissions tutors assess your suitability for the course.

The combination of the technology skills gained through a conversion masters and the general competencies developed through your first degree will give you a breadth of experience and a strong skills set. Technologists need to possess strong people skills and business acumen, and understand the diverse needs of IT users, as well as having deep technical knowledge. Conversion graduates frequently display these highly sought-after traits.

Gain extra employer appeal by seeking out a course that will expose you to IT and computing in a commercial context through a placement or project work with an employer. At the very least, keep up to date with the latest technology developments and goings-on in the industry, and link what you are learning to what's going on in the commercial world of information technology. ☺



Research:
IT conversion courses
at [targetjobs.co.uk/
postgrad](https://www.targetjobs.co.uk/postgrad)

FREE
ENTRY

Get **YOUR**

CAREER ON TRACK



GradJobs *Live!*

17 & 18 OCTOBER | OLYMPIA LONDON
31 OCTOBER & 1 NOVEMBER | NEC BIRMINGHAM

More than just a jobs fair...

Book tickets at GradJobs.co.uk

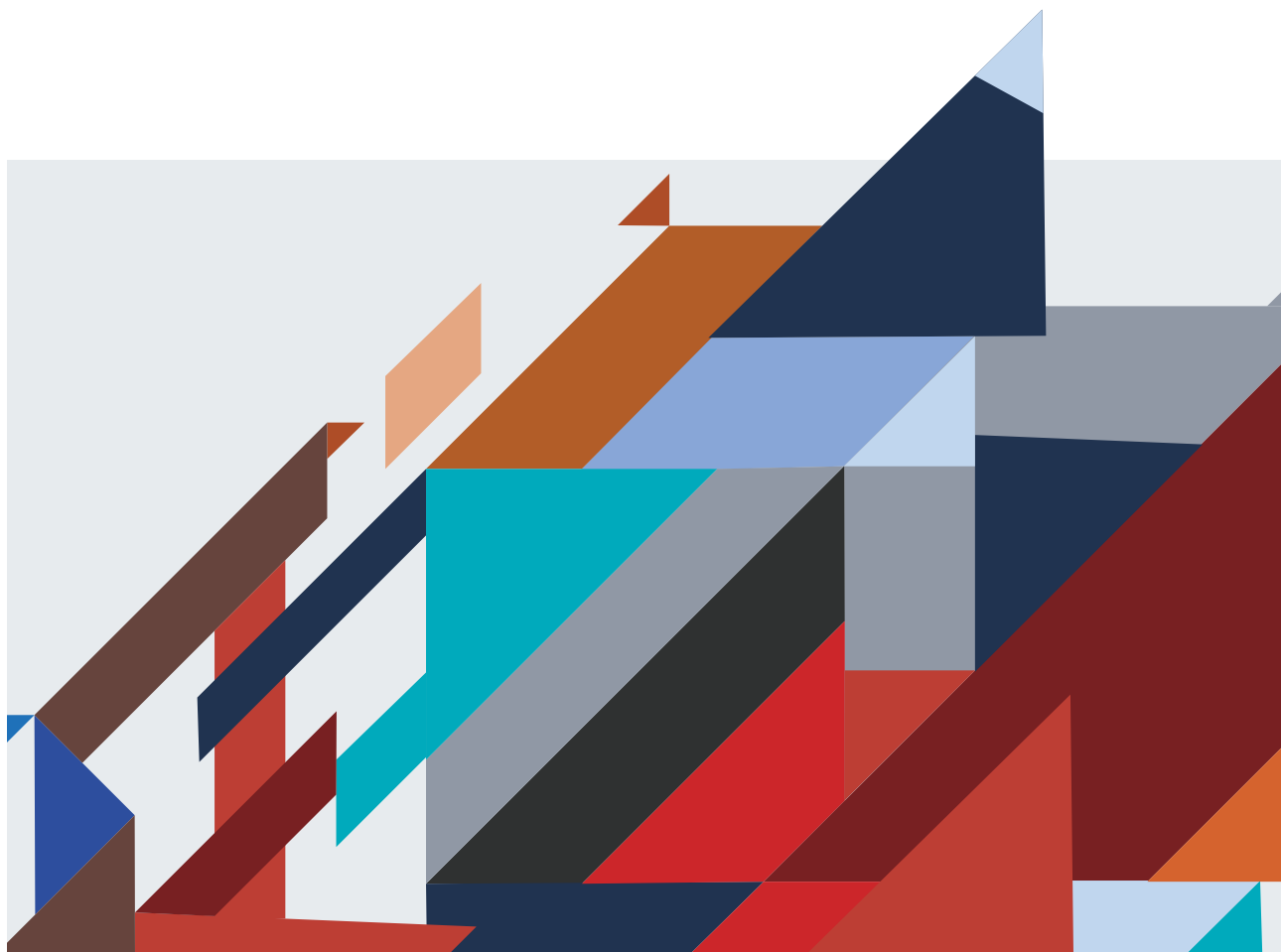
EXHIBITORS INCLUDE*:



IN ASSOCIATION WITH BIRMINGHAM EVENTS ONLY:




*CORRECT AT TIME OF PRESS. SEE WEBSITE FOR MORE DETAILS.



Roles & sectors

IN THIS SECTION

- 62 Software engineering explained
- 64 Decoding job title jargon
- 67 Automation and AI
- 68 Cyber security
- 69 Defence
- 70 Financial services
- 71 Health informatics
- 72 IT services
- 73 Telecoms
- 74 Technology consulting
- 75 Fact vs fiction



Software engineering explained

How does software engineering differ from development? How can coding help keep planes in the air? JACK SAWYER, a principal software engineer, spoke to us to answer these questions and more.

My route into software engineering

- When I was applying to university, computer science was the only option I considered. I'd always been interested in computers and how they work, so studying this at university felt like a natural progression for me.
- My first experience of software engineering was during my year in industry, which I carried out at BAE Systems. Over this year I worked as a software engineer on digital map projects, particularly on tablets and PDAs (personal digital assistants). I was offered a place on BAE Systems' graduate scheme and started work in 2009.
- My job title when I started was graduate software engineer, and I've since progressed to software engineer in 2011, senior software engineer in 2013 and to my current position as a principal software engineer in 2016.

work in safety-critical systems at the BAE Systems site in Rochester,' explains Jack Sawyer, a principal software engineer. 'A good example of the types of projects I work on is the high-lift computer of a well-known commercial aircraft. These control the flaps and slats on the wing of an aircraft to modify the amount of lift produced. I was involved from a relatively early stage right through to seeing the aircraft going into service. This took around five years and involved travelling to Canada and the US to work in the client's own simulation labs. Getting to see that aeroplane fly for the first time was a highlight and there's something quite cool about knowing there are

'Software engineering is a fast-moving area of technology and so the skills that I used in the beginning of my career are completely different to the skills that I use now.'

aeroplanes flying around partly using software I've written.' Intrigued, we wanted to find out more about the work of a software engineer.

What is software engineering?

To me, it's computer programming but with some more rigour and discipline behind it. It's not just putting together code; it's also writing requirements and implementing, testing and maintaining software.

The work of a software engineer interacts closely with people in other disciplines. I usually sit in a team with other software engineers, systems engineers and hardware engineers, each of whom will use their expertise on different stages of a project. It's far from the stereotype of coders working alone in a basement somewhere.

What does a typical project for you look like?

A typical project begins with my team receiving a series of requirements from a customer. This is then passed onto our group of systems engineers, who do some top-level design of a system as a whole. From then, our software engineering team takes the allocated requirements and starts designing and coding. We primarily use UML (unified modelling language), MATLAB Simulink and C for this. Throughout this process, there are many stages of testing and verification that the code needs to go through. This includes the instrumentation phase and testing the code alongside the hardware. This generally happens in a lab environment, where we've got test stands that simulate the other aspects of systems that our code will need to work alongside. A lot of our work is safety critical, so we need to test every line of code to ensure that it meets the customer's requirements.

How has software engineering changed over your career?

Recently, model-based engineering has also become much more prominent. This is where, using tools such as SCADE and MATLAB Simulink, requirements and designs are represented as a collection of models, rather than a bunch of documents or spreadsheets. These models are used as a central source of truth and ensures that the entire team is working with the most up-to-date information. Model-based engineering is still evolving, but it's already changed how we work with the other engineers in our product teams.

Software engineering is a fast-moving area of technology and so the skills that I used in the beginning of my career are completely different to the skills that I use now. I was taught the fundamentals of programming by learning Java at university, but the majority of work I do now is using C. Working in this sector, you've got to be willing to learn on the job.

What challenges are software engineers likely to face?

The work of a software engineer is very much driven by processes. It's

crucial that we follow process documents to the letter, making sure that every test has been passed and everything works in the way that it should. This is vital when working on safety-critical software and for enabling other engineers to do their work. These processes can take some adjusting to from university, as coding (which is usually 'the fun part') makes up a relatively small proportion of the work we do. However, I think of it as an extra challenge that my code has to go through.

What advice do you have for aspiring software engineers?

A lot of the rigour that comes with software engineering will be learned on the job and will naturally grow from logical and analytical thinking skills, so students should focus on developing their programming skills. Show your enthusiasm for programming – you don't necessarily have to have a game on the app store, but it's good to see evidence that students are developing their skills in their own time.

'I usually sit in a team with other software engineers, systems engineers and hardware engineers, each of whom will use their expertise on different stages of a project.'

Find opportunities to look at other people's code, whether that's at university or through work experience or a placement year. There's a lot to be gained from examining an experienced programmer's code and comparing it to the requirements they were given. Ask yourself: do these things match, what can I learn from this, and is there anything I would do differently? 🕒

Decoding job title jargon

Key:

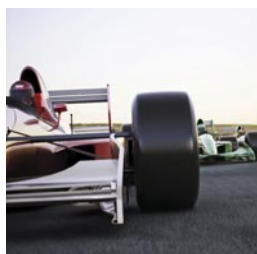
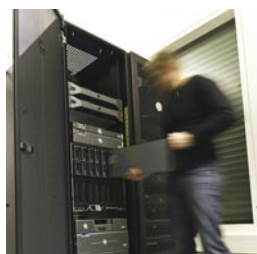
A guide to the proportion of technology/business skills used in the role:

- technology
- business

Find out what these common job roles involve.

The assortment of roles and variety of job titles used in the IT industry can make things tricky when trying to decide whether or not a particular job is right for you. Chances are you've got enough on your plate already, so we've decoded some of the more common job titles you may come across during your search.

Pay close attention to the job description of any position you apply for. In particular, take note of the key skills and competencies wanted. You should also ask questions at interviews to find out more specific information about what the role will involve day to day. This will ensure that you find the right job with an employer you'll be comfortable with. ☺



Network engineer

0 ●●●●●●●●●● ● 10

ALSO KNOWN AS: hardware engineer, network designer.

THIS JOB IN BRIEF: Network engineering is one of the more technically demanding IT jobs. Broadly speaking, the role involves setting up, administering, maintaining and upgrading communication systems, local area networks and wide area networks for an organisation. Network engineers are also responsible for security, data storage and disaster recovery strategies. It is a highly technical role and you'll gather a hoard of specialist technical certifications as you progress. A telecoms or computer science-related degree is needed.

Key skills include:

specialist network knowledge | communication | planning | analysis and problem solving

Systems analyst

0 ●●●●●●●●●● ●●●● 10

ALSO KNOWN AS: systems developer, systems engineer.

THIS JOB IN BRIEF: Systems analysts examine existing IT systems and write requirements for new ones. They analyse how well software, hardware and the wider IT system fit the business needs of their employer or of a client and write requirements for new systems. They may also help implement them, train users and monitor their effectiveness. Travel is a key feature of the job as the majority of work is undertaken at clients' premises. To get a job as a systems analyst you usually need a degree in a technical or IT subject.

Key skills include:

ability to extract information | analysis | communication | persuasion and sensitivity

Business analyst

0 ●●●●●●●● ●●●●●●●● 10

ALSO KNOWN AS: business architect, information specialist.

THIS JOB IN BRIEF: Business analysts are equally happy talking with technology people, business managers and end users. They identify opportunities for improvement to processes and business operations using information technology. The role is often project based and begins with analysing a customer's needs, gathering and documenting requirements and creating a project plan to design the resulting technology solution. Business analysts need technology understanding, but don't necessarily need a technical degree.

Key skills include:

communication | presentation | facilitation | project management | problem solving

IT support analyst

0 ●●●●●●●● ●●●● 10

ALSO KNOWN AS: helpdesk support analyst, technical support analyst.

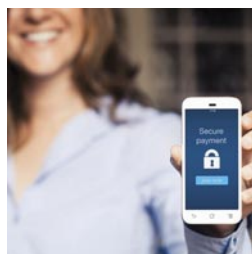
THIS JOB IN BRIEF: IT support analysts provide technical set-up, support and advice to IT users via email, phone, social media and in person. They either provide support within a particular organisation, to external businesses, customers of a particular product, or on an ad hoc basis. For example, there is a growing market for on-demand services for home and office tech repair, set-up and troubleshooting. While open to graduates of any discipline, technical support employers typically prefer graduates with an IT-related degree.

Key skills include:

wide-ranging tech knowledge | problem solving | communication | listening | patience



job descriptions:
See more job descriptions
at targetjobs.co.uk/it



Software developer

0 ●●●●●●●●●●●●●● 10

ALSO KNOWN AS: software engineer, software architect, web developer, mobile developer, systems developer, test automation developer, video game developer.

THIS JOB IN BRIEF: Software developers implement software solutions by building programs, applications and websites. They write and test code, often using development tools. The work can involve talking to clients and colleagues to assess and define what solution or system is needed, which means there is a lot of interaction as well as full-on technical work. A computing, software engineering or related degree is often needed but a few employers train up other graduates who can demonstrate a genuine interest in, and aptitude for, software development.

Key skills include:

analysis | logical thinking | teamwork | attention to detail

Project manager

0 ●●●●●●●●●●●●●● 10

ALSO KNOWN AS: product planner, project leader, master scheduler.

THIS JOB IN BRIEF: Project managers organise people, time and resources to make sure information technology projects meet stated requirements and are completed on time and on budget. They may manage a whole project from start to finish or manage part of a larger 'programme'. It isn't typically an entry-level role: project managers have to be pretty clued up. This requires experience and a good foundation of technology and soft skills, which are essential for working with tech development teams and higher-level business managers.

Key skills include:

organisation | problem solving | communication | clear thinking | ability to stay calm under pressure

Technical sales representative

0 ●●●●●●●●●●●●●● 10

ALSO KNOWN AS: account manager, sales executive.

THIS JOB IN BRIEF: Technical sales may be one of the least hands-on technical roles, but it still requires an understanding of how IT is used in business. You may sell hardware, or extol the business benefits of whole systems or services. Day to day, the job could involve phone calls, meetings, conferences and drafting proposals. There will be targets to meet and commission when you reach them. A technology degree isn't necessarily essential, but you will need to have a thorough technical understanding of the products you sell.

Key skills include:

product knowledge | persuasion | interpersonal skills | drive | mobility | business awareness

IT consultant

0 ●●●●●●●●●●●●●● 10

ALSO KNOWN AS: technical consultant.

THIS JOB IN BRIEF: The term 'consultant' can be a tagline for many IT jobs, but typically technical consultants provide technical expertise to, and develop and implement IT systems for, external clients. They can be involved at any or all stages of the project life cycle: pitching for a contract; refining a specification with the client team; designing the system; managing part or all of the project; after-sales support... or even developing the code. A technical degree is preferred, but not always necessary.

Key skills include:

communication | presentation | technical and business understanding | project management | teamwork

Web designer

0 ●●●●●●●●●●●●●● 10

ALSO KNOWN AS: multimedia programmer, UX designer, web developer.

THIS JOB IN BRIEF: Web designers create the design and layout of a website or web pages, working with colleagues or clients to meet their requirements. Their role is different to web developers, who specialise in making web designs a reality; however, there can be crossover between the two roles. Employers are likely to seek a degree in digital media design or a related subject but, whether you have a related degree or not, you will need to be able to present a portfolio of your best web design work.

Key skills include:

communication | creativity | attention to detail | problem solving

QA analyst

0 ●●●●●●●●●●●●●● 10

ALSO KNOWN AS: test analyst, software tester.

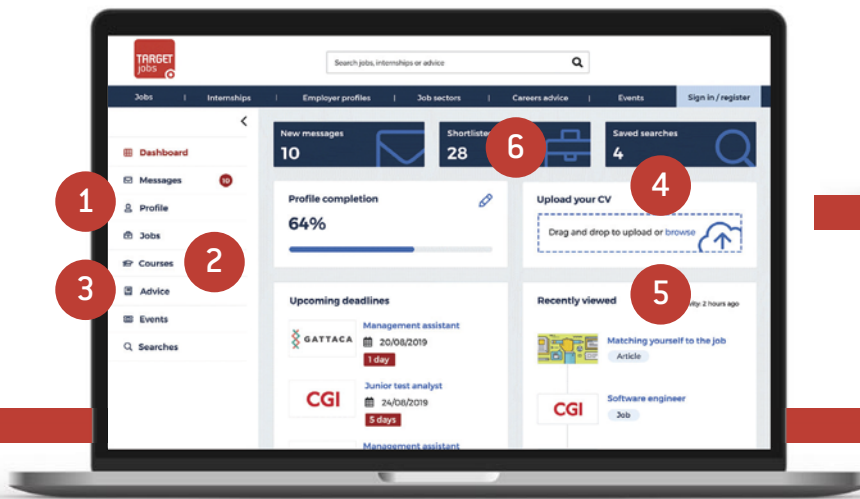
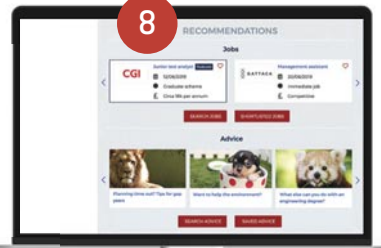
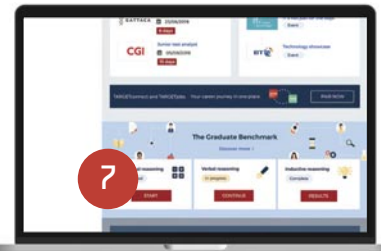
THIS JOB IN BRIEF: QA (quality assurance) analysts test programs, games and any software to make sure they are reliable, fully functional and user-friendly before they are released to the public. They use a test plan to inspect thousands of lines of code to make sure they are error free. Results are fed back to the project leader so that issues can be fixed. QA analysts can be involved in the early stages of projects in order to anticipate pitfalls before work begins. Employers tend to prefer graduate QA analysts to have a degree in an IT-related subject.

Key skills include:

analytical and investigative thinking | communication | attention to detail | strong programming knowledge



Use your TARGETjobs dashboard to make your job hunt easier



Personalise your job search

Direct messages

You can now receive highly targeted messages from employers and have the opportunity to connect with them directly.

1 Your profile

Keep your profile up to date. This is your career passport so it's in your best interests to complete it in as much depth as possible. We can then send you the most relevant careers advice and jobs information possible.

2 Shortlisted courses

Interested in postgraduate options? Save the courses you are interested in and revisit them at a later date.

3 Favourite content

Found an article or video useful? Save it here. We recommend saving useful content throughout your career journey – from choosing a career to the day you get hired by your favourite employer.

4 Your CV

Make your applications easy: save your CV to your dashboard.

5 Recently viewed

Jump straight back into advice, videos, internships, jobs and events you were recently exploring.

6 Shortlisted jobs

Save all the jobs you are interested in and get reminders when their closing dates are approaching.

7 The Graduate Benchmark

Test yourself with the three most commonly used aptitude tests, discover your strengths and compare your scores!

8 Recommendations

Careers advice, internships, jobs and events just for you.



Employers write and send messages to the specific members they would like to talk to. This could be about a job opportunity you are a good match for or an event they would like you to attend.

We send you an alert to let you know there is a message waiting for you within your dashboard.

Once you've read the message, you decide whether or not you would like to continue to talk directly to the employer about the content of the message, ie to find out more about the company or role, or to attend the event.

If you would like to continue the conversation, we will send the employer your TARGETjobs profile, including contact details but excluding sensitive data, so they can contact you directly.

Direct messages within TARGETjobs are the best way to build your network and land your perfect graduate job!

Automation and AI

Build and implement the systems that will define how people work and use technology in the future.

Theoretically, AI concepts and theories have been around since the 1950s, but the hardware and computational power to practically implement them have only become mainstream in the past few years. Automation has been a key driver for the development of software disciplines, with the latest trend being RPA (robotic process automation). Automation is now being augmented by AI technologies to extend its capabilities, and in industry the term used more commonly is 'intelligent automation'.

AI is also enabling new applications, such as chatbots or digital assistants and NLU/NLP (natural language understanding/processing). These technologies are key enablers for digital transformation, enabling businesses to become more efficient and improve their customer's/employee's experiences. The primary goal of automation is to reduce friction between production and consumption.

Every business relies on process and each process is made up of tasks. We're now able to hand simple tasks to 'software robots' – essentially small pieces of software that can be taught to replicate tasks and mimic the actions a human would do. Intelligent automation is now being leveraged to remove the 'human glue' that is necessary when these software systems aren't integrated or don't work well with each other. The goal is for the future workforce to be more productive, so that people are able to focus on cognitive and high-value tasks, while handing off more mundane tasks to robots.

Many large technology consulting firms are offering automation services to clients in nearly every industry in the public and private domain. Start ups that specialise in building AI platforms and technologies also operate in this sector, and partner with consultancies to offer specialist solutions to business problems.

You need to know...

There are numerous new technologies that can become part of the overall automation ecosystem. Emerging technologies, like blockchain, DevOps, and immersive, are also becoming increasingly important. For example, DevOps discipline is almost a standard of how technology teams build and deploy software, and involves leveraging a great deal of automation. Immersive technology, such as augmented reality (AR) and VR, is also becoming more prevalent in industries like aviation, retail, healthcare and is allowing for more streamlined customer/employee experiences.

The introduction of 5G technology in the next few years will open up new avenues for automation by reducing latency and thus improving the productivity of robots, for example in the manufacturing industry. Automation technologies combined with AI and immersive and underpinned by a 5G infrastructure will form the foundation of Industry 4.0 – the next phase of industry and manufacturing.

Getting in and getting on

While, obviously, a technology or engineering background is beneficial to work in this sector, it's not necessary. Programme management, project management, client management and business skills are equally important. Larger organisations, such as consultancy firms, run graduate programmes with the option to specialise in AI and other emerging technologies. There is also a lot of demand for new talent in start ups.

Progression can involve moving into the leadership side of engineering, helping to manage projects and to implement larger-scale projects for clients. ☺

SUMANT KUMAR is director of digital transformation at CGI UK.

He has a degree in computer science from National Institute of Technology, India and an MBA from Cranfield University.



Choose this if...

- You enjoy a fast-paced environment and can think on your feet.
- You want to be able to work across, and gain experience from, multiple industries – automation is being introduced in many sectors.
- You enjoy solving people's business problems and care about improving people's experiences using technology.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.

Cyber security

Protect computers and communications systems from attacks, damage or unauthorised access.

Cyber security specialists develop and employ a range of technologies, processes and practices to protect computers, data, networks and programs from attack, damage and illegal access. There are usually three core job roles within cyber security:

1. Consulting: this involves advising clients on policy and strategies to help them protect their organisations. Conducting risk assessments to ascertain the extent to which an organisation is exposed to threats is an example of a consulting role.

2. Engineering: security engineers, or architects, design and build IT systems in such a way that they'll remain safe and secure. It's a technical job that is usually project-based, with projects lasting 12 to 24 months.

3. Operations: operational security experts monitor IT systems for active signs of attack. They might work in a security operations centre (SOC), undertaking protective monitoring; in digital forensics, where they might investigate clients' machines that have been attacked; or penetration testing, where they simulate attacks to explore vulnerabilities in a client system.

The main employers of cyber security personnel are specialist organisations that are hired for their expertise by a range of institutions and businesses. However, most large organisations do have their own cyber security teams.

You need to know...

Cyber security is one of the biggest issues facing the world today. Recent high-profile leaks, hacks and cyber attacks have made people uncomfortably aware of the risk cybercrime poses to society. Cybercrime is also increasingly recognised as a threat to business: a recent study by CGI and Oxford Economics showed how severe cyber breaches permanently damage company share price.

The prevalence of cybercrime means that people with cyber security skills are very much in demand. Emerging technologies create new potential threats so there are always going to be attackers and there are always going to be defenders. It's a good career bet in this day and age.

Who can apply?

Cyber security is particularly suited to graduates with technical degrees, namely STEM subjects (science, technology, engineering and maths), although it's not unheard of for graduates from other degree disciplines to work in this field. It's important to have an agile mindset and enjoy problem solving because a lot of the work involves solving complex puzzles and thinking like an attacker.

Getting in and getting on

In consulting and engineering roles, graduates will typically work on one or two major client projects at a time. They'll often be guided by mentors and learn as part of a large team, getting exposure to the kind of decisions they'll have to make as they gain more experience.

Graduates on the operational security side can get thrown in at the deep end very quickly if they have genuine aptitude for doing the investigative work. Cyber security specialists can get client call-outs at short notice and operation staff will have to find out how the client has been attacked and how to stop or recover from an attack – you'll always be dealing with new problems. ☉

RICHARD HOLMES is head of cyber security services at CGI UK. He has a BEng in electrical and electronic engineering and a PhD in applied optics from Nottingham University. Richard has worked in IT and technology for over 20 years, focusing on the provision of secure systems and cyber security systems.



Choose this if...

- You enjoy problem solving.
- You want a high-demand, secure, lifelong career.
- You want to work with a variety of clients, such as governments and businesses.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.



Search:
TARGETjobs IT

Defence

Protect the security, independence and interests of the UK.

The key business objective of the defence sector is to provide the security services protecting the UK, and those on the front line, with the equipment, technology and research needed to achieve their objectives with minimal risk. In the UK, organisations in the defence industry work with a number of international partners, nations and organisation types: ranging from universities to small start-ups to large global companies.

Traditionally, the sector used to be split in a similar fashion to the armed forces: into sea, land and air. However, more recently, the sector is more often divided by capability areas, the key ones being: analysis, counter terrorism and security, cyber, integrated survivability, C4ISR (command, control, communications, computer, intelligence, surveillance and reconnaissance), CBRN (chemical, biological, radiological and nuclear), weapons and human capability.

The type of work that you do will largely depend on the projects you are assigned or take on: a project could be customer-facing, working with an industry partner or with academia, an international collaboration as part of a large team, or a small-scale lab-based research project. As such, being able to adapt to different situations and places is key. There is a lot of flexibility in terms of careers, as well as opportunities to travel: a large number of people in the industry travel to international meetings, conferences and trials.

You need to know...

In the UK, defence is linked to the government and, as such, students and graduates should be aware of the constraints and/or strategic guidance placed upon the sector. In recent years, a number of new capability areas have stood out as areas that graduates should be aware of; these include cyber security, additive manufacturing, synthetic biology and autonomy, to name just a few. However, given the classified nature of some of the work in the sector, doing research and finding out about the industry can be difficult.

Looking globally, the defence sector has a large number of major players. Some operate across land, sea and air, while others may focus on an individual domain or even solely on a key piece of technology. You're likely to work closely, and quickly become familiar, with organisations in your chosen field.

Who can apply?

Those who have studied a STEM subject will already have technical skills that are applicable to working in the defence sector. There is currently an increasing reliance on modelling/software skills and programming, so experience in these areas can be beneficial.

The key things that will set a graduate apart are their behaviours. Given the variety of work and specialisms in the sector, a high level of adaptability is needed to cope with potentially unknown subject areas or changing requirements.

Getting in and getting on

Graduates interested in working in the defence sector will likely be able to join a graduate scheme or an industrial placement. These schemes might be rotational, or you might specialise in a specific field from the beginning. For example, at Dstl graduates will usually first spend time working across a number of different groups, teams and areas, before settling in a home team.

Only those truly interested in defence should apply. Undertaking a year in industry will show that you can apply your knowledge to real-world scenarios and give you the skills, confidence and competencies that will set you apart during the application process. ☺

JAMES MCGREARY is a team leader at Dstl (the Defence Science and Technology Laboratory). He has a BEng in mechanical engineering from the University of Liverpool and an MSc in gun systems design from Cranfield University, and has worked in the defence sector for five years.



Choose this if...

- You want to experience a wide range of specialisms and technologies.
- You are driven to develop yourself and your skills.
- You are passionate about providing the armed forces with the equipment they need to do their job.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.

Financial services

Use technology to support the global financial system.

Whether we're using social networks to connect with employers or managing our money online, technology is changing the way we live our lives, making day-to-day tasks faster, easier and more reliable.

The markets have embraced the digital revolution in a big way, and technology now plays a critical role in supporting the global financial system.

Forget the old cliché of trading pits and people yelling at each other; nowadays almost everything takes place electronically. Transactions are delivered at rapid speed, with billions of pounds changing hands every second.

The best of both worlds

The role of financial infrastructure providers like ours is to support the world's financial markets and the companies that use them. As a fintech company, technology underpins everything we do, from tracking and reporting market activity, to trading and clearing.

You need to know...

It's an exciting environment and very different to that of a traditional technology firm. The pace can be faster and the demands that are placed on graduates are intense. You're having to deliver products and services that are extremely time-sensitive, to deadlines determined by the patterns of the financial markets.



We work with emerging technologies – network engineering, database technologies, and blockchain and cloud-based software – that are as cutting-edge as anything you'll find in Silicon Valley. The work you're doing is critical to the global economy. The financial markets simply couldn't function without organisations like ours doing what we do.

Who can apply?

Crucially, you don't have to be a computer science graduate to work in the financial services IT sector. The technical, problem-solving, and analytical skills developed by a variety of STEM degrees can provide a great foundation for your career.

Of course, many roles are extremely technical and involve engineering and testing new applications and software. However, there are also a number of positions where there may be a greater focus on managing projects or developing client relationships.

Mobility and progression

Mobility is another important factor. Fintech companies are typically a lot smaller than the major West Coast technology firms. There are usually opportunities to switch between different roles and to progress quickly up the ladder. A lot of our graduates are running small teams or managing key client accounts within a few years of joining.

If you're looking for a challenging technology career, this is a great place to be. The financial services industry is constantly evolving – as technology providers the demands come thick and fast.

Whether it's driven by the latest innovations, market volatility, or new financial regulation, we constantly have to adapt to new situations and environments. It's an industry that doesn't stand still, and you won't either. ☺

With thanks to the
LONDON STOCK EXCHANGE GROUP.

Choose this if...

- You want to roll out IT systems and applications that are used nationally and globally.
- You want to be a technologist but work closely with the commercial functions of an organisation.
- You want to work in a large organisation that offers a variety of work and progression.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.

Health informatics

Manage and develop the data and IT systems that are used by healthcare providers and hospitals.

Health informatics is all about improving patient outcomes through the use of technology – it's making sure that people receive the best possible care, whether that's getting the right medication or ensuring appointments happen as scheduled. The sector is fast-paced and constantly striving for improvement as innovations in healthcare can quickly have a large impact on those in need.

The main objective in the sector is always improving patient care and outcomes, although how this will happen will depend on the company you work for. Types of employers operating in this sector include tech, pharmaceutical, research, insurance and private healthcare organisations, as well as the NHS. In the health informatics sector, you could be facilitating the sharing of data across the NHS or putting healthcare right into the hands of patients by allowing them access to their own records.

There's also a significant ecosystem of specialised suppliers that integrate with larger applications and organisations, so, for example, a company that just provides medical scanners will slot into the wider industry through other organisations. Major players in the sector include TPP, Cerner, EPIC, EMIS and Babylon.

Key areas of work in this sector include: business analysis, invoicing, stock control management, appointment booking and patient record management, to name a few.

You need to know...

There are a number of challenges that affect the sector. Constraints on money and regulation in hospitals and clinics mean that the healthcare industry is always looking to work more efficiently; as such, it's helpful to be aware of the government's objectives regarding healthcare so that you can anticipate potential policy decisions.

The need to develop apps and more patient-centric technology has increased: it's no longer just as simple as backend, frontend or database management. Historically, health informatics has referred to desktop applications, but

now people have access to their records on their phones or mobile devices, which has meant a rush for app development experience. There is also increased demand for experience in new technologies such as machine learning and AI development, as the introduction of these into healthcare is likely to be a game changer that will have a significant effect on how patient care is strategised and delivered.

Who can apply?

Most graduate-level roles in this sector will require some experience of either technology or healthcare and a degree in a technology-related discipline. Many companies will also require applicants to have prior experience of software development and it may be possible to gain experience in coding, or another area of technology, at another organisation before moving into health informatics. However, it is possible that some employers will hire non-tech graduates and train in the necessary technology skills.

Getting in and getting on

The type of work given to a new entrant to the health informatics sector will vary largely depending on the company they work for.

The ability to adapt quickly and change focus is highly valued in the sector, as this enables you to work in many different areas in healthcare technology. There are options for specialisation if you enjoy working in a particular area, such as software development or business leadership. There is no single path for career progression. Problem-solving skills are important, as the projects are complex, problems can be colossal and the solutions need to be safe and simple. ☺

SAM HARPER is a software developer at THE PHOENIX PARTNERSHIP (TPP). He has a masters degree in physics from Imperial College London and has worked in the industry for five-and-a-half years.



Choose this if...

- You want to work at the cutting edge, implementing new technology to revolutionise how healthcare is thought about and delivered.
- You want to work in a stimulating, fast-paced and exciting industry with fresh challenges every single day.
- You want a job where you can make a tangible, positive difference to millions of people across the entire world.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.



IT services

Build and supply services to meet business needs.

IT services is about supplying the systems and computer programs that businesses use, for example accounting systems or the systems that control the flow of parts and components around a factory. Some large organisations buy their IT services from a third party – a supplier who has many clients and therefore sufficient overall demand to build a team of staff to write code and build applications for those clients. Others, such as car manufacturers, banks, aircraft manufacturers or TV production companies, have enough demand to deliver their own IT services.

A popular approach is to try to achieve a 'buy/build' balance where the company **buys** products that don't need to be very specific to its needs (eg Word, Excel) and **builds** products that are very specific to its own requirements (or gets a third-party supplier to build them).

As an example, consider Uber. They would probably: **buy** their HR and word processing systems; **build** their Uber app; and **buy** some of the development and testing resources from a supplier of staff for the execution of the project to build the Uber app.

You need to know...

You *don't* need to know every single latest development language. Knowing any language alone is great and will facilitate you learning others as you go through your career.

IT services and IT consultancy get mixed and matched as terms but they are different. In general, IT services are 'things' that the company wants to use constantly and therefore *could* get its own employees to build them in-house. IT consultancy is usually about delivering specific outcomes for a set period of time and using expertise that the company does not have in-house, such as advising the company on which vendor would suit it best to provide an IT service.

'IT services are things that the company wants to use constantly and therefore could get its own employees to build them in-house.'

Who can apply?

Anyone can apply, though this varies from employer to employer. IT is everywhere and today's graduates and students understand IT better than they have ever done before. If you have training (whether from school, your degree course or just a hobby) this makes it easier for you to be successful in your application; however, we have film, media and law graduates who have started successful IT services careers with us, and one of the best developers and technologists I have ever worked with has a degree in land management.

Getting in and getting on

Graduates joining the industry will start by learning their trade, developing knowledge and taking on more responsibility as they go. Typical roles include developer, tester and project support officer. A project support officer might start by owning the risks and issues log and some aspects of the reporting, moving on to updating and checking the plan for a part of the project, then owning the delivery of a part of the project and so on. Ten years later they could be running a multi-million pound project for a bank. ☉

JONATHAN YOUNG is group chief information officer at FDM GROUP. He has a mechanical engineering degree and a masters in control systems and IT from the University of Manchester, and has worked in IT services across a range of industries for 28 years.



Choose this if...

- You want to learn continually.
- You want a wide breadth of work.
- You want cross-industry experience.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.



Search:
TARGETjobs IT

Telecoms

Connect people across the world with technology.

The goal of the telecoms industry is to make communication possible, wherever you are in the world.

There are two sides to the industry: there's everything that the users see, from fixed-line telephones and broadband to mobile devices and apps, then there's the infrastructure behind the scenes that makes all of these a reality. On top of that, there's also the infrastructure behind the cloud.

There are so many companies operating in this sector, including: hardware manufacturers such as Dell, Metaswitch, Cisco, Juniper and Ericsson; service providers such as BT, AT&T, Three and EE; software companies such as WhatsApp and Skype; and IT consultancy providers such as Accenture and IBM. Google and Amazon are also involved and there are a lot of smaller companies in telecoms, too.

You need to know...

A key topic at the moment is the rollout of 4G and 5G. General IT trends such as the cloud, advances in data processing speeds and data breaches and security are also very relevant to telecoms. There is currently a shift away from what we call big iron (custom-made hardware that is developed to be very good at a specific thing) towards commodity hardware (generic, easily obtainable servers that are less expensive to manufacture and can be turned into any item of network infrastructure).

Another trend is the containerisation of virtual machines, which is the idea that you can spin up new machines in your data centre by clicking a button, turn them into whatever infrastructure you need at that moment and get rid of them once you don't need them anymore. For service providers, this means they can increase and decrease the size of their infrastructure according to user demand.

You could work in research and development, technical sales and marketing or installation and technical support. You will almost always work in a team, which will include

engineering and IT colleagues, sales and customer support, and possibly design and user experience specialists.

The pace of your work will depend on your employer. When service providers roll out new technology, it tends to be gradual and measured because they need to maintain reliability for their customers. They also face regulations, particularly on critical services such as emergency calling. Small vendors, software-based companies and start-ups, particularly mobile apps, can be very fast-moving as they are trying to launch a product as quickly as possible. Mobility is not required; however, it is possible to work abroad or take on a role that involves frequent travel. There are also always events and trade shows that you can go to.

Who can apply?

Some telecoms companies don't require their graduates to have a related degree or specific technical skills. Others may look for programming and electronic circuit design skills. It's very important, though, to have strong communication skills, logical thinking and problem-solving abilities.

Getting in and getting on

Most companies run a graduate scheme. Some will rotate you between different areas before you decide which one to settle in, whereas others will start you off in a specific role. Summer internships and industrial placements are also helpful. You could progress to a management or team leader position and, theoretically, you can go all the way up to CEO. You could also move sideways into, say, sales or marketing. The skills you'll develop as a technical graduate will give you a good grounding for moving into other areas if you wish to. ☺

FIONA CORDEN is a software engineering manager at METASWITCH. She has an engineering degree from Durham University and has worked in the telecoms industry for 12 years.



Choose this if...

- You want variety: there are lots of different aspects to the industry and within any one company.
- You like working in a team.
- You'd enjoy knowing that you're doing something practical and making things work for people.

You could do...

- Business analysis
- Business intelligence
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.

Technology consulting

Enable businesses to achieve their outcomes by advising them on their technology.

Technology consulting is about understanding what clients want to achieve for their business and advising on how they can use their IT to deliver those business outcomes. Businesses in all sectors use technology consultancies and they tend to do so for a couple of reasons: either they've seen a new piece of technology that they want to use or they are facing a business challenge. For example, it might be that a client has good systems and tools but what they really want is to make their customer journey more efficient and enjoyable. Or a client might have recently acquired another business and wants to understand the most effective way of bringing together all their different legacy systems and introduce standard ways of working.

You need to know...

Students should be passionately involved in keeping on top of the latest technology trends. Technology consultancies need to keep up to date with technology and they must also continually evolve their consulting tools. For example, some of our clients want to improve the way they collaborate to get better and quicker solutions, and they look to us to understand how they could do this. We would recommend they use different collaboration tools like Yammer, Slack or SAP Jam to improve their collaborative experience. We would also look at the behaviours we would need to change throughout the business to drive adoption of those new solutions.

We also work with our clients on 'agile' programmes. Agile is about fixing problems through a series of 'sprint cycles' rather than tackling a big problem all in one go. This means we can be a lot more adaptable in the way we design a solution, tweaking it as we go, rather than trying to come up with the end product straight away.

We often ask graduates in the selection process: 'Are you prepared to travel?'. Your client base could be all over the country and you will often be working away from home for most of the week.

Who can apply?

Graduates in any degree subject can go into technology consulting. Consultancies have a diverse set of roles – from programmers to testers, business analysts, project managers and change consultants – so your skills set could apply to a number of different roles across the business. Technology consulting isn't just about IT, but providing value to customers. Although clients tend to come to us with technology issues, these usually originate from a business problem of some kind.

One of the key strengths needed is collaboration. It would be very easy for consultants to assume they immediately have the right answer for a client because they have fixed a similar problem before. However, to find the best solution they need collaboration skills to understand the challenge and bring about bespoke solutions.

Getting in and getting on

Regardless of their role, all technology consulting graduates are likely to do certain core tasks, such as presentations, building a network with colleagues and clients, and attending training programmes. They can usually reach middle management around the four to six year mark. Employers, including Capgemini, see their graduate programmes as a great way to shape future leaders rather than just hiring them later on. ☺

RACHEL HEAD is a business transformation consultant for CAPGEMINI. She has been working in technology consulting for 21-and-a-half years.



Choose this if...

- You want responsibility: it's possible to get early exposure to clients.
- You want variety: the work you do all depends on the particular challenge facing the client.
- You enjoy working with people: being able to perform in front of a client and operate effectively as part of a team are essential.

You could do...

- Business analysis
- Business intelligence
- Business transformation
- Communications technology
- Consulting
- Data analytics
- Data/information management
- Development – hardware
- Development – software
- Infrastructure/architecture development
- Networks
- Outsourcing services
- Package implementation
- Project delivery
- Research and development
- Security technology development
- Support – technology
- Support – end user
- Systems integration
- Technical sales
- Web development/e-business

Always check each employer's activities.



Search:
TARGETjobs IT

Fact vs fiction: the quiz

IT and technology have become a constant feature of the news, whether the story is on skills or the latest disruptive innovation. So, have you been paying attention? Some of these statements

about IT news and careers are facts, while others are fictitious. Have a go at sorting the truths from the myths and then turn over to check your answers.

1. Sizing up the cyber threat

Cyber crime has overtaken the global drugs trade in terms of monetary value.

FACT?

FICTION?

2. Sizing down to get your first job

Most graduates get their first IT job in an SME (a company with 50 to 250 employees).

FACT?

FICTION?

3. Slow off the starting blocks

Six months after graduating, graduates in IT subjects have one of the highest unemployment rates for all subjects.

FACT?

FICTION?

4. Women in IT

We have finally reached a point where women make up half of the UK's IT workforce.

FACT?

FICTION?

5. Rise of the machines

Artificial intelligence and automation will develop to a point in the next ten years where all jobs for humans will be obsolete.

FACT?

FICTION?

Fact vs fiction: the answers

How did you do? Find out how your industry knowledge stacks up.

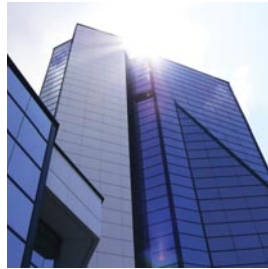


1. Sizing up the cyber threat

FICTION. For now at least. Cyber attacks *are* considered to be posing a large and growing threat to national security, be that individual cyber criminals stealing personal data or state-sponsored groups undermining democratic processes. The global cost of both cyber crime and the international drugs trade are hard to quantify. However, a 2018 report estimated that cyber crime cost the global economy 600bn USD*; meanwhile, in 2017, the international drugs trade was estimated to be worth between 426bn and 652bn USD**. The two are certainly comparable in cost, which is noteworthy in itself, but for the time being the upper bounds of the drug trade's cost *just* beats out cyber crime. Of course, with an increased need for cyber security comes an increased need for experts in this field and a growing number of job opportunities.

*McAfee and the Centre for Strategic and International Studies

**Global Financial Integrity



2. Sizing down to get your first job

FACT. There are plenty of opportunities to get onto a graduate scheme with a large employer, such as those advertising in *TARGETjobs IT & Technology*, but the lion's share of graduate IT vacancies are with small- or medium-sized businesses. This is hardly surprising when you consider that, at the beginning of 2018, 99.9% of private sector businesses were SMEs according to the Federation of Small Businesses. Read more about the benefits of working for an SME on page 30.



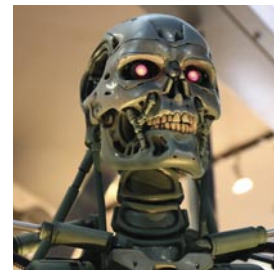
3. Slow off the starting blocks

FACT. Data from the Higher Education Statistics Agency showed that 9.8% of computer science graduates who graduated in the 2016/17 academic year were unemployed six months after graduation. Computer science graduates are most definitely in demand, so it could be that many graduates aren't looking in the right places or have neglected the soft skills that employers want to see. Make sure you stand out – you can find out more on page 22.



4. Women in IT

FICTION. It's not even close, sadly. Anecdotally, recruiters have been reporting a small rise in the numbers of female applicants to graduate schemes. Yet the National Center for Women in IT reported that, in 2018, just 26% of the computing workforce were women. The good news is that there are numerous events for female students to network and explore IT careers, such as *TARGETjobs' IT's not just for the boys!*



5. Rise of the machines

FICTION. Fortunately, or unfortunately depending on your perspective, your graduate job is unlikely to be given to an AI any time soon. While AIs are becoming more and more capable, due to developments such as machine learning, they're still nowhere near as versatile as human beings – they tend to be very good at the one thing they're designed for and not much else. While AIs are likely to become commonly used for menial or time-consuming tasks, more complex, creative and strategic responsibilities will still require people... for the near future, at least. ☺



A–Z of employers

Search:
TARGETjobs employer hubs

- More information from this employer can be found on TARGETjobs
- Read the Insider Reviews on this employer

Alfa	78	FDM Group	92
American Express	79	Fidelity International	91
Aon	80	Kerry Group	93
BAE Systems	81	Lighthouse Systems LTD	94
Baillie Gifford	82	London Stock Exchange Group	95
Bank of America	83	Met Office.....	96
CGI.....	84	MI5	97
Close Brothers	86	Orbium Consulting Limited	98
Deutsche Bank.....	87	Sky	99
DSTL	88	ThoughtWorks	100
FactSet	89	TPP	101

Alfa

We're Alfa. We're a fast-growing fintech company who bring our mission-critical software to the likes of Mercedes Benz, Barclays and John Deere.

Our clients get to work with our finest assets: our people. We are extremely proud of our track record of successful projects, a testament to the skills, experience and knowledge of our consultants who develop organically through the company from graduate joiner to Senior Manager.

Our Junior Software Engineers and Analysts are recruited from graduates of the highest calibre across all disciplines. New recruits are given an intensive induction into the asset finance industry, software development and consultancy skills, before being assigned to a project where they can put their training into practice. Supervised at all times by more experienced consultants, recent joiners will find that the open culture means they also have easy access to Senior Managers and Directors for discussion and guidance.

Your initial training period will be around two months and the programme will be delivered by your new colleagues from junior to senior level. You will then be working on a client site or based in the office, and your first role will typically involve software development.

During a project, as well as the design and development of the software, we also need to modify business processes to ensure the client is working as effectively as possible, test that everything works, transfer all the data from the old system to Alfa, and provide support through the go-live process and into the future. During your career, you can spend time working in each of these areas. As you progress, you will develop particular abilities and interests and you can choose your own training to support that. For example, you might want to become a Project Manager or a Technical Architect.

We are looking for people who have the ability to see an end goal, break down the steps to get there, and put in the effort to achieve it. Therefore, any hard-working and ambitious graduate can be successful as long as he or she has a logical mind, enjoys working as part of a team, has pride in their work, and sees their career immersed in the worlds of both technology and finance. With our ever increasing geographic reach, knowledge of foreign languages is an added bonus, and we'll even support you through learning a new one if you want to pursue extra studies.

Alfa is established in the UK, US, Asia-Pacific and throughout Europe. As well as working on projects based in London and the surrounding area, you may be expected to work in European locations during the working week. We also see a steady flow of UK consultants on secondment further afield, so if this sounds like your kind of thing, we can make that happen too.

We need our people to work hard but that doesn't necessarily mean long hours. We only recruit people who we think will get on with each other, so the atmosphere is friendly and people genuinely enjoy doing things as a group. The whole company gets together every couple of months at our Company Meetings and we usually have a trip overseas for our Annual Conference, which is never lacking in fun. There are groups aplenty to join if you're interested in activities like football, tennis, or board games.

From day one, new joiners will be enrolled on our benefits scheme which includes private health insurance and access to a private GP, worldwide travel insurance, life assurance, income protection, interest-free loans, 25 days' annual leave, pension, access to a city gym and laptop.

Alfa

Search:

TARGETjobs Employer hubs



Areas of organisation

• software development • technical consultancy • financial services • financial software development

Salary £40,000 pa

Benefits

• gym membership • annual conference
• training allowance (5 days per year)
• private healthcare • life assurance
• pension scheme • season ticket loan
• 25 days' holiday

Number of vacancies 15–20

Number of employees 310

Summer internships No

Placement year No

Degrees sought

• all degree disciplines

Locations Based in London with operations in the US, Australia, New Zealand and Europe

Contact information

www.alfasystems.com/eu/careers
www.facebook.com/alfaworldwide/
www.linkedin.com/company/alfasystems
twitter.com/alfasystems

Alfa Recruitment Team
020 7588 1800

Apply to:

Type of application accepted
Online

CareersUK@alfasystems.com

Closing date Ongoing

'The culture of Alfa is what made the company stand out to me during my application process. The people working here are outstandingly friendly, helpful, genuinely kind and interested in the collaborative nature of the job. The after-hours culture is also very versatile and vibrant, with work drinks every Friday evening as well as interest or sport-related group activities. The hierarchy feels very flat and even the most experienced staff are always happy to help out and share their knowledge.'

See the outside back cover and the jobfinder table on pages 52–53 for more information



Careers

About Us

American Express has been making a difference in people's lives for over 160 years, backing them in moments big and small, granting access, tools, and resources to take on their biggest challenges and reap the greatest rewards. We've also made a difference in the lives of our people, providing a culture of learning and collaboration, and helping them with what they need to succeed and thrive. We have their backs as they grow their skills, conquer new challenges, or even take time to spend with their family or community. And when they're ready to take on a new career path, we're right there with them, giving them the guidance and momentum into the best future they envision. Because we believe that the best way to back our customers is to back our people.

What we offer

As a summer intern or a graduate at American Express, you'll be encouraged to push yourself, generate new ideas, take calculated risks and collaborate across business lines. And you won't be alone—we'll support you with the right combination of on-the-job experience, professional mentoring and formal training so you can strengthen your business and technical expertise, and enhance your leadership skills.

Our 10 week Summer Internship Programme offers a combination of training, networking and mentoring that help you develop both personally and professionally. Interns work on meaningful projects that link to our key business priorities. Your role as a Technology Intern at American Express could include...

- Identifying exciting opportunities for adopting new technologies to solve existing needs and predicting future challenges

- Serving as a member of a team that designs and/or develops software applications
- Learning technical skills, writing code, conducting code reviews and testing
- Working with product managers to prioritise features for new products and managing a list of requirements based on industry trends and new technologies
- Taking part in social activities, charity days, and fun projects with other graduates and interns.

Graduates join our Technology group from a variety of backgrounds and can be assigned to one of several exciting teams that are developing new virtual internet-based payment solutions, customer service portals, online merchant services support and integration, credit management tools, and suites of web-based applications for Card Member targeted offers that will span over 20 international markets. As part of the American Express team you will have the opportunity to work on world-class Card Member experiences on multiple channels including web, iOS, and Android. You will be challenged with identifying innovative ideas and proof of concept to deliver against the existing and future needs of our customers.

What we look for

We're looking for people from a range of creative, scientific and technical backgrounds to join our internship and graduate programmes.

- americanexpress.com/campus
- facebook.com/americanexpressuk
- linkedin.com/company/american-express

American Express

Search:

TARGETjobs Employer hubs 

Areas of organisation

- financial services/technology

Salary £40,000

Benefits

- £2,000 sign on bonus
- gym membership/subsidy
- life assurance
- pension scheme (with company contribution)
- private healthcare
- season ticket loan
- days' holiday – 22

Number of vacancies 48

Number of employees 55,000

Summer internships Yes

Placement year No

Degrees sought

- all degree disciplines
- computer science/IT
- software engineering
- engineering
- mathematics
- science

Locations Burgess Hill, Sussex

Contact information

americanexpress.com/campus
ask.campus.emea@aexp.com

Apply to:

Type of application accepted Online

www.americanexpress.com/campus

Closing date 17 November 2019



See the jobfinder table on pages 52–53 for more information





Empower Results®

Few things are certain in life. Economic upheaval, political crises, natural disasters, cyber-attacks – and plenty more besides – all mean the world can be full of surprises. Depending on the area you join, you'll be using your technical and analytical abilities, as well as strong communication skills to help clients address key questions that affect the running and growth of their businesses. How will they protect their clients data? How do they manage future cyber risk? What will be the impact of rising life expectancy? How would the collapse of the Eurozone affect the world economy? Will we see an increase in anti-globalisation protests? Aon's business is to provide the answers.

Our expertise in supporting our clients includes understanding and quantifying their cyber risks, protecting their organisation and critical assets, and responding and recovering from incidents.

Roles:

With over 50,000 colleagues globally, Aon have a diverse range of opportunities across a wide variety of business areas. No matter which business area you join you'll be given real responsibility from day one, working alongside Aon colleagues gaining early exposure to clients.

Our Cyber Security graduate programmes offers the opportunity to rotate around our cyber business exploring areas such as incident response, penetration testing and digital forensics, enabling you to gain new skills and certifications before specialising within one of our growing teams.

In addition to our cyber security programme we have consulting and broking career opportunities for graduates, summer interns and industrial placement students in the following areas:

- Insurance, Reinsurance and Risk Management
- Actuarial
- Investment
- Employee Benefits
- Reward and Remuneration

Why Join Us?

One of the key differentiators between Aon and our competitors is our people and how they behave with our clients and each other. How we do things is just as important as what we do. As a market leader in all our businesses, we are able to offer our graduates a highly attractive reward package. We also recognise studying while you're learning a new role can be difficult – and we expect you to progress quickly.

Training & Development

Our graduate development programme will complement your technical training, helping you to build your business knowledge, develop professional skills and grow effective relationships with clients and colleagues. Aon's technical training and business skills will be a core part of your learning, ensuring you leave us with a better understanding of the professional world and how best to make your way in it.

We also provide full study support for relevant professional qualifications throughout the graduate programme and beyond.

Aon

Search:

TARGETjobs Employer hubs

Areas of organisation

- IT services • technical consultancy
- financial services • professional services
- other

Salary

Competitive

Benefits

- gym membership/subsidy • life assurance • pension scheme with company contributions • private healthcare • season ticket loan • 25 days' holiday • option to purchase up to 5 more days of annual leave • share save programme

Number of vacancies

90+

Number of employees

50,000

Summer internships

Yes

Placement year

Yes

Degrees sought

- all degree disciplines

Locations

500 offices globally
UK locations include: Birmingham, Bristol, Chelmsford, Edinburgh, Epsom, Farnborough, Glasgow, Leeds, London, Manchester, St Albans

Contact information

www.aonearlycareers.co.uk

Apply to:

Type of application accepted

- online

www.aonearlycareers.co.uk

Closing date See website for deadline



See the jobfinder table on pages 52–53 for more information



BAE SYSTEMS

Remarkable people doing work that matters

Join us as a graduate and you'll quickly become involved in developing some of the most technologically advanced defence, security and aerospace systems, and receive tailored development to advance your career.

About us

At BAE Systems, our advanced defence technology protects people and national security, and keeps critical information and infrastructure secure. We search for new ways to provide our customers with a competitive edge across the air, maritime, land and cyber domains. We employ a skilled workforce of 85,800 people in more than 40 countries, and work closely with local partners to support economic development by transferring knowledge, skills and technology.

What you can expect

As one of the world's most innovative companies, we can offer you an exciting and challenging career. If you have the drive and enthusiasm to improve within your chosen field, you'll receive the support you need to be creative and pioneering in all sorts of ways. That's how you can set the stage for a remarkable future with us.

Our graduate schemes

Our two-year graduate programme combines formal learning with valuable real-world experience, giving our graduates the opportunity to develop in their chosen field from day one. We place great importance not only on what we do, but how and why we do it. Our graduates are supported throughout the programme with training and mentoring, enabling them make the very most of their talents and develop a career where they'll

make a real difference. Inspired engineering is the foundation of our business. With over 18,000 engineers in the UK, we support professional accreditation and have graduate and undergraduate opportunities available in a wide range of engineering disciplines including (but not limited to) civil, electrical, manufacturing, naval architecture, software and systems.

We are also continually on the look out for people who can add real value in areas such as business development, commercial, human resources, information technology, procurement and project management.

If finance is of interest the Finance Leader Development Programme (FLDP) is our five year fast-track graduate scheme that seeks to prepare individuals to become Finance Directors of the future within our organisation, through an accelerated programme of training and practical experience. The programme includes a structured and fully supported route to the highly respected Chartered Institute of Management Accountants (CIMA) qualification. It will also equip you with all the leadership and management skills necessary to become one of the finance function's senior leaders.

Benefits

There are many benefits to joining one of our graduate schemes including:

- A minimum starting salary of £28,000
- A welcome payment of £2,000
- 25 days holiday
- Regular development and salary reviews
- Competitive pension scheme
- Car lease and share schemes

For our full range of opportunities including undergraduate opportunities and associated benefits, please visit our website www.baesystems.com/graduates.

BAE Systems

Search:

TARGETJobs Employer hubs



Areas of organisation

• software development • technical consultancy

Salary £28,000 minimum

Benefits

• pension scheme (with company contribution) • share options
• 25 days holiday

Number of vacancies 350

Number of employees 85,800

Summer internships Yes

Placement year Yes

Degrees sought

• computer science/IT • cyber security
• engineering • mathematics • software engineering • technology • science
• systems engineering • electrical engineering

Specific degrees may be required – please check role profile for details.

Locations Multiple across the UK

Apply to:

Type of application accepted

Online

www.baesystems.com/graduates

Closing date

Varies by function



See page 19 and the jobfinder table on pages 52–53 for more information





Where could technology take you?

We're looking for trailblazers in technology. You're as innovative as the cutting edge technology you're passionate about and have the vision to imagine its impact on the business landscape of the future. If you're wondering how your technology skills could translate into an illustrious career, then we have the answer – Baillie Gifford. We'll harness your potential and provide the structured training and support you need to achieve your ambitions. Join one of our Technology graduate programmes and explore where new technologies could take you.

Technology at the heart.

As a leading global investment management firm, Information Systems underpin everything we do. We're one business, and technology is right at the heart of it, which is why our team of around 300 technology professionals is based at our head office in Edinburgh. While you work with people at all levels across our whole organisation, you'll be a name – not just a face in the crowd or another graduate trainee. You'll feel valued here at Baillie Gifford from day one.

Harnessing potential.

Our team doesn't just work with the latest technology – they work on it. Join us and you'll harness the potential of Agile Methodologies to pioneer breakthrough solutions. You'll have the exciting opportunity to collaborate with major suppliers and field trial their new technologies. So you'll not only work with new software and kit before anyone else, you'll help to shape its functionality.

Training that will see you flourish.

The two years you'll spend on our graduate programme is as important as it is inspiring. After a comprehensive three-month induction, you'll be working on real projects and getting involved in their complete lifecycle. Don't worry about being thrown in at the deep end. There's full and ongoing support from the motivated and talented people around you. You will be chosen on your potential, and we'll ensure you get all the development you need to achieve it.

Programmes overview.

The experience you'll receive during your training at Baillie Gifford could be the foundations of a very rewarding career. We offer graduate training programmes in Application Development and Technical Infrastructure.

Application Development – creating innovative software solutions to make our business work better. We'll provide comprehensive training to become a full stack developer and to help you work through the complete project lifecycle. You'll work with business users to define and create systems with technologies including HTML5, JavaScript, Angular, ASP.NET Core, Oracle SQL and PL/SQL, and C#.

Technical Infrastructure – exploring how advanced technologies can shape the future of imaginative business solutions. Our team maintains and develops the entire IT operation including our own private cloud and Data Centre, Oracle and SQL estates, supporting several thousand desktops, laptops and mobile devices. In terms of vendors, you'll get the chance to work with products from companies like Microsoft, VMware, Dell EMC, Cisco, Apple, Palo Alto, F5, Splunk and Bloomberg. We also work with cloud technologies including Office 365, Azure and Amazon.

What we're looking for in you.

For Application Development you don't need to have studied Computer Science, but you will need knowledge of a programming language. While our Technical Infrastructure programme requires an IT-related degree. For both, we're looking for candidates who are not one-dimensional. You're business minded as well as technically skilled and have the ability to articulate how you believe technology can make business better. You're a problem solver and have the potential to find technological solutions to any business challenge.

A growing partnership.

Baillie Gifford was established as an investment management partnership over 100 years ago. Today, with around 1,200 people based in Edinburgh and over 700 people across the globe, we are an independent investment management business with over £200 billion under management.

Baillie Gifford

Search:

TARGETJobs Employer hubs



Areas of organisation

• financial services • financial software development • investment management

Salary Highly competitive

Benefits

• bonus • welcome bonus
• life assurance • pension scheme (with company contribution) • days' holiday – 34

Number of vacancies 6

Number of employees Around 1,200

Summer internships Yes

Placement year Yes

Degrees sought

• all degree disciplines • computer science/IT • software engineering
• engineering • MSc IT conversion

Locations Edinburgh

Contact information

0131 275 2000
Calton Square
1 Greenside Row
Edinburgh EH1 3AN

Apply to:

Type of application accepted

• online • CV & letter

www.bailliegifford.com

Closing date 29/11/19

See the jobfinder table on pages 52–53 for more information

Bank of America Merrill Lynch

One of the world's leading financial institutions, we have 66 million customers ranging from individuals to businesses to governments and we are committed to growing responsibly. We've been building meaningful connections in Europe, the Middle East and Africa for 90 years, and you'll find our 200,000-strong workforce in more than 35 countries worldwide. But our success isn't just about the figures, we want to continue to share our success with our communities, and ensure we are a great place to work for our teammates through driving operational excellence.

Our diverse and inclusive culture make us strong. They're integral to our sustainability too. We have been recognized by Euromoney as the World's Best Bank for D&I as well as having signed The Women in Finance Charter in 2017. Since then, we've taken more steps to make sure that there are more women at senior level by 2021.

Technology is critical to our success and owing to our investment in cutting-edge technology, Bank of America's Global Technology and Operations (GT&O) division places growth and success as a central part of its strategy. This gives our business the

competitive edge to solve business problems by delivering high quality and practical solutions. We've been investing in digital and mobile channels for years, and they're growing incredibly fast. Our technology graduates design, develop and implement applications, systems and operational processes for clients and colleagues all over the world. From programming to data management, innovation to information security, our cutting-edge tools and resources are making sure we're a market leader.

Interested in learning how Bank of America is poised to meet the technology challenges of the future? Our Global Technology Summer Analyst Programme offers you the opportunity to design, implement and support cutting edge applications and infrastructure. Dependent on location, you will have the opportunity to work within one of our Technology lines of business: Global Banking & Markets Technology, Global Information Security or the Chief Technology Organisation. You will contribute to live projects within one dedicated team, whilst gaining exposure to the wider Technology division through a variety of speaker series, presentations and networking events.

Bank of America

Search:

TARGETjobs Employer hubs



Areas of organisation

- investment bank • IT services

Salary Competitive

Benefits Competitive

Number of vacancies

200+ across all lines of business

Number of employees

c. 200,000+ Worldwide, c. 10,300 EMEA

Summer internships Yes

Placement year Yes

Degrees sought

- all degree disciplines

Locations London, Chester, Dublin and various locations across EMEA

Contact information

020 7996 3528

@BofA_Careers

You can also find us on LinkedIn

Apply to:

Type of application accepted

Online

campus.bankofamerica.com

Closing date Varies by vacancy. Refer to website for details.



See the jobfinder table on pages 52–53 for more information



CGI

You may not have heard of CGI, but you'll have heard of our projects! We designed, built and operate the Police National Database used by all UK police forces and containing over 3.2 Billion records, we are the Data Services Provider for the roll-out of 53 million smart gas and electricity meters in the UK and we are part of the European Space Operations Centre team which guided Rosetta's Philae probe to land on a comet.

CGI's story began in 1976 with two 26 year old entrepreneurs, Serge Godin and Andre Imbeau. The two started the company in the basement of Serge's home with one client, one phone and a lot of ambition. Today, there are over 77,000 of us working across the globe delivering the IT services that matter.

Our graduate and placement students are very much part of our story. They have worked on top-secret national security projects, they have helped secure Europe's major satellites to Mars, helped win multi-million pound projects and ensured that all our projects are planned and executed to the standards our clients have come to expect.

We typically have vacancies within the following industries: Banking, Cyber Security, Defence, Energy & Utilities, National Security, Public Sector and Space. There are opportunities nationwide, although certain

industries only operate from certain UK locations.

Our requirements

The majority of our graduates and industrial placement students have studied Computer Science/IT or STEM based degrees. Most of our roles involve an element of development, programming, testing or analytics. We also have some business roles where we take from a variety of degree disciplines as long as candidates have some experience and passion for working within IT.

As well as technical skills, your ability to listen and communicate is equally important. The success of our business depends on our ability to engage with our clients and get under the skin of their organisations. As well as an inquisitive mind, you'll need to be a strong relationship builder. You'll need to be flexible, open to sharing ideas and truly collaborative in your approach. We recruit throughout the year, so whilst there are no closing dates, we would advise you to make an early application.

You will have a student induction when you join and we have several intakes for this. Please visit our website www.cgi-group.co.uk/careers for further details.

CGI

Search:

TARGETjobs Employer hubs 

Areas of organisation

- IT services • software development
- technical consultancy
- telecommunications • financial software development • management consultancy
- outsourcing

Salary Industry competitive

Benefits

- pension scheme (with company contribution) • private healthcare • days' holiday – 25

Number of vacancies 100

Number of employees 77,000

Placement year Yes

Degrees sought

Technical roles – comp sci/stem and Business roles – all degree disciplines

Locations UK wide

Contact information

ukstudents@cgi.com

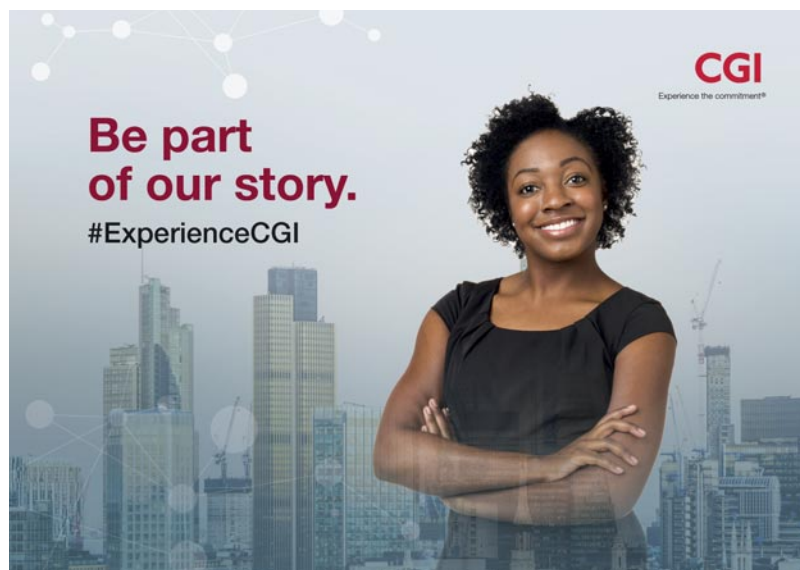
Apply to:







Type of application accepted

Online

www.cgi-group.co.uk/careers

Closing date Recruit on a rolling basis




 2019 FINALIST Panel award The best school leaver programme	 2019 FINALIST Panel award The best innovation in student recruitment
 2019 FINALIST Panel award The best student marketing campaign (independent marketing agencies £500k cap)	 2019 FINALIST Panel award The best use of social media
 2019 FINALIST Panel award The apprentice of the year	 2019 FINALIST Panel award The best on-boarding experience



See the inside front cover and the jobfinder table on pages 52 – 53 for more information

The trainee

Natalia

Employer *CGI*

Role *Software Developer on one of the world leading Global IoT solutions for a Tier 1 Telco.*

Joined CGI *2017*



What does your role involve?

Implementing solutions for networking components which are connected directly into Telco's mobile network.

What does a typical day in your role look like?

Once I log on, I spend the first 20 minutes going through emails and organising my priorities for the day. If any off-shore testers have contacted me about defects, then I deal with those first. Usually I pick up where I left off from the previous day and continue with any development of new changes whilst continually testing before progressing. If it's a 'quiet' day then I get on top of the documentation of any changes, review records and training presentations.

What is the most interesting part of your role?

I find it quite exciting to be working on such critical components. The quality and speed of these networking systems is of high importance due to the amount of network traffic that passes through, and it's rewarding to be working on a project which impacts so many people globally!

What projects are you working on at the moment and what impact will they have?

As we enter the IoT era, systems within the telecommunications sector that underpin the IoT Service need to be re-architected to accommodate for growth. There are currently two focus areas which implementation is currently addressing – driving efficiency and

scalability to cater for the growing IoT platform. A lot of these challenges are being addressed by moving to the cloud and accommodating for more traffic and SIM's.

What are you most excited about in relation to your role and future tech developments right now?

It's an exciting time for the networking and telecommunications sectors as 5G begins to roll out and the IoT platform becomes more prevalent. As more of our devices will be connected to the internet, the continuous exchange of data puts a strain on the network. With 5G's capabilities promising less latency and larger geographical coverage, IoT can continue to expand without having to compromise on energy or speed.

How do you feel CGI has impacted your career to date?

I feel that CGI has given me the confidence to take on challenging tasks and expand my skillset. Prior to joining, I never would have thought I was capable of developing these important, difficult systems. However, with support from my team and training from CGI I have achieved a lot, and I feel I have been given the boost to take on many opportunities throughout my career.

What is your favourite thing about working for CGI?

It's nice working for a company which values employees not settling in a singular role which employs a limited skillset, and continually encourages members to keep learning and expanding their horizons.

Whether it's within emerging developments, different industries within both business and technology, or working on their soft skills. The structure of being project-based means there are many opportunities to work on new projects, and I value the company ethos of pushing professional development.

Have you benefited from any training and development at CGI – If so what did you learn and how has it benefited you both professionally and personally?

One of my passions is advocating social equality and activism regarding social issues, and so CGI's promotion of mental health and development of interpersonal training is important to me. Recently I've been attending training regarding bias in the workplace, which I found eye opening to learn about the different, subconscious biases that affect us all on a daily basis. I am soon to be taking on training regarding the 5G technology and Spring Boot to boost my industry skillset and assist me with upcoming development.

Tell us why someone should consider a career at CGI

As CGI is one of the biggest companies in developing IT solutions, there's a vast range of interesting projects with have a global impact on different sectors. A career here means the opportunity to find something which means a lot to you and to contribute towards it. I find the prospect of working on a solution which people use every day exciting and I couldn't be happier that CGI found me a project that I could excel in.



Who we are

Close Brothers is a leading merchant banking group, providing lending, deposit taking, wealth management services, and securities trading. We employ 3,000 people, principally in the UK, and are one of the largest 250 companies listed on the London Stock Exchange.

Working with us

We know that outstanding individuals help drive our business forward, deliver exceptional service for our clients and continue to build our longstanding reputation as a leading merchant banking group. Our geographic footprint means we have been able to maintain local, long-term relationships with our clients based on face-to-face interaction. We are keen to continue that tradition by recruiting employees from across the UK. We believe our employees are the best in the business.

Shape your future at Close Brothers

We have a number of exciting entry level routes for Graduates at Close Brothers. We recruit into specific business areas and offer tailored training and development opportunities, including an induction programme and mentoring to kick start your career in your chosen field.

Technology and Business Change is a varied, dynamic and crucial function within Close

Brothers. We are currently leading several large transformation programmes that are enhancing our customer's experience and enabling the digital and data agenda across the Bank. Through collaboration with our business partners, we are focused on delivering the next generation of technology platforms and services that support our future growth. In addition to all of this, we are also building new shared technology capabilities whilst implementing more efficient ways of working to set us up for a continued success.

What we are looking for?

We are looking for Graduates from all degree backgrounds who are committed and eager to learn. We are keen to hear from people who are commercially aware and have a genuine interest in working in the financial industry. The Graduate scheme will provide a great opportunity to gain exposure across the organisation for candidates who are passionate and personally driven.

How you can apply

To obtain more information about Close Brothers Group you can visit our website at www.closebrothers.com/careers Close Brothers Group is committed to equality and valuing diversity within its workforce and welcomes applications from all candidates regardless of sex, race, age, disability, religion or belief.

Close Brothers

Search:

TARGETJobs Employer hubs 

Areas of organisation

• financial services • financial software development • investment bank

Salary £27,000

Benefits

• bonus (discretionary) • life assurance • pension scheme with company contributions • season ticket loan • cycle to work scheme

Number of vacancies 7

Number of employees 3,000

Summer internships No

Degrees sought

• all degree disciplines

Locations London, Wimbledon, Doncaster
HQ: Central London

Contact information

www.closebrothers.com
Lauren Davies
020 7654 7217

Apply to:

Type of application accepted
Online

www.closebrothers.com/careers

Closing date Open

“Close Brothers as an employer has so much to offer as they really invest in you and from day one I have been given more responsibility than I ever expected.”
Graduate

See the jobfinder table on pages 52–53 for more information



At Deutsche Bank, we're designing the digital bank of the future. You could be an integral part of building it with us. With a strong position in Europe and a significant presence in Asia and the Americas, we're taking a technology-first view of our business. That's why we're looking for innovative thinkers and curious minds to transform the bank through advanced applications, challenging programming projects, and cutting-edge tech like artificial intelligence and blockchain.

We have made and continue to make significant investments in technology, evidenced by our commitment to spend 1 billion EUR on digitalisation efforts by 2020. We are paving the way for what's next and continue to prioritise technology through our Digital Factory and Global Innovation Labs. Our Digital Factory brings together over 400 employees from 14 different countries and we currently have five global innovation labs who have helped generate innovative solutions for a number of divisions across the bank.

When you join us, you'll have the opportunity and flexibility to explore a variety of different areas across our technology business. You'll work with expert teams on live projects, from rapidly prototyping an app to finding new ways to connect our people across the world. Collaborating closely with users, engineering teams, and stakeholders, you could turn data into powerful, business-critical insights that serve our clients and the bank.

While you're engaged in building fintech's future, you'll have the tools and training to grow your skills and the opportunities to increase your network. So, whether you're working out how to move currency around the globe, pioneering algorithms that predict price shifts, or developing complex quantitative trading tools, you'll advance your career and our industry. The future is yours to shape.

Discover a career to look forward to at db.com/careers/technology

Deutsche Bank

Search:

TARGETjobs Employer hubs 

Areas of organisation

• IT services • IT vendor • software development • financial services • financial software development • investment bank

Salary Competitive

Benefits

Excellent benefits

Number of vacancies 100+

Summer internships Yes

Placement year No

Degrees sought

• all degree disciplines

Locations London and rest of the world

Contact information

facebook.com/DeutscheBankCareers

@careersDB (Twitter)

linkedin.com/company/deutsche-bank

youtube.com/user/DEUTSCHEBANKGROUP

@deutschebank (Instagram)

Apply to:

Type of application accepted

Online

db.com/careers/technology

Closing date

Graduate Training Programme & Analyst Internship Programme (Infrastructure & Technology) – December 2019



Deutsche Bank
db.com/careers

We're ready to transform the future.
Our graduates are revolutionising technology.
#PositiveImpact

To find out more please visit db.com/careers.

See the jobfinder table on pages 52–53 for more information



[dstl]

Business facts

The Defence Science and Technology Laboratory (Dstl) is at the heart of the UK's defence and Security capabilities, ensuring that our vital and unique innovative science and technology contribute to current and future challenges. We provide the UK expertise in a spectrum of engineering and scientific fields. We work with the best people with the best ideas, and apply them in unexpected ways, much of which is operationally critical with the potential to save many lives.

We work at the forefront of defence and security research and innovation, a dynamic and rapidly evolving environment. Taking technology and push it to its limits, using creativity and innovation to solve real world problems for real world customers. Quite simply, this is work that you cannot do anywhere else.

Crucially, we work with other brilliant people – collaborating with everyone from small companies and world-class universities to large defence companies and other nations. Together, we develop battle-winning technologies, based on deep and widespread research, to support UK military operations now and into the future.

Our Graduate roles are an opportunity to take on a real job, right from the start, while enjoying some of the best development around. We recruit into one of our 5 divisions:

- Platform systems
- Counter Terrorism and Security
- Cyber and Information Systems
- Defence and Security Analysis
- Chemical, Biological and Radiological

You're recruited into a specific role to develop your skills in your particular discipline. This means there's real responsibility right from the start with unique, interesting and challenging projects that make a difference to UK defence. What you learn on the job is complemented by high quality learning and development activities. You won't find a programme like it:

- Work-related conferences to expand your skills and networks
- Events [both internal Dstl focussed and external]
- Fantastic training - including seminars, computer-based learning, training sessions and on-the-job training
- The opportunity to cross-train and retrain, gaining experience outside of your technical discipline
- Encouragement to continue your professional development through Chartership programmes and accreditation
- Opportunities to travel
- Exciting project involvement across government, industry and academia
- A mentor and buddy to help you settle into your role
- Opportunities to network and learn about Dstl with other new starters



"I am incredibly proud to work for dstl; I am proud of the impact we make to the defence and security community and that I contribute to that impact."

DSTL

Search:

TARGETjobs Employer hubs 

Areas of organisation

• software development • hardware/device development • public sector • cyber and information systems

Salary £24,000–£28,000

Benefits

• on site gym • overtime • pension scheme with company contribution • season ticket loan • rental deposit scheme • days' holiday (25 rising to 30 after 5 years) • on site restaurants • free car parking • salary sacrifice schemes

Number of vacancies 90

Number of employees 4,000

Summer internships Yes

Placement year Yes

Degrees sought

• engineering • science • physics • maths • aeronautical/astronautics engineering • electronic or electrical engineering • systems engineering • communications engineering • software engineering • computer science • data science • artificial intelligence

Locations Salisbury, SP4 0JQ
Portsmouth, PO17 6AD
Sevnoaks, TN14 7BP

Contact information

Facebook – dstlmod
LinkedIn – dstl
Instagram – dstlMOD
Twitter – dstlMOD

Dstlrecruitment@dstl.gov.uk
www.gov.uk/dstl

Apply to:

Type of application accepted

online: www.civilservicejobs.service.gov.uk

Closing date November 2019

See the jobfinder table on pages 52–53 for more information



FACTSET

Financial Data. Made Smarter.

FactSet delivers the world's best insight and information to investment professionals through superior analytics, service, content and technology. More than 115,000 users make smarter investment decisions with FactSet's desktop analytics, mobile applications, and comprehensive data feeds.

When you join our team, you'll receive immediate responsibility and recognition for hard work. Our employee retention rate has historically averaged 90 percent because employees are treated well and opportunities abound. Around the globe, FactSet is committed to creating a workplace environment that is hardworking, flexible and fun.

Having been voted one of the UK's 'Best Workplaces' consecutively since 2008, FactSet is a great place to start and grow your career.

Software Engineering

Our teams in London work with some of the core parts of our product suite that include real time systems, messaging, content integration, data services, key infrastructure and analysis applications / tools. Software Engineers at FactSet drive reliability, performance, usability and innovation in our products and applications that are a core part of the Global Investment Market. The solutions you will find will require high levels of original thinking and creativity. We work on a variety of platforms (Windows, Linux) and in a

number of core languages (C++, C#, JavaScript, Perl) to build robust and well-designed solutions, and thus we look to recruit not just programmers but "true" Software Engineers.

Global Client Solutions

FactSet's Client Solutions Associates are the essential connection between our clients and our software business. Their expertise ensures that FactSet's client service is unrivalled in the industry. Our Client Solutions Associates deliver excellent customer service, are naturally good relationship builders and have a keen eye for detail. They are inquisitive, data literate and effective problem solvers. Combining knowledge of the industry and technical expertise, Client Solutions Associates work closely with our investment management and investment banking clients to ensure that they are seamlessly integrating our software into their investment process.

Internships

We offer internships in both Software Engineering and Global Client Solutions. Our interns actively contribute to FactSet's business. Interns gain a mentor within their department, interact with representatives throughout the organisation and work on hands-on assignments. FactSet is dedicated to helping you grow your professional skills and industry knowledge to prepare you for a full-time position.



'A primary requirement for me was to find a company that had a rigorous training programme with early responsibility and a hardworking, balanced culture. FactSet provided that from the beginning, and I can certainly attest to it being rated as one of the UK's "Best Workplaces."' Guy

FactSet

Search:

TARGETJobs Employer hubs 

Areas of organisation

IT services • software development
• financial services • financial software development

Salary Competitive with benefits

Benefits

• free lunch • gym membership/subsidy
• life assurance • pension scheme with company contributions • private healthcare
• season ticket loan • share options
• 25 days' holiday

Number of vacancies 70+

Number of employees 10,000+

Summer internships Yes

Placement year No

Degrees sought

All degree disciplines however we hire primarily from the following degree subjects: Finance; Economics; Computer Science; Software Engineering; Mathematics; Physics; Chemistry

Locations Headquartered in the US, with over 500 employees in London

Contact information

www.FactSet.com/careers
facebook.com/FactSet
twitter.com/factsetcareers
instagram.com/factsetcareers

To submit an application, visit www.FactSet.com.careers. Please send any questions to recruiting_uk@factset.com. 020 3009 7050

Apply to:

Type of application accepted
Online

www.FactSet.com/careers

Closing date Open

See the jobfinder table on pages 52–53 for more information



In association with

SHL

Talent in Innovation.
Innovation in Talent.

A competition

For undergraduates

**Studying a
variety of subjects**

Closes 31.01.2020

Undergraduate *of the* *year*

Take part in our annual awards competition, which aims to find the best undergraduates in the UK. Prizes include work placements, exclusive overseas trips and much more.

undergraduateoftheyear.com

Delivered by





Fidelity International

Create value with Fidelity

Fidelity International is a privately-owned and family-run global asset management business that aims to help its clients fulfil financial goals and add value to their lives.

From individuals to large companies, financial advisers to institutions and governments, we are dedicated to delivering the Fidelity experience to as wide a range of people as we can; we help our clients save for retirement and meet their long-term investment objectives. We care, because our clients depend on us to; it's a commitment that's been at the core of our business for nearly 50 years.

Every single one of our 7000 employees, working in over 25 countries, takes pride in developing a deep understanding of our clients' needs.

Create value for the future

We don't seek quick wins. We craft, construct and create value by balancing risk with reward. Our approach is the reason we're so well-respected within the finance industry. We're renowned for our global research network and the work you do with us will influence change and make other people's dreams achievable.

Our commitment to you

At Fidelity we understand the importance of a work-life balance. We value people for the quality and outcome of their work, rather than for the number of hours you've done. Hard work is important to us, but never at the expense of well-being.

We care about your development and are always willing to help when you need support. With offices around the world, you will get to be a part of a global team that celebrates diversity and is actively involved in the communities we serve, whether through charity work or social entrepreneurship.

We only hire a select number of graduates and interns each year, which means you'll be a valued member of the team, making contributions that count.

Where you'll be adding value

At Fidelity International, there are opportunities for everyone. We offer a wide variety of roles across several departments, ranging from investment management (Equity Research, Fixed Income or Multi-Asset) to the commercial side of the business (Sales & Marketing or Technology).

Whether you want a front-office role in asset management, or want to be involved in the backbone of the company, you will be expected to add value from the start. Our people will ensure we continue to be a globally growing business. You will need to make decisions based on sound analysis, as well as learning all you can about our industry, our assets and our clients. Your work will help to ensure the smooth running and delivery of our business. You will have the opportunity to make a valuable impact on the wider team and every area of Fidelity's global business from day one.

The roles on offer vary each year, so please check our website for more details.

Search:

TARGETjobs Employer hubs  

Areas of organisation

- financial services • sales • marketing

Salary

Competitive

Benefits

- bonus (discretionary) • welcome bonus • retail discount • lifestyle benefits • life assurance • pension scheme with company contributions • private healthcare • share options • 25 days holiday

Number of vacancies

30

Number of employees

7,000

Summer internships

Yes

Placement year

No

Degrees sought

- all degree disciplines

Locations

Cannon St, London and Kingswood, Surrey

Contact information

Fidelity International

4 Cannon Street

London

EC4M 5AB

early.careers@fil.com

Apply to:

Type of application accepted

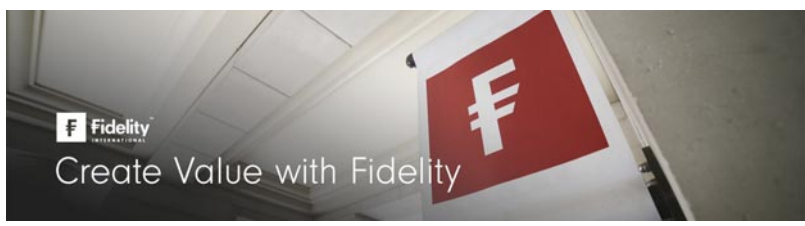
Online

<https://earlycareersatfidelity.com>

Closing date

Investment – 08/11/2019

Commercial – 17/01/2020



See the jobfinder table on pages 52–53 for more information





FDM Group is a FTSE 250, award-winning employer, working with over 200 of the world's largest brands such as HSBC, Shell, Capgemini and Virgin Media. We recruit over 2,000 graduates every year, bringing people and technology together around the world.

Award-winning Graduate Careers Programme

The FDM Graduate Careers Programme will provide you with training and invaluable commercial experience working alongside one or more of our prestigious clients. We also provide ongoing support, guidance and professional development through various initiatives such as the Consultant Peer Support and Mentoring Programmes as well as online learning platforms such as Intuition Know-How and Pluralsight. At FDM our consultants are at the heart of the business.

As a diverse and inclusive organisation, we welcome individuals from all degree disciplines to push their limits, explore their potential and achieve their goals. By joining the FDM Graduate Careers Programme, you will be joining a network of thousands of talented individuals around the world who have launched their careers through FDM.

Our graduate opportunities include careers in Software Development, Software Testing, Business Intelligence, IT Operations Analysis, Project Support Office, Business Analysis and Risk, Regulation and Compliance.

We help bridge the gap between university and the corporate world, providing the skills and experience needed to launch a successful career.



“FDM has truly helped me build a career in tech as they have provided me with a foundation and a bridge to cross over the never ending dilemma of ‘need experience to be hired but need to be hired for experience’.”

Swetha Thanabalasingam – FDM Consultant, trained in Software Development, studied Mathematics and Computing

FDM Group

Search:

TARGETjobs Employer hubs

Areas of organisation

- Technical and business consultancy

Salary FDM offers a starting salary of £23,500–£27,500.

Benefits

- pension scheme (with company contribution)
- 20+ holiday days
- commercially relevant training and opportunities for industry recognised certifications
- employee recognition awards
- option to join FDM's Buy As You Earn share scheme
- ongoing technical and professional career support and development

Number of vacancies 1,100+

Number of employees 4,000 +

Summer internships Yes

Placement year Yes

Degrees sought

- All degree disciplines, focusing on STEM

Locations FDM's centres are located in London, Leeds, Birmingham, Glasgow, Frankfurt, New York, Virginia, Austin, Charlotte, Toronto, Hong Kong, Singapore and Sydney.

Contact information

Facebook.com/FDMGroup
Twitter.com/FDMGroup
LinkedIn.com/company/fdm-group
Youtube.com/channel/user/FDMGroupVideos
Instagram.com/fdm_group

Contact our Recruitment Team:
UK.recruitment@fdmgroup.com
020 3056 8240

Apply to:

Type of application accepted

CV & letter • online • email

www.fdmgroup.com/careers

Closing date Hiring all year round

See the jobfinder table on pages 52–53 for more information





Who we are

Kerry Group is a world leader in food and beverage manufacturing & has enjoyed phenomenal success since its formation in 1972. Today, Kerry Group has 23,000 employees globally, 15,000 products and revenues of €6.6 billion. Our mission is to help nourish and delight consumers across the globe.

Our business is comprised of 2 divisions: Kerry Taste & Nutrition & Kerry Foods.

Taste & Nutrition

We think of ourselves as the Taste & Nutrition company. We understand that consumers want delicious products made from trusted, authentic foods and flavours and every day millions of people throughout the world consume foods and beverages containing our taste and nutrition solutions.

Kerry Foods

We are a leading name in the global food industry – producing branded & customer branded food across Meals, Meats and snacking & Dairy. We have an incredible heritage and amazing brands. With brilliant people, and big ambitions. Our products, many of which are household favourites, are eaten by 60m people every day.

What we offer

- We offer our Graduates a permanent job from the outset.
- We also support your career development through our Graduate Development Programme. Our Programme follows the 70:20:10 development model:
 - 70% of your learning takes place on the job

through projects, rotations and being granted responsibility early in your career.

- 20% comes from the support you receive from your manager and your mentor who is a senior leader in Kerry.
- 10% comprises a personal leadership programme run in conjunction with a leading Executive Education school

Graduates have a fantastic support network which includes a global network of past and current graduates.

Graduate opportunities in IT:

There are a wide range of roles on offer from business analyst, technical delivery, development and infrastructure.

Full details on roles are available on www.kerrygraduates.com

The Business Technology Graduate Programme in Kerry Foods provides graduates an opportunity in the first year to experience a number of different areas of the business before a true ICT role. This enables you to understand our business and how ICT can provide solutions to drive our business forward.

What we are looking for?

- We are looking for graduates who are
- Globally mobile,
 - Ambitious and driven to develop themselves and their careers,
 - Flexible,
 - Team Players,
 - Are passionate about Kerry and the food industry
 - Fluency in a second European language is a distinct advantage

Kerry Group

Search:

TARGETjobs Employer hubs

Areas of organisation

- fast moving consumer goods

Salary Competitive salary which is reviewed regularly throughout the Graduate Programme

Number of vacancies We recruit approximately 15 IT Graduates annually.

Number of employees 23,000

Summer internships For further details on Internship Opportunities please visit: www.kerrygrads.com

Degrees sought

- all degree disciplines • business studies
- computer science/IT • software engineering • engineering • mathematics
- science

Locations World-wide locations across 25 different countries

Contact information

Kerry Graduate Recruitment Team
 + 44 (0)20 7654 7201
www.kerrygraduates.com
kerrygraduates@gtisolutions.co.uk
facebook.com/Kerry.Group.Graduate.Recruitment
youtube.com/watch?v=ERNmrH_56_A&t=6s

Apply to:

Type of application accepted

Apply online on www.kerrygraduates.com

Closing date See www.kerrygraduates.com



See the jobfinder table on pages 52–53 for more information





Who we are

Lighthouse Systems is a global vendor of Manufacturing Execution Systems (MES) software. We enable the digital transformation of manufacturing organisations around the world in a wide range of industries. With functionalities across production, quality, inventory/logistics and maintenance, Lighthouse's MES Shopfloor-Online software removes traditional organisational siloes to optimise business processes. Customers include Nissan, pladis (United Biscuits), Sunpower, Toyota.

We are a "Microsoft Gold Partner". Our software is a configurable solution developed with latest technology in .NET, C#, JavaScript and SQL server. Our aim is to provide students with the best possible experience during their placements. We offer an environment where you can take responsibilities and develop your skills while working on real projects with international customers, in a friendly and collaborative environment. Take our past placement students' word for it!

Our UK team of Software Engineers and Developers are based at our Head Office in West Sussex which is perfectly situated between Brighton and London; giving you access to a relaxed cultural city on the coast, and the ever exciting UK Capital, for shopping and nightlife. We are a global company with offices in France, Germany, Poland, Sweden, USA and Asia.

For the fourth year in a row, we are proud to announce we have yet again been voted one of the top medium-sized companies in the UK for the quality of our placement programme. Our Graduate and Placement programme kick

starts around the 1st of July each year with a 10-week intensive training programme. After the training, you will join either our Software Implementation or Development team. As part of our Programme, you will engage with international companies, working on real projects with potential to visit customer sites, working with companies such as Nissan, Airbus and United Biscuits.

Our aim is for our graduates to have the best possible experience during their time with us, placing them in a challenging environment in which they can take on responsibility, develop skills such as requirements gathering, and project management, working on real projects with international customers. At Lighthouse Systems whatever, your role you will have the opportunity to make a difference.

Software Project Engineer and Developer

Join us for the Lighthouse Experience – personal development, challenges, team work, training and travel.

Excellent opportunity for high-calibre software development orientated Graduates who are looking to join a Microsoft Gold Partner software company that is able to offer a structured Graduate Training Programme, career development and the opportunity to travel worldwide working with our international customers deploying our solution.

If you are studying an IT or STEM related subjects, expecting a minimum 2.1, passionate about making a difference, keeping pace with technology and with a proven flair for programming then this could be for you.

Lighthouse Systems LTD

Search:

TARGETjobs Employer hubs

Areas of organisation

STEM related subjects, Manufacturing Computer Science • IT services • software development

Salary Competitive

Benefits

- competitive salary • relocation package
- free car parking • free lunch and refreshments • 20 days annual leave, rising to 25 days with service, plus the usual bank holidays • pension with company contribution • life insurance

Number of vacancies ?

Summer internships No

Placement year Yes

Degrees sought

- computer science/IT • software engineering • mathematics

Locations Head Office is Pease Pottage West Sussex and we have offices in the USA, Asia and Europe

Contact information

www.lighthousesystems.com
F@LGHTHSjob
Twitter @LGHTHS_ITjobs

Apply to:

Type of application accepted

Online

careers@lighthousesystems.com
www.lighthousesystems.com/careers/
graduate-careers

Closing date Open



“One of the best things about working here is the close team relationship; everyone's opinion is valued and taken into consideration” – Lighthouse Systems Graduate

See page 14 and the jobfinder table on pages 52–53 for more information

★ RATEMYPLACEMENT

2019 - 2020

**Top 50
Medium-sized
Schemes**



London Stock Exchange Group

Who we are

London Stock Exchange Group (LSE.L) has a long, prestigious heritage that few organisations around the world can rival, dating back to 1698. The financial markets have evolved significantly since then, and LSEG along with it. We have grown to become one of the world's foremost financial market infrastructure and capital markets groups, and a global leader in new financial technology, or FinTech. Headquartered in London, our geographic footprint extends to more than 20 cities worldwide, and more than 50 nationalities are represented by our 4,500-strong workforce.

As we continue to expand and diversify, we are looking for the next generation of talented, ambitious graduates to help us shape the future of LSEG. You will get direct exposure to the exciting developments and innovations happening within finance and technology, putting your problem solving skills to use and challenging the status quo.

Pushing the boundaries of technology

Joining the Technology division at London Stock Exchange Group is a chance to work with the essential systems and platforms that drive the world's markets. From Artificial Intelligence, to Blockchain and beyond, our technologists are building the future of financial services technology, improving efficiencies, reducing risk and creating new business models.

Unique exposure and responsibility from day one

Both our graduate and internship programmes offer real responsibility from day one. This means the opportunity to work on critical projects with leading individuals from the world of finance and technology. Underpinning this is a friendly and supportive working environment where work-life balance is both respected and encouraged. However you look at it, this really is a fantastic place to launch your career in the financial markets.

The roles

On our technology graduate programme you will undertake two rotations of six months each, giving you exposure to varied technical career paths.

You'll have an important role in harnessing new, disruptive technologies and working on projects aimed at integrating these into our frontline operations. No two experiences are

alike; your roles will depend on your background and interests, and on business needs. You could be helping to enhance our existing IT infrastructure, for example, or developing the next generation of software and applications to drive our business forward. Equally, as a technology project manager or business analyst, you'll play a key role in helping us to shape our long-term technology strategy, helping to build client relationships and to integrate new companies and product lines into our core business. Wherever your graduate or internship programme takes you, you can expect constant opportunities to develop your skills and knowledge along the way.

- **Software Development:** Our software development team design and build the financial architecture that underpins some of the world's most important exchanges. They work with a range of cutting edge programming languages.
- **Software Testing:** All of our software is mission critical and requires thorough testing prior to launch. Working in post development is a fantastic way to really understand LSEG and everything we do.
- **Technology Analysis:** Our analysts play a vital role in shaping our products and services, and in bringing these to market. They are the problem solvers who know the right questions to ask.
- **Project Management:** Technology project managers provide an essential link between the designers and the people who use our products. It's a unique opportunity to understand our wider operations, as well as those of the organisations that rely on LSEG's services.

Who should apply?

We're looking for highly motivated individuals from a Science, Technology, Engineering or Maths (STEM) background with a demonstrable interest in technology to join our graduate and internship programmes.

As a multinational organisation our workforce is extremely diverse, and we are committed to maintaining an open, inclusive environment.

Your next steps

Applications open on 02 September 2019 and close on 01 December 2019. Before applying, we recommend that you visit our website at lseg.com/graduates to find out more about the opportunities on offer. We do recruit on a rolling basis and encourage early application.

London Stock Exchange Group

Search:

TARGETJobs Employer hubs

Areas of organisation

• financial services • information technology

Salary Competitive

Benefits

• bonus (discretionary) • gym membership/subsidy • life assurance • pensions scheme (with company contribution) • private healthcare • season ticket loan • share options • days' holiday – 25

Number of vacancies 30

Number of employees 4,500

Summer internships 30

Placement year No

Degrees sought

• STEM degrees

Locations Headquartered in London, with significant operations in North America, France, Italy, Romania, Sri Lanka and Taiwan.

Contact information

Follow us on Twitter at twitter.com/LSEGplc
+44 (0)20 7797 1000

Apply to:

Type of application accepted

Online

www.lseg.com/graduates

Closing date full time: 01/12/19,
summer internships: 01/12/19

See the jobfinder table on pages 52–53 for more information



Met Office

The Met Office is the UK's National Meteorological Service, recognised globally as one of the most accurate forecasters. We create 3,000 tailored forecasts and briefings a day that are delivered to a huge range of customers from the Government, to businesses, the general public, armed forces, and other organisations. The Met Office provides these critical services 24/7, employing more than 1700 staff at 60 locations throughout the world.

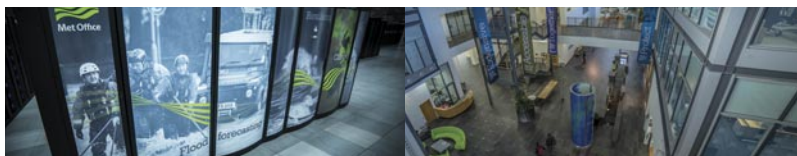
Technology plays a fundamental role in the operation of the Met Office, underpinning everything we do from gathering the 10 million weather observations we need every day, ensuring continuous operation of one of the largest supercomputers in the world through to delivering those forecasts to customers via the web, our app or other channels. We are constantly evolving,

adopting cutting edge cloud technologies to transform the services we provide to our customers.

Our Industrial Placement scheme provides a range of opportunities including software development, cyber security, networks, desktop services and working within our cloud team. At the same time, you will experience what it's like working within a world-class organisation along with the opportunity to develop a better understanding of the wider Met Office business.

The sheer scale of Met Office IT capabilities outstrips those found in most other organisations allowing us to offer a unique opportunity to work with a wide range of technologies supported by expert teams.

If you're passionate about working in IT, then this is the placement for you.



Met Office

Search:

TARGETjobs Employer hubs

Number of vacancies 12

Summer internships No in 2020 but we will offer in 2021

Placement year Yes

Contact information

Facebook, Twitter, Instagram, Snapchat: metoffice; YouTube: TheMetOffice; LinkedIn: met-office
Hrrecruitment@metoffice.gov.uk
01392 885000

Apply to:

Type of application accepted

Online www.metoffice.gov.uk/about-us/careers/vacancies

Closing date We offer a number of schemes and closing date varies but usually around March

See the jobfinder table on pages 52–53 for more information



Sign in/register to:
Organise your job search
Get headhunted
Receive job alerts

 @TARGETjobs

 @TARGETjobs.co.uk

 @TARGETjobsUK

Delivered by 



SECURITYSERVICE MI5

We safeguard the UK against threats to national security including terrorism, espionage, cyber and sabotage. At MI5, we investigate suspect individuals and organisations to obtain, collate, analyse and assess intelligence relating to those threats. We also act to counter the sources of threats, as well as working to reduce any government or infrastructure vulnerabilities.

Technology is rapidly evolving and it's vital for MI5 to stay one step ahead. This is why we need individuals with technical minds who can come up with innovative solutions to a wide range of technological challenges.

Our Technology Graduate Development Programme (TGDP) is a structured programme that gives you the experience, knowledge and skills you need to be an effective technology professional in our pioneering IT function. You could be working with technical architects or business analysts to understand a business challenge and apply technology, people or processes to meet our needs. Alternatively, you could be involved in defending our IT systems or be involved in building and testing applications to support our data collection, investigations, agent running or corporate systems. At the end of the programme you will specialise in a

specific area to develop your technical expertise, consolidate your work experience and have the opportunity to gain a recognised professional qualification. This will prepare you for a rewarding career at the very forefront of technology.

We also recruit graduates to become Covert Technical Operations Specialists. In this role you will be deploying a wide range of advanced technical capability to enable us to collect intelligence for our fast paced and high profile investigations. Working alongside investigators you will give a unique insight into the complex and evolving threats to national security by developing methods to allow us to access the computers and devices used by terrorists that pose a serious threat to the UK.

MI5 offers varied and rewarding careers within technology in a supportive and encouraging environment that puts the emphasis on teamwork. We also place great importance on our staff maintaining a healthy work-life balance.

Whichever path you choose you will be working with leading technology to keep the country safe.

MI5

Search:
TARGETjobs Employer hubs

Areas of organisation

- public sector

Salary c.£34,500

Benefits

- pension scheme with company contributions
- season ticket loan
- 25 days' holiday

Number of vacancies TBC

Number of employees c.4,000

Summer internships Yes

Placement year No

Degrees sought

- all degree disciplines

Locations London and Northern Ireland

Apply to:

Type of application accepted

Online

www.MI5.gov.uk/careers

Closing date Open

“After getting my degree I wanted a job that would stretch my skills and more importantly something that I could be genuinely proud of. That’s why MI5’s Technology Graduate Development Programme appealed to me – I’m using technology in amazing, innovative ways. And everything we do is helping to keep the country safe from a range of threats. It’s exciting work too. The way terrorists are using technology is changing rapidly, so we have to stay one step ahead by being flexible and ready to act fast. There’s a really strong team atmosphere because we’re all working towards the same goal - to keep the country safe. Although you can’t tell everyone where you work, the secrecy has its advantages, for instance you can never take your work home. This means I have lots of time to follow my other interests away from the office.”

See the jobfinder table on pages 52–53 for more information



orbium

Management & Technology Consultancy for Financial Services

We help banks and wealth managers realise their strategy and execution priorities. Widely recognised for exceptional commitment, we help our clients to realise revenue growth and efficiency gains through innovation and industrialisation. By effectively blending business and technology consulting with software products and strong partnerships, we enable clients to focus on what matters most: their own success. We are now part of Accenture Wealth Management.

Orbium prides itself on an excellent track record based on high-quality and successful project completion. We have the proven ability to execute complex projects through a mix of onshore and offshore delivery services depending on client needs.

By effectively matching our consultants' skills and expertise to clients' strategic goals, Orbium helps clients leverage their performance and productivity.

You are not just a number to us

A career with us means you won't be lost in the crowd. At Orbium we have a strong focus on the training and development of each one of our employees. We understand the importance of our staff and ensure we offer the best in learning experiences. We offer a Graduate Programme, where we provide not only formal training, such as sponsoring you

to study at the Academy to become Avaloq certified, but in addition we provide exposure to live projects where on-the-job training is invaluable to achieving your career ambitions.

You will also report to a Coach who will mentor you and support you in meeting your development needs. All of these learning dimensions will enable you to further your skills and quickly progress following Orbium's career path to senior positions.

Your base

Our UK office is located in the City of London. However more often than not you will be working on client sites which may be in London, the rest of the UK or overseas.

Therefore, we require graduates that are flexible and will thrive on any opportunities there may be to travel.

Recruiting Talent

We are looking for graduates who have a strong academic record and have achieved or are expecting a minimum 2.1 in an IT, Engineering or related discipline. You will have a genuine interest in both consulting and IT and have the drive and ambition to develop your potential. Demonstration of technical ability is key but equally we require excellent interpersonal skills – you need to show us you can effectively communicate with people and work cohesively as a team in this client-facing role.

Orbium Consulting Limited

Search:

TARGETJobs Employer hubs 

Areas of organisation

- IT services • software development
- technical consultancy • financial services
- financial software development
- management consultancy • investment bank • professional services

Salary Competitive salary and benefits package

Benefits

- bonus (discretionary) • life assurance
- pension scheme (with company contribution) • private healthcare • days' holiday – 25 • income protection • travel insurance

Number of vacancies 5

Number of employees 500

Summer internships No

Placement year No

Degrees sought

- computer science/IT • engineering
- mathematics • physics • science
- software engineering • MSc IT conversion

Locations New York, London, Zurich, Geneva, Singapore, Hong Kong, Frankfurt, Luxembourg, Düsseldorf, Paris, Sydney, Berlin, Warsaw and Manila.

Contact information

www.orbium.com/careers

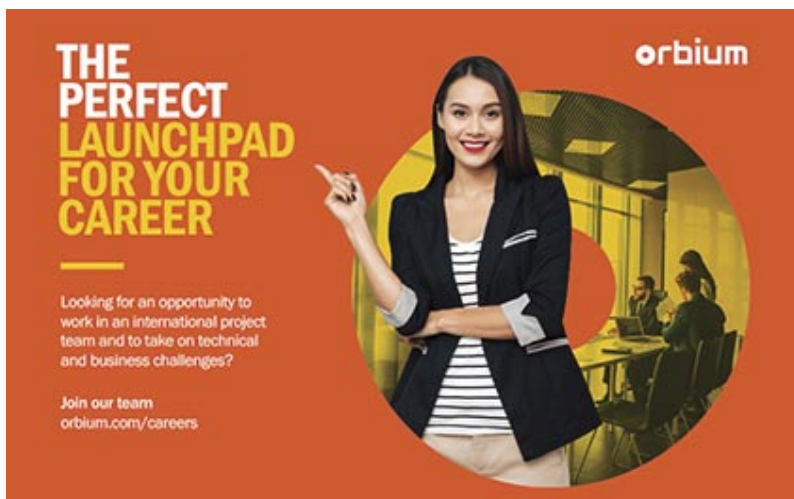
Apply to:

Type of application accepted

Online

<http://smrtr.io/i6Xh1w>

Closing date Ongoing



THE PERFECT LAUNCHPAD FOR YOUR CAREER

Looking for an opportunity to work in an international project team and to take on technical and business challenges?

Join our team
orbium.com/careers

orbium

See the jobfinder table on pages 52–53 for more information



What makes world-class content possible? World-class technology. Talented technologists. Serious ambition. That's why Sky offer so many opportunities for emerging tech talent. There's a rotational Technology Graduate Programme and a fast-paced Software Engineering Graduate Programme, as well as a range of apprenticeships, internships and insight days.

You don't need a degree in technology to succeed in a Sky tech team either, just a real passion for emerging technology. Made in-house, Sky technologists often work on projects from idea to launch, seeing their work influence how customers connect to more of what they love. Surrounded by a collaborative and close-knit team, nobody is ever too busy to help each other out either.

Sky have technology opportunities in London and Leeds. Wherever you join, you'll benefit from flexible working, structured learning plans, competitive rewards and discounts.

Technology graduate programme

Analysis. Project Management. Scrum Master. You'll try it all on our Technology programme. Over two years embedded in our agile and collaborative tech team, you might be

launching new channels, developing new customer management platforms, working on the Sky latest apps or something completely different. Whatever you come up with, you might just have found a job you love to talk about.

Software Engineering Academy

Seen something Sky web, mobile or internet TV-related? That's the Software Engineering team.

As part of your seven months' Software Engineering Academy, you'll work on a huge range of projects as part of that team.

First up is training on Java development, test-driven development and continuous build and integration. Next, you'll be putting your skills to the test on live projects, getting to grips with agile project methodologies and making a tangible impact.

Summer internships and insight day opportunities

Still exploring your interests? Looking for first-hand experience? Summer Internships or Insight Days are designed for you to a get flavour for life in the Sky tech team.

Sky

Search:

TARGETjobs Employer hubs



Areas of organisation

• entertainment and technology

Salary £30,000–£35,000

Benefits

• full Sky package • volunteering days
• 25 days' holiday • subsidised food • gym membership/subsidy • life assurance
• pension scheme with company contributions • private healthcare
• season ticket loan

Number of vacancies 90+

Number of employees 30,000+

Summer internships Yes

Placement year No

Degrees sought

• all degree disciplines

Locations Osterley, Leeds

Contact information

www.skyearlycareers.com

Apply to:

Type of application accepted

Online

www.skyearlycareers.com

Closing date Refer to website



See page 20 and the jobfinder table on pages 52–53 for more information



ThoughtWorks®

ThoughtWorks is a global software company and community of passionate, purpose-led individuals. We think disruptively to deliver technology to address our clients' toughest challenges, all while seeking to revolutionize the IT industry and create positive social change.

Our services fall into software delivery, products and consulting, but we prefer to talk about ideas, opportunities and how we can help. Our clients include well-known household names, large government organisations, forward thinking retailers and anything in-between. This means that you'll get the opportunity to work across a variety of industries, working with different teams and technologies to solve a range of business problems and continually delight our customers.

Our people are what really make us different. We're talented, curious individuals, working best when we're really challenged. With over 20 years of thought leadership, we have been integral in the agile movement, more recently championing practices like continuous

delivery and lean enterprise. We promote a collaborative, non-hierarchical working environment to encourage innovation, creativity and productivity.

We want to better humanity through software. We run our business around a three pillar model – striking a balance between running a sustainable business, providing software excellence and advocating for social and economic justice. Whether we're defending the free internet, teaching children how to code or helping to tackle global epidemics head on, we strive to have a positive impact on the world.

All of our graduates join an intensive graduate programme, which includes five weeks at ThoughtWorks University in India. You will work (and play!) with other graduates from all over the world, learning about software development and project delivery to help prepare you for your first ThoughtWorks project. And guess what? It's on us!

So what is holding you back?



“ThoughtWorks has provided me a great learning and growth environment. I have worked with both startups and enterprises in complex domains such as payments, commodities trading and sharing economy over the last year. The learning pace has always been set based on how quickly I am able to rise to the challenge. The more I have pushed myself, the more responsibilities I have been afforded. Overall, the most important thing to me has been the network of mentors and support who continue to help me shape my career path.” Erin Kyle – ThoughtWorks Graduate Programme

ThoughtWorks

Search:

TARGETJobs Employer hubs



Areas of organisation

• software development

Salary £32,000–£35,000

Benefits

• personal development plan • parental leave and childcare vouchers • private healthcare • income protection • critical illness • life insurance • pension scheme • annual travel insurance • 25 days holiday

Number of vacancies 35+

Number of employees 6,000

Summer internships No

Placement year No

Degrees sought

• all degree disciplines

Locations

Global
In UK – London and Manchester

Contact information

Joanne O'Brien
obrienj@thoughtworks.com

#ThoughtWorks

Apply to:

Type of application accepted

Online

www.thoughtworks.com/careers/uk

Closing date Ongoing

See the jobfinder table on pages 52–53 for more information



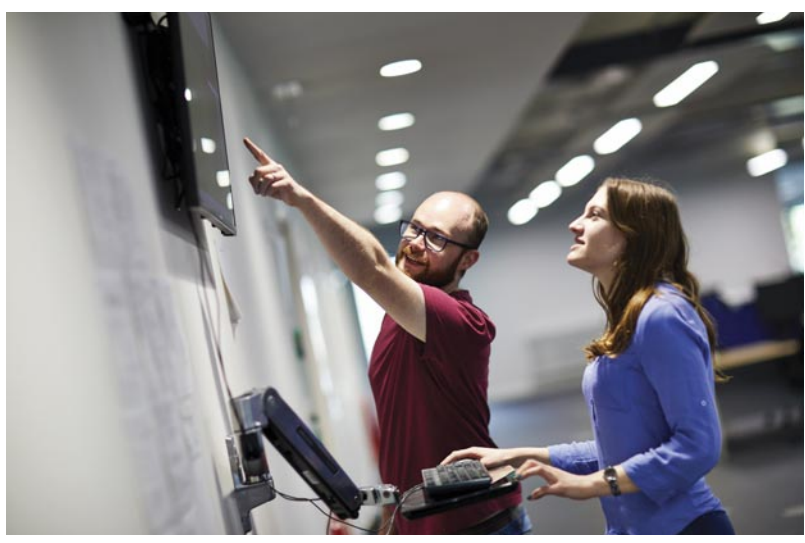
TPP is a market leading UK based IT company, dedicated to delivering innovative software solutions to the healthcare industry. After 22 years of success, we now operate on an international scale with projects ongoing across the Middle East and China. TPP have had great success in the UK, with over 5,500 organisations using our system to support over 48 million patient records.

We are based in our brand new custom-built offices in Leeds, TPP House, and attract graduates from all over the country. We want our staff to share our vision of integrating healthcare, and to embrace our core values of honesty, responsibility and empowerment. Our flat hierarchy and transparent culture ensures that everyone in the company has a voice and is able to play an integral part in our success from day one.

TPP has been consistently recognised as an outstanding graduate employer. In 2014 and 2015 we placed first in The Sunday Times 100 Best Small Companies To Work For and we were named Top Company For Graduates To Work For in 2016/17 by The JobCrowd. Most recently, we were in the top 100 Graduate Employers in 2018 by The Times.

We offer one of the most competitive graduate salaries on the market and we won the 'Best Graduate Salary' award from The JobCrowd last year. We provide an excellent starting salary with outstanding annual pay reviews. The graduate salary will increase rapidly during their time at the company.

“I get to work with brilliant people every day on projects with a huge real-world impact. I’ve been able to travel the world with work and make great friends, and I actively look forward to coming to work.”
Software Developer, TPP



TPP

Search:
TARGETJobs Employer hubs  

Areas of organisation
• IT services

Salary £45,000

Benefits
• £200 birthday meal allowance • Pub Fridays • Fantastic holiday entitlement
• Regular social events • Opportunities to travel internationally • Life insurance
• BUPA Health, Dental and Travel cover

Number of vacancies Ongoing recruitment

Number of employees 173

Summer internships Yes

Placement year Yes

Degrees sought
• all degree disciplines

Locations Horsforth

Contact information
facebook.com/tppcareers/
twitter.com/TPPCareers
instagram.com/tpp_careers/

0113 205 0082
careers@tpp-uk.com
TPP House, 129 Low Lane,
Horsforth, LS18 5PX

Apply to:

Type of application accepted
CV • online • email

To apply, please visit <https://tpp-careers.com/roles> and click on the 'Apply now' button on the job page of the role you are interested in.

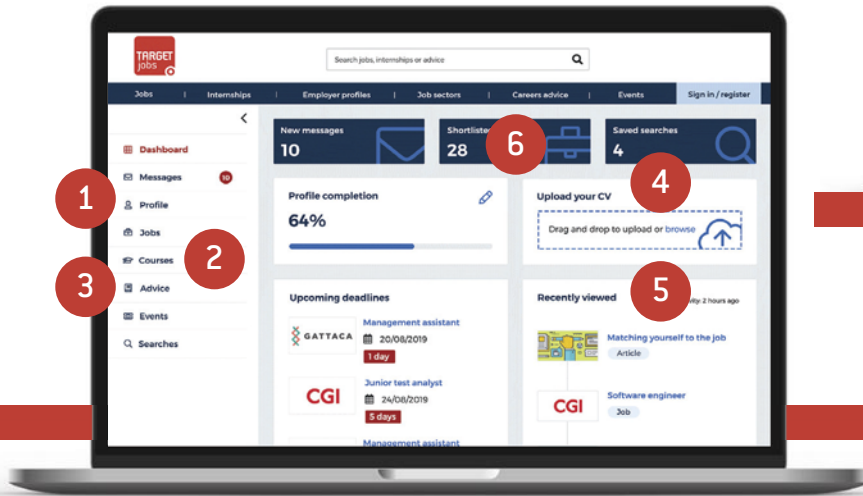
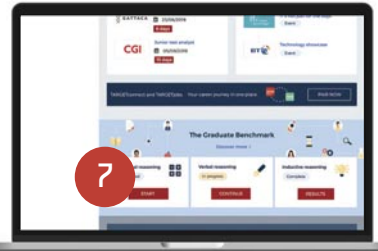
Closing date Open

See the inside back cover and the jobfinder table on pages 52–53 for more information





Use your TARGETjobs dashboard to make your job hunt easier



Personalise your job search

Direct messages

You can now receive highly targeted messages from employers and have the opportunity to connect with them directly.

1 Your profile

Keep your profile up to date. This is your career passport so it's in your best interests to complete it in as much depth as possible. We can then send you the most relevant careers advice and jobs information possible.

2 Shortlisted courses

Interested in postgraduate options? Save the courses you are interested in and revisit them at a later date.

3 Favourite content

Found an article or video useful? Save it here. We recommend saving useful content throughout your career journey – from choosing a career to the day you get hired by your favourite employer.

4 Your CV

Make your applications easy: save your CV to your dashboard.

5 Recently viewed

Jump straight back into advice, videos, internships, jobs and events you were recently exploring.

6 Shortlisted jobs

Save all the jobs you are interested in and get reminders when their closing dates are approaching.

7 The Graduate Benchmark

Test yourself with the three most commonly used aptitude tests, discover your strengths and compare your scores!

8 Recommendations

Careers advice, internships, jobs and events just for you.



Employers write and send messages to the specific members they would like to talk to. This could be about a job opportunity you are a good match for or an event they would like you to attend.

We send you an alert to let you know there is a message waiting for you within your dashboard.

Once you've read the message, you decide whether or not you would like to continue to talk directly to the employer about the content of the message, ie to find out more about the company or role, or to attend the event.

If you would like to continue the conversation, we will send the employer your TARGETjobs profile, including contact details but excluding sensitive data, so they can contact you directly.

Direct messages within TARGETjobs are the best way to build your network and land your perfect graduate job!

Advertisers

Page 78 and outside back cover



Page 79



Page 80



Pages 19, 81



Page 82



Page 83



Page 84 and inside front cover



Page 86



Page 87



Page 88



Page 89



Page 92



Page 91



Page 93



Pages 14, 94



Page 95



Page 96



Page 97



Page 98



Pages 20, 99



Page 100



Page 101 and inside back cover



Page 60



Page 44



Thanks to our contributors

Alfa	Gillian Bray.....	8
BAE Systems	Jack Sawyer	62–63
Capgemini	Rachel Head.....	74
	Kirsty Smith	2, 24–25, 27, 28, 49
CGI	Rebecca Cackett	18
	Richard Holmes.....	68
	Sumant Kumar	67
Deutsche Bank	Francesca White	3, 25, 35
DSTL	James Dean.....	3
	James McCreary.....	69
FDM Group	Jonathan Young	72
London Stock Exchange Group	70
	Iain McFadyen	2, 25, 40, 45
Metaswitch	Fiona Corden	73
MI5	3, 25, 29, 48–49
TPP	Sam Harper	71
	Ben Montgomery	10



Editor Ashley Johnson
Editorial assistant Siobhan Middleton
Proofreader Vanessa Lindsey
Advertising Adam Gillespie, sales product champion; the TARGETjobs sales team; the TARGETjobs campaign management team
Circulation Patty Shufflebotham
Series editors Jacky Barrett; Rachael Milsom
Commercial director Jon Mallott
Sales director Simon Rogers
Production director Jane Anderson
Chief executive officer Graham Storey
Published by
 GTI Media Ltd, The Fountain Building,
 Howbery Park, Benson Lane, Wallingford,
 Oxon OX10 8BA UK
 Tel +44 (0)1491 826262
 www.groupgti.com
Printer Acorn Web Offset Ltd
 ISBN: 978 1 912625 16 1 ISSN: 1757-4072

GTI would like to thank everyone who has taken the time to contribute to, or find contributors for, TARGETjobs *IT & Technology*. We would also like to thank all those who supplied advice and photographs.

© GTI Media Ltd, September 2019
 All rights reserved. No part of this publication may be reproduced by any means including, but not limited to, photocopying or stored in a retrieval system in any form without prior written consent of GTI. This is subject to the single exception of photocopying by careers advisers or lecturers for careers counselling. All items so used should be fully acknowledged. The views expressed in articles are those of the authors and their publication does not necessarily imply that such views are shared by GTI. Whilst every care has been taken in the compilation of this publication, the publishers cannot accept responsibility for any inaccuracies, or for consequential loss arising from such inaccuracies, or for any other loss, direct or consequential, arising in connection with information in this publication.





WRITE CODE. SOLVE PROBLEMS. SAVE LIVES.

STARTING SALARY:

£45,000

ROLES INCLUDE:

- Software Developer
- Graduate Analyst
- Communications Manager
- Account Manager
- Technical Operations

NO EXPERIENCE REQUIRED

INTERNSHIPS AVAILABLE



www.tpp-careers.com



Alfa[^]

INVESTORS
IN PEOPLE | Silver

Time to learn. Space to grow.



We're Alfa. Our culture is vibrant, innovative and diverse, and we're really proud of it.

We can offer you a future in technology development or consulting - whichever you prefer. Alfa careers are for people of all academic backgrounds and will see you working at our London HQ, at one of our US locations, or on one of a range of international assignments.



Visit alfasystems.com/careers to read more and apply. Unlike others, our recruitment process is simple.

