



19 NOVEMBER JOBS FOR MATHEMATICIANS

Mathematical Institute, OX2 6GG

Exhibitors: 16:00–18:00



www.careers.ox.ac.uk/fairs



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STARTING SALARY:

£45,000

ROLES INCLUDE:

- Software Developer
- Graduate Analyst
- Marketing & Communications
- Account Manager
- Technical Operations

NO EXPERIENCE REQUIRED

INTERNSHIPS AVAILABLE



www.tpp-careers.com

Jobs for Mathematicians Fair

We are delighted to welcome you to Jobs for Mathematicians – a boutique fair – which offers you the opportunity to:

- Find out about careers using maths;
- Meet employers who are recruiting for roles using maths;
- Compare different organisations and sectors;
- Ask questions to help your decision making.

Pre-fair talks

15:00–15:30 | Engaging with Organisations as a Disabled Student.

15:00–16:00 | Researchers @ the Jobs for Mathematicians Fair.

15:00–16:00 | Alumni @ the Jobs for Mathematicians Fair.

15:30–16:00 | Working in FinTech.

Fair talk

18:00–18:45 | Careers in Research for Mathematicians.

Top tips

Use this booklet to plan your Fair tactics:

- Check who is attending and read their booklet entry first.
- Plan some questions to ask: e.g. what are the pros and cons of their work? Or, what tips can they give you to increase your chances of being selected for work experience or employment?
- Be keen and attentive – first impressions count!
- Talk to as many people as you can.
- Remember to record who you spoke to and key points of your conversations.

Recruiters at the fair

PAGE EMPLOYER

4	Ab Initio Software
5	Aon UK Ltd
6	APR LLP
7	Cisco
8	Citadel and Citadel Securities
10	d-fine Ltd
11	First Actuarial LLP
12	Five Rings Capital
14	G-Research
15	GSA Capital Services Ltd
16	HSBC Technology
18	Institute and Faculty of Actuaries
19	Institute of Mathematics and its Applications
20	Jane Street
21	Leonardo
22	Liquidnet
23	Marshall Wace Asset Management
24	Munich Re UK Life & Health Branch

PAGE EMPLOYER

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31	OxFORD Asset Management
32	Page White and Farrer
33	Rebellion Developments
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36	StarLeaf
37	Teach First
38	Tessella
39	Tibra
40	TNG Technology Consulting
41	TPP
42	Xeqos Limited

EMPLOYER	Offer internships	Open to offering internships to postdoc researchers or PhD students	Interested in recruiting Postdoc researchers with work experience	Interested in recruiting recent PhD graduates	Entry route: Graduate Training Scheme	Entry route: Direct Entry
Ab Initio Software	✗	✗	✓	✓	✗	✓
Aon UK LTD	✓	✗	✗	✓	✓	✗
APR LLP	✗	✗	✓	✓	✓	✗
Cisco	✓	✗	✗	✓	✗	✓
Citadel and Citadel Securities	✓	✓	✗	✓	✓	✓
d-fine Ltd	✗	✓	✗	✓	✗	✓
First Actuarial LLP	✓	✓	✓	✓	✓	✗
Five Rings Capital	✓	✓	✓	✓	✗	✗

EMPLOYER	Offer internships	Open to offering internships to postdoc researchers or PhD students	Interested in recruiting Postdoc researchers with work experience	Interested in recruiting recent PhD graduates	Entry route: Graduate Training Scheme	Entry route: Direct Entry
G-Research	✓	✓	✓	✓	✗	✗
GSA Capital Services Ltd	✓	✓	✓	✓	✗	✓
HSBC Technology	✗	✗	✓	✓	✗	✗
Institute and Faculty of Actuaries	✗	✗	✓	✓	✗	✗
Institute of Mathematics and its Applications	✗	✗	✓	✓	✗	✗
Jane Street	✓	✓	✓	✓	✗	✓
Leonardo	✓	✓	✓	✓	✓	✓
Liquidnet	✓	✓	✓	✓	✗	✓
Marshall Wace Asset Management	✓	✓	✓	✓	✓	✓
Metaswitch	✓	✓	✓	✓	✓	✓
Munich Re UK Life & Health Branch	✗	✗	✓	✓	✓	✗
Newton Europe	✗	✗	✓	✓	✓	✓
Nomura	✓	✓	✗	✗	✗	✗
Operis	✗	✗	✗	✓	✗	✗
Optiver Services BV	✓	✗	✗	✗	✗	✗
OxFORD Asset Management	✓	✓	✓	✓	✗	✓
Page White and Farrer	✗	✗	✓	✓	✗	✓
Rebellion Developments	✓	✓	✓	✓	✗	✓
SIG	✓	✓	✓	✓	✓	✗
Softwire	✓	✓	✗	✓	✓	✗
StarLeaf	✓	✗	✗	✓	✓	✗
Teach First	✓	✓	✓	✓	✓	✗
Tessella	✗	✗	✓	✓	✗	✓
Tibra	✓	✓	✓	✓	✓	✗
TNG Technology Consulting	✓	✓	✓	✓	✗	✓
TPP	✓	✓	✓	✓	✗	✓
Xeqos Limited	✓	✓	✓	✓	✗	✓



Ab Initio provides a data processing software platform that our customers and consultants use to build applications that tackle their largest and most complex data processing challenges. Ab Initio sells through word-of-mouth, so you are unlikely to have heard of us, but our customers are some of the largest companies in the world and cover a wide range of industries including banking, retail, telecommunications, credit card processing, transportation, healthcare, insurance and high tech. Ab Initio was founded in 1995 and has been growing ever since. We are headquartered in Boston Massachusetts and have offices all over the world. We have positions open for Internal Consultants and Field Consultants. The Internal Consultant role involves teaching customers how to do things right from the beginning and includes programming and architecture advice, performance tuning, training, and debugging problems. This is far beyond the usual help desk role and can often include both low-level analysis of other software, including operating systems; and high-level analysis of business requirements. We are also recruiting recent graduates for our Field Consultant role where, after intensive training, you will be able to deliver proofs of concept that demonstrate the capabilities of Ab Initio's software, provide an understanding of how the software works and what is realistically possible to expect of the software.

www.abinitio.com

► **LOCATIONS:** Nationwide, Europe, North America, Asia, Oceania

► **RECRUITMENT CRITERIA:** We encourage applications from undergraduates in their final year, from postgraduates and from postdoctorate researchers. Most of our Internal Consultants have Masters degrees and/or PhDs in STEM subjects from top universities. For the Field Consultant role we are looking for problem-solver candidates who have an excellent academic background and preferably a Masters degree either in Computer Science, or a STEM subject where the course included some significant amount of programming in a language such as Java or Python.

► **APPLICATION PROCESS:** There is no fixed deadline for Internal Consultants, but CVs for our Field Consultants Graduate programme 2020 should be submitted by 30 Nov 2019.

► **TRAINING:** Training is both on-the-job and classroom based and includes time in our Boston HQ.

► **CONTACT FOR APPLICATIONS:** Lauren Robinson

► **EMAIL:** UKcareers@abinitio.com

► **PHONE:** +448708508700

At Aon, we draw on the expertise of 50,000 people to help the biggest names in business plan for every eventuality. We are one of the worlds leading insurance broker, provider of reinsurance and human capital consulting organisation. Our size, global network and emphasis on innovation mean where we lead, the industry follows.

www.aoncareers.co.uk

► **LOCATIONS:** Nationwide

► **VACANCIES:** Graduate, Intern and Placement Opportunities available in Actuarial, Investment, Insurance and Reinsurance, Cyber, Human Capital Solutions, and Health and Benefits.

► **INTERNSHIPS:** Our nine week long Summer Internship programmes are designed to give you an insight into our business, an understanding of our culture and an invaluable opportunity to help us forge lasting legacies with worthy causes through our Corporate Social Responsibility (CSR) programme. Technical training and business skills will be a core part of your Programme and although an Internship does not guarantee a place on our Graduate Programme, a significant proportion of our Interns have joined as Graduates.

► **RECRUITMENT CRITERIA:** We accept applications from graduates with a 2:1 in any discipline (dependant on programme). You must be numerically very strong and have the desire and ability to excel in a competitive environment where personal communication and analytical skills are key. Building relationships is at the heart of what we do and you'll need to show that you can work collaboratively to develop solutions for our clients.

► **APPLICATION PROCESS:** Our process includes an online application, online testing, video interviews and assessment centres. Applications are now open and due to close in early January 2020, however assessment centres will start in November 2019 so we encourage early applications.

► **TRAINING:** Our Development Programmes will fuel your passion for knowledge and improvement. All new joiners receive centralised training and networking opportunities, including a residential induction. These will help you develop your understanding of all our businesses and improve your general business acumen, equipping you with the professional skills you will need to be successful. We're committed to your ongoing development. That's why we fully support professional study and qualifications.

► **DIVERSITY AND INCLUSION:** You will be valued as an individual and recognised for your skills and the contribution you can make to our organisation. Valuing diversity is not about special treatment; it's about fair treatment for all. We challenge discrimination based on age, disability, gender identity, marriage and civil partnership, pregnancy and maternity, race, religion or belief and sexual orientation.

► **EMAIL:** graduates@aon.co.uk

APR provides high-quality technical, data-driven and modelling solutions to clients mainly in the financial sector. These take the form of:

- Short-term actuarial support to supplement client teams, working on a broad selection of different projects.
- Consulting solutions, using our expertise to address a variety of client needs in areas such as data analysis, modelling and technical training services.

The majority of your APR career will be spent on direct client work, normally on site at clients' offices, contributing across all types of actuarial projects and helping our clients to meet the challenges they face – all of which will quickly serve to develop your own actuarial skills.

aprilp.com

► **LOCATIONS:** England – London, Scotland

► **VACANCIES:** Graduate Actuarial Associate (5–7 vacancies).

► **INTERNSHIPS:** We do not offer internships, but hold a Mini Actuarial Academy each August, giving attendees an introduction to key actuarial concepts.

► **RECRUITMENT CRITERIA:** The key qualities we look for in individuals are intelligence and confidence. We believe that most other characteristics we require, including excellent communication skills, flow automatically from these two qualities.

Our minimum academic requirements are demanding, reflecting the calibre of individual we are seeking to recruit, and are as follows:

- 2:1 in any degree subject.
- A grades in GCSE English Language and A Level Mathematics.
- 136 UCAS points from top three A level results (340 on old tariff).

► **APPLICATION PROCESS:** We initially ask you to submit a CV and covering letter via the graduate pages on our website. Selected candidates will then be invited to complete

our online test and, if you pass this, we will hold a telephone interview with you. The final stage is our assessment centre which lasts a couple of hours and consists of a face-to-face interview, a presentation and a written test.

► **TRAINING:** We pride ourselves on the high-quality of our training, both in the core technical areas we know are in high demand, but also in the wider skills needed to make our associates into well-rounded professionals, able to stand out and make a difference on client projects.

We also provide full study support, with a much higher than average pass rate in the actuarial exams, helping you to qualify quickly and opening up even more opportunities for interesting and diverse client projects.

► **DIVERSITY AND INCLUSION:** To support our own internal initiatives we have been working with Inclusive Employers to promote diversity and inclusiveness within APR.

► **CONTACT FOR APPLICATIONS:**
Rhianna Hutchins

► **EMAIL:** grad.recruitment@aprilp.com

► **PHONE:** 01235 821160

#WeAreCisco, where each person is unique, but we bring our talents to work as a team and make a difference. Here's how we do it.

We embrace digital, and help our customers implement change in their digital businesses. Some may think we're "old" (30 years strong!) and only about hardware, but we're also a software company. And a security company. A blockchain company. An AI/Machine Learning company. We even invented an intuitive network that adapts, predicts, learns and protects. No other company can do what we do – you can't put us in a box!

But "Digital Transformation" is an empty buzz phrase without a culture that allows for innovation, creativity, and yes, even failure (if you learn from it.)

Day to day, we focus on the give and take. We give our best, we give our egos a break and we give of ourselves (because giving back is built into our DNA.) We take accountability, we take bold steps, and we take difference to heart. Because without diversity of thought and a commitment to equality for all, there is no moving forward.

So, you have colorful hair? Don't care. Tattoos? Show off your ink. Like polka dots? That's cool. Pop culture geek? Many of us are. Passion for technology and world changing? Be you, with us!

www.cisco.com

► **LOCATIONS:** England – London, Northern, Ireland, Europe, North America, South America, Asia, Africa, Oceania

► **VACANCIES:** Software Engineer (20), Associate Consulting Engineer (5), Associate Solutions Engineer (7), Desktop Engineer (5), Test Engineer (5).

► **INTERNSHIPS:** Software Engineer (10), Technical Sales (7), Desktop Engineer (3), IT Analyst (3). Internship duration is between 3–12 months, depends on the role.

► **WORK EXPERIENCE:** We offer work shadowing and insight days.

► **RECRUITMENT CRITERIA:** Mathematics degree and all STEM related disciplines, 2:1 or above.

► **APPLICATION PROCESS:** Online application, followed by a phone or digital interview, second interview and /or assessment centre, group exercises and presentations.

► **TRAINING:** We offer ongoing training, structured graduate programs and different technical certification to our employees.

► **DIVERSITY AND INCLUSION:** We have a very active Diversity & Inclusion team, who are heavily involved in various activities, for example– sponsoring women hackathons, sponsorship Pride London, supporting project LifeChanger for people with disability and many more...

► **CONTACT FOR APPLICATIONS:**
Maya Javeed

► **EMAIL:** rajaveed@cisco.com



Citadel is a leading investor in the world's financial markets. For over a quarter of a century, we have sought to deliver industry-leading investment returns to clients including corporate pensions, endowments, foundations, public institutions, and sovereign wealth funds. Our global team works to help our clients' capital fulfill its greatest potential across a diverse range of markets and investment strategies, including fixed income & macro, equities, quantitative, commodities and credit. www.citadel.com

Citadel Securities is a leading global market maker, delivering a broad array of fixed income and equity products to banks, broker-dealers, government agencies, corporations, insurers, and sovereign wealth funds. Through innovation and efficiency, the firm provides liquidity with the goal of driving price discovery in more than 35 countries and making markets more competitive, open, and transparent. Since its founding more than 15 years ago, Citadel Securities has cultivated a culture of excellence, assembling the brightest minds in trading, technology, and the sciences to make better markets for a better world. www.citadelsecurities.com

www.citadel.com | www.citadelsecurities.com

► **LOCATIONS:** England – London – Europe – North America – Asia

► **VACANCIES:**

Investment & Trading – Full Time and Summer Internship

Quantitative Research – Full Time and Summer Internship

Software Engineer – Full Time and Summer Internship

► **INTERSHIPS:**

Investment & Trading

Quantitative Research

Software Engineer

► **RECRUITMENT CRITERIA:** Applications accepted from Undergraduates and Postgraduates from a range of degree disciplines.

► **APPLICATION PROCESS:** Online Application, Phone Interview and On Site Interview.

► **CONTACT FOR APPLICATIONS:** Anna Curtis

► **EMAIL:** anna.curtis@citadel.com

About Citadel & Citadel Securities

CITADEL is a leading investor in the world's financial markets. For over a quarter of a century, we have sought to deliver industry-leading investment returns to clients including corporate pensions, endowments, foundations, public institutions, and sovereign wealth funds.

CITADEL SECURITIES is an award-winning global market maker that helps meet the liquidity needs of asset managers, banks, broker-dealers, hedge funds, government agencies, and public pension programs.

Main Locations

London, Dublin, Chicago, New York, Hong Kong

Application Process

Apply for full-time graduate positions and internships via our websites

citadel.com

citadelsecurities.com

Connect with us on:

INVESTMENT & TRADING

Trade in incredibly competitive markets and capture the most compelling investment opportunities.

QUANTITATIVE STRATEGIES

Transform the global markets through cutting edge algos and technology.

SOFTWARE ENGINEERING

Work side-by-side with quantitative researchers and traders to help write the future of finance.

d-fine is a European consultancy firm with 1000 employees, distributed across seven offices in four countries. Our London office in the heart of the City was established in 2005 to deliver services to all our clients in the UK and Ireland. The firm is focused on analytically challenging and quantitative projects, with the aim of designing and developing future-proof solutions for business problems. These solutions are based on extensive practical experience and highly qualified employees with a quantitative and technological background. This combination enables d-fine to efficiently deliver solutions for our clients across a range of commercial and industrial sectors.

www.d-fine.com

► **LOCATIONS:** England – London, Europe

► **VACANCIES:** Consultant, about 5

► **RECRUITMENT CRITERIA:** Examples of some academic backgrounds that are suitable for our consultant roles include Physicists, Mathematicians, Financial Mathematicians, Statisticians, Computer Scientists, and related quantitative sciences. The minimum requirement is a Masters (2:1 and above) and a PhD is considered an advantage.

► **APPLICATION PROCESS:** Go to “Job Portal” on <https://www.d-fine.com/en/career/united-kingdom/overview/>. For London vacancies, fill out the form and upload your CV and cover letter.

► **TRAINING:** d-fine offers a comprehensive training program where you have the opportunity to undertake for example an MSc Mathematical Finance from Oxford University, an MBA or become a CFA Charterholder.

► **CONTACT FOR APPLICATIONS:**

Claudia Sievers

► **EMAIL:** claudia.sievers@d-fine.co.uk

► **PHONE:** +442077761000

First Actuarial delivers pension consultancy services to employers and trustees, bringing expert advice and solutions tailored to every shape and size of pension scheme. We listen carefully to what our clients tell us, and seek to develop a deep understanding of our clients' businesses through long-term relationships based on trust.

First Actuarial are hiring a range of roles across our five offices: Basingstoke, Leeds, Manchester, Peterborough & Tonbridge.

First Actuarial was set up in 2004, and we've experienced steady, organic growth since then. We are a partnership with no external investors. All our partners work in the business, sharing their knowledge and expertise.

www.firstactuarial.co.uk

► **LOCATIONS:** Nationwide

► **VACANCIES:**

Graduate Pensions Actuarial

Graduate Investment Consultant

► **INTERNSHIPS:** Internships typically run for 6–8 weeks over summer and are available to students in their penultimate year of university. Roles are available in our pensions actuarial teams (all offices) and investment teams (Basingstoke & Leeds). Our internships are designed to give you a real understanding of what working at First Actuarial is like and you'll be an integral member of the team from day one.

► **RECRUITMENT CRITERIA:** First-rate numerical skills and a strong academic performance, with at least a predicted 2:1 undergraduate degree in any discipline, as well as the following skills:

- Communication – be an excellent communicator who understands how to express complicated ideas in a concise and clear way, and the ability to develop your communication approach as your exposure to clients increases

- Enthusiasm – a can do, enthusiastic approach to tackling problems, and a desire to build positive relationships with your colleagues and clients

- Self-discipline – determined and motivated to meet the demands of studying and working full time

- Problem solving – an agile mind able to examine challenges from various aspects

► **APPLICATION PROCESS:** Applications open 1 October – 31 November 2019 (graduate & intern roles).

Apply online through our careers portal by submitting a CV and covering letter. If successful, you will be invited to a face to face interview.

► **TRAINING:** Full study support for the Institute and Faculty of Actuary or CFA exams. Ongoing professional development is well supported with regular training.

► **EMAIL:** graduates@firstactuarial.co.uk

Five Rings Capital



Opportunities are everywhere. The objective at Five Rings Capital: Find them first and profit from them quickly. We work in teams – quants, developers, traders – continuously designing and optimizing. Strategies are executed rapidly, from insight to implementation often within days or weeks.

Five Rings is a team-first meritocracy built on constant innovation, where motivated, highly analytical individuals can thrive in almost any direction.

fiverings.com

► **LOCATIONS:** England – London, North America

► **VACANCIES:**

Software Developers
Quantitative Traders
Quantitative Researchers

► **INTERNSHIPS:** Internships are only available in the NYC office.

► **RECRUITMENT CRITERIA:** Undergraduates and postgraduates with degrees in math, physics, statistics, computer science and other related technical fields are encouraged to apply.

► **APPLICATION PROCESS:** Please apply online at www.fiverings.com/apply/

► **EMAIL:** learnmore@fiveringscapital.com



FIVE RINGS CAPITAL

New York • London

Quantitative Proprietary Trading

Opportunities are everywhere.

The objective at Five Rings Capital: Find them first and profit from them quickly. We work in teams – quants, developers, traders – continuously designing and optimizing. Strategies are executed rapidly, from insight to implementation often within days or weeks.

Five Rings is a team-first meritocracy built on continuous innovation, where motivated, highly analytical individuals can thrive in almost any direction.

QUANTITATIVE TRADERS

SOFTWARE DEVELOPERS

QUANTITATIVE RESEARCHERS

RESUMES TO:

LearnMore@FiveRings.com

G-Research is a leading quantitative research and technology company. By using the latest scientific techniques, we produce world-beating predictive research and build advanced technology to analyse the world's data.

www.gresearch.co.uk

► **LOCATIONS:** England – London

► **VACANCIES:** Software Engineering Internship, Quantitative Researcher Internship, Data Analytics Internship

► **INTERNSHIPS:** Software Engineering Internship, Quantitative Researcher Internship, Data Analytics Internship

► **RECRUITMENT CRITERIA:** Dependent on the role.

Software Engineering Internship– Computer Science students in their penultimate year.

Data Analytics Internship– Students studying numeric subjects in their penultimate year.

Quantitative Researcher Internship– Masters/ PhD in numeric subjects.

► **APPLICATION PROCESS:** Please apply online via our website

► **TRAINING:** Various training and development courses are offered. In each internship you will also be matched with a mentor who will guide you through your time with us.

► **EMAIL:** graduates@gresearch.co.uk

GSA is a collaboration of approximately 180 people. For over a decade we have worked together creating and applying innovative technologies to solve problems in the investment management industry. Over 60% of our staff work in research or on developing technology necessary to enable and monetise our research. We are an eclectic mix of mathematicians, scientists, programmers, economists and a great deal more. We live by the scientific method in building quantitative models that analyse and predict real world behaviour. We implement algorithms based on these models to systematically invest in markets. At GSA we reward people based on merit and excellence, not necessarily on experience. We avoid the bureaucracy of larger organisations, and keep our management structures flat. People who work here enjoy a culture of trust, innovation and scientific rigour. It's a friendly, open place where people are motivated because they enjoy what they're doing.

www.gsacapital.com

► **LOCATIONS:** England – London, North America

► **VACANCIES:** Opportunities available for Quantitative Strategists, Software Engineers, Algorithm Developers and Systems Engineers. Students of all academic levels from the following and any closely related disciplines including Computer Science, Engineering, Mathematics, Statistics, Physics, Economics and Empirical Finance are welcome to apply.

► **INTERNSHIPS:** Summer internships and off cycle internships for undergraduate and postgraduate students interested in software development and quantitative research are available all year round.

► **APPLICATION PROCESS:** Apply via www.gsacapital.com/careers

► **EMAIL:** careers.campus@gsacapital.com

We build the technology that runs one of the world's leading international banks, however our purpose extends beyond what we already do for millions of customers. We aim to transform the world's banking experience – to make it simpler, better and faster for people to manage their money and companies to do business safely and securely. We are constantly committing to fuel our growth through technology. We aim to achieve that by assembling the best technology team in the world, one that brings together in-house experts, partners from leading technology firms and an exciting community of innovators and collaborators. We solve the world's biggest financial and data challenges.

www.hsbc.com/careers/students-and-graduates/graduate-opportunities/technology-graduate-programme

► **LOCATIONS:** Nationwide

► **VACANCIES:** Technology Graduate Programme

► **RECRUITMENT CRITERIA:** We're looking for candidates with a keen interest in Technology, preferably with a degree in Computer Science, or other undergraduate/postgraduate degree that includes Technology-related modules, such as Engineering or Mathematics.

► **APPLICATION PROCESS:** Applications for our 2020 Technology Graduate Programme are now open and will close on 31st January 2020. As we are hiring on a rolling basis we encourage you to apply as soon as possible.

► **TRAINING:** The Technology Graduate Programme will enable you to develop both deep technical capabilities and core leadership skills in an international finance organisation. If successful, you will have the opportunity to develop your capabilities through roles that drive innovation across multi-disciplinary teams, including Enterprise Architecture and Design, Process and Automation, Information Security and more.

We empower all of our people to shape their careers and to take full advantage of all training opportunities on offer, including our recently launched Technology Academy. We also offer all of our employees access to resources such as HSBC University, which offers a huge range

of online and classroom-based learning. As well as structured learning modules, you can access videos, programmes, articles and books.

► **DIVERSITY AND INCLUSION:** Successful graduates will be partnered with a buddy with whom they can get advice and share ideas; they will also be supported by a mentor who will help with career guidance. We expect our technology graduates to aim high, think big and challenge themselves always – joining other graduates who have gone on to become leaders of our global technology team.

At HSBC, we have a large number of different Employee Resource Groups (ERGs) across the Group with more than 75,000 employees in 21 countries who are members of them. The UK has 15 ERGs with over 12,000 members and are led by employees' representative of our global lines of business and functions. Our ERGs play a key role in engaging employees and are an important feedback channel for more innovative and inclusive business solutions for our employees and customers.

Additionally, our employees lead seven global networks to promote diversity within the bank as well as a number of common interest groups under HSBC Communities. Together they help to create a culture where everyone is included, business challenges are addressed, and advice and support can be shared.

► **EMAIL:** technology.graduate.team@hsbc.co.uk

HSBC Technology provides you with a world of opportunities and the freedom to create and navigate your own path.

Our two-year rotational programme will see you developing solutions at the forefront of technological advancements in areas such as cloud, cyber, artificial intelligence, data and applied innovation.

If you're a motivated and curious technologist, please apply at: hsbc.com/earlycareers



Together we thrive

Institute and Faculty of Actuaries

Did you know you can use your love of maths to really make an impact? As an actuary you'll solve real world problems that can make a huge difference in areas including: financial services, climate change, cyber security, population growth and so much more. Actuaries ensure governments, businesses and organisations can look to the future and take the steps they need to succeed in a fast changing world.

Here at the Institute and Faculty of Actuaries (IFoA) we're dedicated to educating, developing and regulating actuaries based both in the UK and Internationally.

As the sole chartered body for actuaries and actuarial analysts in the UK, we not only regulate the profession but are also a trusted source of information about the industry.

www.actuaries.org.uk/become-actuary

► **LOCATIONS:** Nationwide, Europe, North America, South America, Asia, Africa, Oceania

► **VACANCIES:** Professional Body - Not Recruiter

► **RECRUITMENT CRITERIA:** A Level in Maths at Grade B or above and min 2:1 in any numerate discipline.

► **APPLICATION PROCESS:** Various - depending on organisation.

► **TRAINING:** To become an actuary you will need to secure a graduate role. Your employer will then fund your exams and support you with your studies. More information about the exams you are required to complete during your graduate trainee role to become a Associate or Fellow of the IFoA can be found at www.actuaries.org.uk/studying/plan-my-study-route/fellowshipassociateship

► **CONTACT FOR APPLICATIONS:** Tessa McAuliffe

► **EMAIL:** careers@actuaries.org.uk

Institute of Mathematics and its Applications

The IMA is the professional body and learned society for mathematicians, supporting and promoting the advancement of mathematical knowledge for the public good. Membership recognises your qualifications and experience; establishes you in the wider mathematics community; provides post-nominal letters and a route to Chartered registration. Membership demonstrates a commitment to career development and promoting mathematics.

www.ima.org.uk

► **LOCATIONS:** Nationwide

► **VACANCIES:** The IMA is the professional body and learned society for mathematicians. We have managed the Mathematical Teacher Training Scholarships programme for several years to candidates with the potential to be inspirational maths teachers and 'flag wavers' for maths education. Scholars starting teacher training in Autumn 2020 will receive a generous tax free grant during your training year with a two year membership and support package and two further payments in your 3rd and 5th year of teaching.

► **INTERNSHIPS:** As a membership organisation we do not offer internships directly but our Corporate Affiliate partner companies do. <https://ima.org.uk/affiliates/corporate-affiliates/>

► **RECRUITMENT CRITERIA:** We have different levels of Membership: Student, Associate, Member and Fellow.

The teaching scholarships are available to anyone with a first or subsequent degrees in Mathematics

► **APPLICATION PROCESS:** Online application through myIMA for membership <https://my.ima.org.uk/>

The Teaching scholarships are through the dedicated website: <http://teachingmathsscholars.org/home>

► **DIVERSITY AND INCLUSION:** The IMA is governed by the Science Council so is signed up to their declaration on diversity, equality and inclusion and works with the LMS Women in Mathematics Committee.

► **CONTACT FOR APPLICATIONS:** Erica Tyson

► **EMAIL:** erica.tyson@ima.org.uk

► **PHONE:** 07970865720

Jane Street



Jane Street is a quantitative trading firm and global liquidity provider. Our trading is based on mathematical modeling and strategies and we use innovative technology, a scientific approach, and a deep understanding of markets to stay successful. With over 900 employees in our New York, London, Amsterdam, and Hong Kong offices, that's a lot of ideas. Our next great idea could come from you; what will you come up with? We trade based on our own proprietary models. Quantitative analysis and insights into related markets enable us to make competitive markets in even the most complicated products. On an average day, we trade over \$13 billion in equities worldwide. During peak trading hours, trading desks are central to the excitement of our offices. Once the buzz has subsided, they're a place for mentorship and open discussion. Technology is core to our business, and software development is integrated into everything we do. The scope of the systems we build is large, with billions of dollars of transactions flowing through them every day; but the group behind them isn't. That means that each person has the opportunity to make a substantial impact. Business Development sits at the intersection of our trading, technology, operations, and compliance teams. We improve the firm's existing business and consider potential new business opportunities by understanding the regulatory and operational frameworks of various financial markets, and how they impact the implementation of the firm's systems, processes, and trading strategies.

www.janestreet.com

► **LOCATIONS:** England - London, North America, Asia

► **VACANCIES:**

Trading
Research
Software Engineering
Business Development

► **INTERNSHIPS:** We offer internships in four different groups: trading, technology, research and business development. All of our offices follow a slightly different internship schedule, though our typical summer internship lasts 10-12 weeks. You work alongside full timers, and we get to know you and see how you think about and solve the kinds of problems we deal with every day.

All interns also spend time in a foreign office with travel and accommodation arranged by Jane Street.

► **EMAIL:** jobs@janestreet.com

Leonardo

Leonardo is a global high-tech player in Aerospace, Defence and Security. With headquarters in Italy and over 46,000 employees, Leonardo has a major industrial presence in four main markets (Italy, UK, US and Poland), and a network of strategic partnerships worldwide. With a UK focus on our Defence Electronics and Helicopters, Leonardo employs around 7,000 people at six UK sites, 67% of who hold highly skilled positions.

www.uk.leonardocompany.com/en/people-careers

► **LOCATIONS:** England - South East, East of England; Scotland

► **VACANCIES:** Leonardo is offering graduate positions in many disciplines at our Luton site. Providing support to real projects, graduates will design, test, qualify and support technology across our range of products. If you are looking for a role at the cutting-edge of technology that will enhance your skills, business acumen and future prospects, all while earning a competitive salary, then the Leonardo graduate scheme may be for you!

► **INTERNSHIPS:** An 8-week Summer Placement with us offers invaluable experience, working as part of a team confronting real engineering challenges - no photocopying or making tea!

Providing support on real projects, placement students will be required to communicate with other team members to create solutions to problems. In addition, placement students will work together as an Integrated Project Team to deliver a concept on a real defence issue.

► **RECRUITMENT CRITERIA:** Leonardo does not discriminate based on nationality. However, employment is subject to security clearance from the UK MOD, which generally requires 5 years permanent residency in the UK.

► **APPLICATION PROCESS:** All applications should be made through the website: www.uk.leonardocompany.com/en/people-careers. Summer placement applications should be submitted as soon as possible since places fill up quickly. Application queries should be sent to placements@leonardocompany.com.

Graduates are recruited from September through to April but it is recommended that you apply early (before the end of December). Application queries should be sent to leonardo.gb@mailhr.info.

► **TRAINING:** The graduate programme consists of modules that aim to improve business awareness and orientation to our customers, culminating in a graduate conference after two years. A number of business awareness sessions provide an overview of the various company functions.

► **EMAIL:** leonardo.gb@mailhr.info

Liquidnet is a next-generation fintech company. Powered by technology that helps drive institutional alpha, our trading and liquidity network intelligently and securely connects the world's investors with the world's investments.

Liquidnet prides itself on standing at the nexus of Wall Street and Silicon Valley. But, with fewer than 500 employees globally, Liquidnet is more like a startup than any dusty old bank or overgrown tech giant. It's a culture where everyone has an opportunity to make a difference—and to make someone's day a little brighter. We want people in our team who are smart, accomplished, and one of the friendliest people in the room – if this sounds like you, we'd love to talk to you about working with us.

www.liquidnet.com

► **LOCATION:** England – London

► **VACANCIES:**

Data Scientist | x5
Developers | x5

► **INTERSHIPS:** Our internship program cultivates the next generation of Liquidnet. Interns from diverse backgrounds, majors and schools are hired into departments including Technology and Product, Business Operations, Sales, Marketing and Client Services.

Throughout the summer, Interns work cross-functionally with each other, their teams, and senior employees. Managers are tasked with providing substantive projects and meaningful mentorship – learning about and fostering our interns' goals and passions.

In keeping with Liquidnet's philosophy, we strive to create an environment where our interns are challenged and grow in every way. Interns work on global projects, lifted directly from our company roadmap, from beginning to end (often times contributing directly to our production environments). They end the summer with the opportunity to formally present their accomplishments to senior leadership.

Ensuring that interns experience Liquidnet's true work hard/play hard culture is a high priority. That is why we aim to strike a balance of challenging work and Liquidnet fun. We plan several outings for interns to build a rapport with one another outside of their day to day. In the past, interns have participated in activities such as bowling, pizza making classes, escape the room and even ping pong tournaments!

► **APPLICATION PROCESS:** Online application:
www.liquidnet.com/open-positions

► **CONTACT FOR APPLICATIONS:** Ian Quill

► **EMAIL:** ukcareers@liquidnet.com

► **PHONE:** 02076141740

Founded in 1997, Marshall Wace is one of Europe's leading Hedge Fund Managers with over \$42 billion assets under management. Our firm is made up of 285 professionals operating from established offices in London, New York, and Hong Kong. We offer graduate programmes designed to give maximum exposure to our business whilst delivering a long term investment in the best people.

Joining into your area of specialism, you will be part of a small cohort of other driven Graduates, developing your knowledge as a cohort over the 16 month structured programme. As our scheme is non-rotational you will gain an invaluable depth of knowledge and will immediately have accountability for crucial work. Put simply – we offer breadth, variety and the support that will enable you to build yourself a strong technical platform from which to launch your career within the firm.

www.mwam.com

► **LOCATIONS:** England – London, North America, Asia

► **VACANCIES:**

Technology Programme:

We are seeking people at the start of their careers who have a passion for technology. To be successful you must be an innovative problem solver who can demonstrate creative use of technology, even beyond your studies.

Based within our development teams, you will hone your software and programming skills whilst getting an understanding of our business and financial markets. You will have the opportunity to work with the latest technologies and learn from some of the best technicians in our sector.

Quantitative Researcher Programme:

We are looking for Quantitative Researchers to join our Systematic Investment teams in London. You are likely to have a research scientist mind-set and be among the top 1% of students at your university. You will become one of the team from day 1 and work in a research position designed for high

calibre, highly numerate individuals who are able to contribute to the development of our quantitative strategies.

Over time you will become involved in creating and optimising systematic trading models. You will also be tasked with delivering on the research agenda and back testing/researching forecasts of asset returns on horizons of hours to years.

► **TRAINING:** Year long graduate programme which includes personal development and training covering the hedge fund industry. Our graduate training is for all new graduate joiners.

► **DIVERSITY AND INCLUSION:** Mentor scheme and charity run initiatives with ARK. Also a 5 figure Give as You Earn scheme.

► **CONTACT FOR APPLICATIONS:**
Sean Farrell

► **EMAIL:** s.farrell@mwam.com

Munich Re UK Life & Health Branch

Munich Re UK Life & Health Branch is a leading player in the UK, Irish and offshore life reinsurance markets. As a major global reinsurer working across all business lines (including Life, Disability, Health, Longevity and Financial/Structured Reinsurance), we offer the ability to join our technically expert teams working across a diverse product offering.

We understand that Life insurers work in a dynamic market where medical progress, demographic trends and changing lifestyles are constantly giving rise to new risk landscapes. This demanding situation is made even more challenging by changing laws and regulations and ever tougher competition. We work with our clients to ensure we stay ahead of these trends.

www.munichre.com/uk/life/

► **LOCATIONS:** England – London

► **VACANCIES:** 2–3 Actuarial Graduate Trainees. Actuarial Graduate Trainees will be allocated to one of our actuarial departments, but will have the opportunity to learn about the industry and gain exposure to different units within UK and Ireland Life.

► **RECRUITMENT CRITERIA:** Mathematical and analytical skills are essential due to the nature of our business: We are looking for undergraduates or postgraduates in Mathematics, Statistics and Science and related degrees with a minimum 2:1 degree classification achieved / predicted and good grades at A level (or equivalent).

► **SUBJECT AREAS FOR PHDS/POSTDOCS:** Mathematics, Statistics, Sciences and related study.

► **APPLICATION PROCESS:** Applications by 18th December 2019. Online assessment and phone interviews in January 2020. Face to face assessment centre in February 2020.

► **TRAINING:** All Actuarial Graduate Trainees will receive full support and encouragement throughout their Actuarial exams and to qualify. This includes entry fees and annual membership fees to the Institute of Actuaries, a competitive

study leave policy, course material, tuition, mentoring, mock exams and examination fees. In addition, Graduates receive thorough on and off the job training. This will involve taking part in our Case Study Exercise to gain insight into the business, joining our Breakfast Seminar to learn more about the UK businesses, taking part in the Graduate Ideathon collaboration workshop, attending our Insights workshop to develop self-understanding, as well as other soft skills training to suit your individual needs and develop your career at Munich Re.

► **DIVERSITY AND INCLUSION:** For Munich Re, diversity is a business need which promotes the acceptance and value of differences between our employees. This includes not only classic aspects such as gender, religion, age, disabilities, nationality or cultural differences, and sexual orientation, but also inherent characteristics such as experience, education, personality or views. Together, we benefit from those differences in achieving Munich Re's strategic goals and objectives.

► **CONTACT FOR APPLICATIONS:** Ross Stevenson

► **EMAIL:** rstenenson@munichre.com

► **PHONE:** 02036507672

NOT IF, BUT HOW

Munich RE 

Munich Re Graduate Scheme

Munich Re UK Life and Health branch is looking for bright, strong and ambitious graduates or postgraduates to join our expert actuarial teams of technical specialists in all areas of the UK Life Insurance industry. We will provide full study support and encouragement to help you throughout your Actuarial exams and to qualify. Further on and off the job training will develop your technical abilities and soft skills to develop you into a leading Life Insurance professional.

“I’ve been given the opportunity to work beside market leading experts and learn from the best.”

“The London office is a friendly and sociable environment. It is demanding but supportive, with lots of knowledge sharing and opportunities to learn about what the different teams do.”

“I have been given fantastic support in my studies allowing me to make very fast progress through the actuarial exams.”

Metaswitch is one of the world's leading global technology companies. Join us and see the effects of your work in how the whole world communicates!

www.metaswitch.com

► **LOCATIONS:** Work from Home, England – London, South East, East of England, West Midlands, North West, Scotland, Northern Ireland

► **VACANCIES:** We are recruiting talented and motivated graduates, post graduates and Interns from any degree discipline to join us as Engineers. You don't need any experience – just an interest in technology and be willing to take on big challenges!

You will be welcomed and making a recognised contribution from day one! You will be made to feel part of a team, where you will learn your role directly from intelligent like-minded supportive peers. Despite now having over 800 employees, Metaswitch still manages to retain the small company feel.

► **INTERSHIPS:** ... the same as Graduates but only for a minimum of 8 weeks!

► **RECRUITMENT CRITERIA:** You will have a great academic background (including a good degree in any subject) and be looking to build your career in a company full of really smart people who love solving problems and working together in a collaborative and innovative environment.

► **APPLICATION PROCESS:** Our application process is as simple as submitting your CV to www.metaswitch.com/careers or alternatively you can send your CV over to emma.watts@metaswitch.com

► **TRAINING:** From day one, you will be assigned real tasks working on the design and development of complex software. A training program will be tailored for you and continue throughout your career with us. While you can develop your career in a technical role, you are also free to explore other paths within our flexible, open organisation.

► **DIVERSITY AND INCLUSION:** We are committed to diversity and inclusion. We want Metaswitch to be a place where anyone will feel welcome, encouraged and supported to be the best they can be. We believe diversity makes us stronger, more innovative and more successful. This commitment starts with our CEO and Board of Directors, and we expect our leaders and every employee to help create and sustain an inclusive environment.

► **CONTACT FOR APPLICATIONS:** Emma Watts

► **EMAIL:** emma.watts@metaswitch.com

► **PHONE:** 020 8366 1177

We are Newton. We're a team of the brightest and most curious minds with a fundamental belief that every organisation can be better.

We crack some of the toughest business and public sector challenges of the day. Not with reports or copy and paste thinking. But by pinpointing and implementing the changes that will make the biggest difference – and then guaranteeing our fees against delivering measurable results.

We never start out assuming we know the answer, but we're always certain we'll find it and see it through to the finish. By uncovering the data that means the most important decisions are made with facts, not opinions. By bringing together people who live and breathe delivering results. And by embedding in client organisations this same passion, self-belief and know-how to thrive on any challenge in the future.

www.newtoneurope.com/careers

► **LOCATIONS:** Nationwide

► **VACANCIES:** Operations Consultant
Digital Solutions Consultant

► **RECRUITMENT CRITERIA:** We accept applications from all years, subjects and degree classes.

► **APPLICATION PROCESS:** Application form, online tests, video interview, selection day, final interview

► **CONTACT FOR APPLICATIONS:** Hisham Jamal

► **EMAIL:** graduates@newtoneurope.com

► **PHONE:** 02035 980760

Nomura is an Asia-headquartered financial services group with an integrated global network spanning over 30 countries. By 'Connecting Markets East & West', Nomura services the needs of individuals, institutions, corporates and governments through its three business divisions: Retail, Asset Management, and Wholesale (Global Markets and Investment Banking). Founded in 1925, the firm is built on a tradition of disciplined entrepreneurship, serving clients with creative solutions and considered thought leadership.

We offer a range of graduate and internship programmes across three key areas; investment banking, global markets and corporate infrastructure (Technology, Finance & Risk).

At Nomura our goal is to attract and develop exceptionally talented people who share our passion for individual excellence and our commitment to teamwork. We recruit graduates with a high level of academic and extra-curricular achievement, who will be able to withstand the rigours of a rapidly changing, demanding but ultimately rewarding environment.

www.nomura.com/careers/

► **LOCATIONS:** England – London, Europe, North America

► **RECRUITMENT CRITERIA:** Our Summer Internship vacancies are open to penultimate and final year students (graduating in 2020 or 2021).

Our Spring opportunities are open to first year students on a three year course, or second year students on a four year course.

Our Industrial Placement Programmes are available to those on a four year degree which includes a year in industry.

► **APPLICATION PROCESS:** To apply to our vacancies, please go through our company website at www.nomura.com/careers.

► **EMAIL:** eurrecruitingevents-eu@nomura.com

Based in London, Operis provides financial advisory services, tailored modelling projects, training and related product sales to banks, project sponsors and government departments both in the UK and globally. These are typically in connection with the provision of capital funding for large infrastructure and other projects. Operis is highly involved in the PPP market (Public Private Partnerships) working with models to support bids for hospitals, schools, roads and other public services. Operis is a small, friendly organisation that takes pride in its skills and professionalism, using a collaborative and flexible approach for all its projects. Successful applicants will receive fantastic training, immediate involvement in interesting projects and a friendly and supportive work environment.

www.operis.com

► **LOCATIONS:** England – London

► **VACANCIES:** Financial Modelling Analyst

To provide financial modelling and analytic expertise for a wide range of model build, model audit, and systems development assignments and related activities. We offer a rolling recruitment process throughout the year with 3 places available for 2020.

► **RECRUITMENT CRITERIA:** Minimum 2.1 in a highly numerical undergraduate degree.

► **APPLICATION PROCESS:** Please send applications to opportunities@operis.com

Please include: CV & Cover Letter, Degree & A level (or equivalent) results and if you require sponsorship to work in the UK. Successful candidates will be invited to a first interview held at our London office which will consist of a discussion of your CV, the role and a few number puzzles. Candidates will then be asked to prepare and talk through a case study if they progress to a second (and final) round interview.

► **TRAINING:** Graduates will receive intensive financial modelling training when they join the organisation and will be offered the opportunity to study for the CFA qualification.

► **EMAIL:** opportunities@operis.com

► **PHONE:** 02075620400

Over thirty years ago, Optiver started business as a single trader on the floor of Amsterdam's European Options Exchange. Today, we are a leading global electronic market maker, focused on pricing, execution and risk management. We provide liquidity to financial markets using our own capital, at our own risk, trading a wide range of products: listed derivatives, cash equities, ETFs, bonds and foreign currencies. Our independence allows us to objectively improve the markets and provide efficiencies for end investors.

With over one thousand Optiverians globally, our mission to improve the market unites us. Thriving in a high performance environment, we pioneer our own trading strategies and systems using clean code and sophisticated technology. We achieve this by attracting, developing and empowering top talent, in order to sustain our future.

www.optiver.com/eu/en

► **LOCATIONS:** Europe

► **VACANCIES:** We have the following full time opportunities for final year students or recent graduates to join us as;

- Traders
- Researchers
- Graduate Software Developers
- Risk Analysts

► **INTERNSHIPS:** We have two 8 week summer internship programmes within Trading and Technology. The programmes are open to penultimate year students studying one of the following subjects or equivalent;

Mathematics, Engineering, Physics, Econometrics or Computer Science

In addition to this we require;

- Excellent numerical and analytical skills
- Fluency in English (Dutch is not required)

► **WORK EXPERIENCE:** We will host an insight day in our Amsterdam office in Spring 2020 for first year STEM students. Please enquire at the fair for more information.

► **RECRUITMENT CRITERIA:** Please check the Optiver website for the specific requirements and application process per role. Kindly note that Optiver is able to provide sponsorship for work visas.

► **TRAINING:** We have a two month training programme for Trading, Research and Risk. For our Technology function, you will mix on-the-job training with classroom learning.

► **APPLICATION PROCESS:** We make use of online and paper tests as part of our assessment process. There are also technical and competency interviews which are either conducted on the phone/Skype or in person. The final stage will be an interview day in Amsterdam, consisting of a mix of tests and interviews. For Trading roles the interview days will be 21st and 22nd November 2019.

► **EMAIL:** Recruitment@optiver.com

► **PHONE:** +31 (0)20 708 7000

OxFORD Asset Management is an investment management company with a quantitative focus, based in Oxford, England. We invest and trade world-wide, 24 hours a day. Most of our trading is done automatically by our proprietary algorithms and software. Our team of mathematicians, scientists and engineers work with the latest technologies to develop these algorithms and tools to navigate a wide range of markets. Our team of over 80 includes researchers, who identify opportunities and build our quantitative models and strategies, software engineers, who design the software that drives our investment strategies, and IT infrastructure specialists, who design and support our infrastructure.

We are looking for exceptionally talented individuals who are ambitious and relish a challenge. We value mental flexibility, innovative thinking, and the ability to work collaboratively. Teamwork is as important to us as individual excellence. We are a great team of really smart and friendly people from a wide range of backgrounds. Nobody wears a suit to the office. We're a collegiate group with a flat management structure.

www.oxam.com

► **LOCATIONS:** England - Oxfordshire

► **VACANCIES:** Computer Scientists, Researchers and Summer Interns.

► **INTERNSHIPS:** 10 week internship placements available within our Researcher and Software Engineering teams. Very keen to hear from DPhil students also.

► **RECRUITMENT CRITERIA:** Accept applications from both undergraduates and postgraduates, coming from disciplines including Mathematics, Computer Science, Physics and Econometrics.

► **APPLICATION PROCESS:** Please submit an application form for the relevant role at www.oxam.com

► **CONTACT FOR APPLICATIONS:** Charlotte Grant

► **EMAIL:** charlotte.grant@oxam.com

► **PHONE:** 01865248248

Page White and Farrer is a leading firm of specialist intellectual property attorneys in Europe – with offices in London, Leeds and Munich, we also work with clients and their lawyers around the world in all fields of technology with a growing team of AI, data science and computer science specialists.

Our clients include some of the most recognised tech companies in the world as well as highly innovative AI tech startups and scale-ups, many of whom employ software engineers alongside research teams of mathematicians or data scientists.

www.pagewhite.com

► **LOCATIONS:** Europe

► **VACANCIES:** Potential vacancies for trainee patent attorneys in London, Leeds and Munich.

► **RECRUITMENT CRITERIA:** Are you good at spotting the difference?

For an invention to obtain the protection of a patent, a patent attorney will need to make a convincing case that an invention differs from what is already known. The work is fascinating and often at the cutting edge of developments. It requires a challenging mix of technical expertise, legal knowledge, analytical reasoning and exceptional written communication skills.

To help them protect their intellectual property, we are looking for graduates with specialist knowledge of the following areas:

- computer science
- machine learning
- data science
- applied mathematics.

A patent attorney requires a top STEM undergraduate degree and a high level of skill and understanding in the technical fields of his or her clients.

To qualify as a patent attorney, no legal background is required as the necessary legal skills and qualifications are obtained over a

training period of typically 3-5 years in a highly supportive environment. Written advocacy and the ability to legally define an invention are specialist skills which will be learned over the course of the training period (and beyond)!

► **APPLICATION PROCESS:** Please send your CV with a covering letter to Tim Searing: tim.searing@pagewhite.com.

We are looking for:

- graduates who are available to start now; or
- final-year students who seek a position after graduation.

► **TRAINING:** Trainees at Page White and Farrer benefit from a structured training programme with a choice of Queen Mary University or Bournemouth IP foundation level courses and regular on the job training and personal development support.

► **CONTACT FOR APPLICATIONS:**
Tim Searing

► **EMAIL:** tim.searing@pagewhite.com

Rebellion, founded in 1992 by brothers Chris and Jason Kingsley, is a growing independent games and media production company with studios in Oxford, Liverpool, Warwick and Wakefield. With a history of producing award-winning, chart-topping games, we are looking to build on our success with talented and creative people who have a passion for making great games and want to be at the forefront of developing gaming technology.

Known historically for work on beloved series such as Aliens vs Predator and Battlefront, our desire to work on our own IP has delivered major independent hits including Sniper Elite 4, Strange Brigade, Zombie Army Trilogy and acclaimed PlayStation VR launch title, Battlezone VR.

careers.rebellion.com

► **LOCATIONS:** England - Oxfordshire

► **VACANCIES:** Junior Programmer

► **INTERNSHIPS:** We offer programming internships over summer breaks which typically last up to twelve months.

► **WORK EXPERIENCE:** We offer programming internships over summer breaks which typically last up to three months.

► **RECRUITMENT CRITERIA:** We accept applications from undergraduates and postgraduates. A strong academic background is also preferred with a 1st class or 2:1 degree in Computer Science, Maths, Physics or other science-related subject.

The main ability we are looking for is some practical C++ knowledge! If we are considering inviting you to interview then we will usually ask you to do an initial C++ programming test beforehand. This gives Rebellion a chance to see what you already know and how you approach problems.

The test can be done at home at a time suitable to you. It should take about an hour but we assess tests based on your own indicated level of skill – so if you are confident in your C++ you

should attempt the test under test conditions but if you have just started learning C++ we are happy for you to take longer and use reference material.

Other things we consider:

- Excellent initiative, self-motivation, organisational and problem solving skills.
- The ability to accept and follow direction.
- A genuine interest in playing games.

► **APPLICATION PROCESS:** For all our roles the recruitment process is really simple:

- 1) Apply online and complete our application form and upload a copy of your CV.
- 2) You will be asked to complete our pre-interview C++ test.
- 3) Onsite interview.

► **TRAINING:** We provide on the job training and mentoring.

► **CONTACT FOR APPLICATIONS:**
Josh Mildenhall

► **EMAIL:** vacancies@rebellion.co.uk

► **PHONE:** 01865792201

SIG is a global quantitative trading firm founded with an entrepreneurial mind-set and a rigorous analytical approach to decision making.

We commit our own capital to trade financial products around the world. Building virtually all of our own trading technology from scratch, we are leaders and innovators in high performance, low latency trading. Our traders, quants, developers, and systems engineers work side-by-side to develop and implement our trading strategies.

sig.com

► LOCATIONS: Europe

► **VACANCIES:** SIG's Trading Internship Programme welcomes students in their second and penultimate years of study, while the Trading Graduate Programme is aimed at final years and graduates.

Our Quantitative Analyst Programme is a unique opportunity for PhD graduates, straight from academia to work in an industry setting and develop the skills needed to build a successful career as a Quantitative Research Analyst.

All opportunities are based in our Dublin office.

► INTERSHIPS:

- Work directly with our Quantitative Traders, learning how they make decisions and assess uncertainty in the markets
- Learn how we make rational decisions by playing poker and mock trading games
- Find out how we use game theory to hone our skills and apply them to complex financial markets
- Participate in daily education where you will learn option theory and how to make positive expectancy decisions in the financial markets
- Work on a specific trading desk and complete a project to help your desk tackle unsolved, live/real-life problems

• Develop new skills in the technology tools our Quantitative Traders use, including Python, SQL, and VBA

► **RECRUITMENT CRITERIA:** We look for students with academic backgrounds in Mathematics, Physics, Actuarial Science, Engineering, Computer Science, Economics, and Finance, who are on track to achieve or have achieved a minimum grade of a 2.1 for all Trading Programmes.

► SUBJECT AREAS FOR PHDS/POSTDOCS:

We look for recently graduated PhDs and post-doctorates who have a keen interest in quantitative trading. Successful candidates from past programmes have studied a range of quantitatively-oriented disciplines, such as mathematics, physics, engineering, computer science, and econometrics for our Quant Analyst Programme.

► **APPLICATION PROCESS:** SIG recruit on a rolling basis and strongly encourage early applications. We open our applications in September.

► CONTACT FOR APPLICATIONS:

Mark Fitzgerald

► **EMAIL:** dubcampusrecruit@sig.com

► **PHONE:** 00353 1 8028000

Softwire makes innovative, high quality software for a range of clients including the BBC and Google DeepMind. Our brilliant working environment, friendly attitude and flexible approach has put us in the top 25 of The Sunday Times Best Small Companies List for the past nine years.

Our team is made up of all sorts of people who share a passion for problem solving and a willingness to work together and get things done. We're growing year on year and are looking for graduate software developers and interns who will grow with us, learning diverse technologies and pursuing the type of work they find most interesting.

www.softwire.com

► **LOCATIONS:** England - London, East of England, North West

► **VACANCIES:** We are looking for around 30 graduate software developers to start in London, Cambridge or Manchester.

We combine a relaxed and friendly environment with a superb all-round package including:

- London starting salary of £40,000 (£37,000 in Manchester; £38,500 in Cambridge).
- Annual bonus to further reward your contribution to the company's success.
- Flexible working time and conditions, and no pressure to regularly work long hours.
- Lively and frequent social events and company outings.

► **INTERSHIPS:** We offer up to 30 internship places in London each year, mostly over the summer but with other dates available too. Our internship programme is extremely popular with students, offering real-life, team-based software development work under the guidance of a dedicated mentor, and a salary of £2,000 per month. Around half of our interns go on to take up permanent employment after their studies.

► **RECRUITMENT CRITERIA:** We are seeking highly inquisitive people with raw talent and a passion for coding.

Hobbyist or academic experience of programming is desirable but not mandatory, and we accept applications from students of all disciplines

► **APPLICATION PROCESS:** There is no deadline for applications, but you will increase your chances significantly if you apply before 1st January for summer internships or permanent roles starting the following autumn.

► **TRAINING:** We provide full on-the-job training and support to our staff, all the way through their career.

► **DIVERSITY AND INCLUSION:** We recognise that software development can be a relatively non-diverse industry. We are committed to doing everything we can to make Softwire accessible and welcoming to everyone and have introduced initiatives to increase the number of employees from under-represented categories. In recent years, for example, we have grown the proportion of female developers that we hire from the national average, less than 20%, to over 40%.

► CONTACT FOR APPLICATIONS:

Cassie Lahoud

► **EMAIL:** recruit@softwire.com

► **PHONE:** 02074857500

Founded in 2008, StarLeaf enables seamless collaboration through intelligently engineered, reliable meeting room systems, superior video conferencing, and secure messaging.

We have been recognised as a Visionary in the Gartner 2019 Magic Quadrant for Meeting Solutions and as one of the fastest-growing tech companies in the UK by The Sunday Times Hiscox Tech Track 100.

Our culture is built on collaboration, inclusion, creativity and support. This permeates everything we do, across all our teams and operations. We believe everyone at StarLeaf has a part to play in our success and that everyone should be rewarded for their contribution. This is why every single permanent StarLeaf employee becomes a shareholder through the company's share option scheme.

www.starleaf.com

► **LOCATIONS:** England – South East, East

► **VACANCIES:** Software Engineers, Software Test Engineers, CloudOps Engineers, Sales Engineers, Escalation Engineers

► **INTERNSHIPS:** With several intakes each year at our Cambridge and Watford offices, we will aim to make your experience as an intern as close as possible to that of a full-time member of our team, so that you gain a valuable understanding of how a software engineering team functions in a commercial environment whilst, at the same time, giving us an insight into your potential as a future full-time StarLeaf employee.

"Since my code is likely to be absorbed into the company's processes and further developed by others in the company, I developed a good awareness of good coding practices in professional software engineering. The StarLeaf workplace achieves a great balance of being a really fun and chilled-out place to work, whilst you get to work on some challenging and interesting projects and to develop your skills amongst a group of really talented engineers. They also offer some great perks and a really supportive environment to develop your skills." Joanne Nock (Intern 2019)

► **RECRUITMENT CRITERIA:** First or upper second honours degree in Computer Science, Engineering, Maths or Physics. You are interested in and curious about technology.

► **APPLICATION PROCESS:** Apply Online – StarLeaf Careers Hub at jobs.starleaf.com to find out more about our student and graduate opportunities.

Apply via Email – daniel.bardsley@starleaf.com with your CV and any other information you wish to support your application.

► **TRAINING:** As a member of our graduate scheme you will be assigned your own personal mentor when you join us. And as our team is made up of some of the brightest minds in the UK high tech industry, you will be working with and learning from the very best. This is a fantastic opportunity and if your goal is to be working on projects that will end up in customers' hands within weeks, while learning and soaking up as much information as possible then the exposure you are given will really excite you.

► **CONTACT FOR APPLICATIONS:**
Daniel Bardsley

► **EMAIL:** daniel.bardsley@starleaf.com

Young people from disadvantaged backgrounds in this country are being let down by one of the most unfair education systems in the developed world, and the knock-on effect of this injustice lasts a lifetime. It's a cycle we're determined to break, but we need your help.

On our two-year Leadership Development Programme, we'll support you to become a qualified teacher. And, by training on the job, you'll quickly develop your skills and have an immediate impact on the lives of the young people who need you the most.

www.teachfirst.org.uk

► **LOCATIONS:** England – London, South East, South West, East of England, East Midlands, West Midlands, Yorkshire and the Humber, North East, North West, Wales

► **VACANCIES:** Graduate Leadership Development Programme – over 100 places.

► **INTERNSHIPS:** On our three undergraduate programmes – Taster, Insight and Brand Manager – you'll develop your personal and professional skills, learn more about educational inequality, and start making a difference to the most disadvantaged young people in the country.

► **RECRUITMENT CRITERIA:** We accept applications from undergraduates and postgraduates.

To apply you will need a 2.1 degree or above (2.2 degrees will also be considered), a degree or A-levels that satisfy the curriculum areas we teach in and Grade C (or equivalent) in GCSE maths and English.

► **APPLICATION PROCESS:** Our selection processes are clearly structured. You submit an application online and if successful are then invited to an assessment. We allocate roles to both our graduate programme and undergraduate internships on a first come first served basis so applications will close on filling positions.

► **TRAINING:** On our graduate programme, participants will complete five weeks of training with Teach First at our Summer Institute during the summer before starting work in a school that September. Trainees gain a Post Graduate Diploma in Education and Leadership (PGDE) and become a fully qualified teacher.

► **CONTACT FOR APPLICATIONS:**
Gemma Hall

► **EMAIL:** ghall@teachfirst.org.uk

► **PHONE:** 0203 862 8403

Tessella is one of the world's leading data science and AI consultancies. We are scientists and engineers who enjoy solving the real-world technical challenges faced by companies at the forefront of science and technology. Using a combination of deep domain knowledge and technical expertise, including data science, analytics and software engineering, we work with our clients to unlock the value held within their data, enabling better-informed business decisions.

We are looking for talented science, mathematics and engineering graduates and postgraduates to join us and help create solutions that make a difference in the world. You will learn new domains and technologies and apply innovative thinking and transferable skills to solve new challenges.

www.tessella.com

- **LOCATIONS:** England – Oxfordshire, East of England, East Midlands, North West
- **VACANCIES:** We continuously recruit Data Scientists / Software Developers, typically 20+ vacancies throughout the year.
- **RECRUITMENT CRITERIA:** BSc (min 2.1), MSc or PhD in science, mathematics or engineering plus software development skills in any object-oriented language and the ability to interpret complex data using a variety of mathematical techniques.
- **APPLICATION PROCESS:** Apply online or by email.
- **TRAINING:** We offer excellent future prospects. While we do offer traditional career paths, most staff end up shaping their own based on their aspirations, the skills they have developed and the projects they have worked on. We take personal development seriously and we provide an annual training allowance of 150 hours, which can be used to learn new technical and soft skills, often leading to recognised professional qualifications.
- **DIVERSITY AND INCLUSION:** WISE (Women In Science & Engineering) member since 2017.
- **CONTACT FOR APPLICATIONS:** Neil Barrett
- **EMAIL:** jobs@tessella.com

Tibra is a world-class diversified trading firm whose story started in 2006 when a group of young traders and developers near Sydney, Australia decided they could challenge and beat some of the world's most successful trading firms at their own game.

Our founders' ambition to make their mark, back their skills and judgement and shape their own future has defined Tibra's culture and success ever since.

This conviction and desire to grasp an opportunity has helped Tibra grow into a business of more than 100 people operating in the world's most advanced financial markets from offices in Sydney and Austinmer in Australia, Hong Kong, Dubai and the City of London.

www.tibra.com/careers/

- **LOCATIONS:** England – South West, Oceania
- **VACANCIES:** We recruit for Junior Quant Traders based out in our Austinmer office near Sydney, Australia. Quant Traders are responsible for the design, implementation and on-going support of trading strategies deployed on a particular trading desk. Across the graduate programme you will get exposure to real world derivative pricing and quantitative finance methods. You will assist in performing cutting edge research on the most competitive markets, designing and analysing algorithms, exploring financial market's structure, and contributing to the continual evolution of our quantitative trading strategies. Your coding skills will be key in building and maintaining the tools necessary for us to be successful.
- **INTERNSHIPS:** We offer 8 week long summer internships in our London office. This role presents an excellent opportunity for penultimate year students to get exposure to real world derivative pricing and quantitative finance methods.
- **RECRUITMENT CRITERIA:** We accept applications from students who are studying Engineering, Mathematics, Computer Science, Physics or similar.
- **APPLICATION PROCESS:** Our application process involves online CV and transcript submission followed by psychometric testing and an interview process.
- **TRAINING:** We offer a broad range of both internal and external training for new joiners. This begins with formal coding training which is then supplemented with a range of on the job coaching and mentoring opportunities.
- **DIVERSITY AND INCLUSION:** We are an Equal Opportunities employer.
- **EMAIL:** careers@tibra.com

As a partnership-based IT consultancy, we work in a customer-oriented manner on a variety of projects in the areas of Agile Software Development, Artificial Intelligence and DevOps & Cloud. In addition, we work on Big Data and IoT topics. We mostly use Java and JavaScript, but also other programming languages such as Python or C#. Our customers include large corporations as well as medium-sized companies and start-ups from a wide range of industries, including e.g. telecommunications, security technology, insurance, fintech, and automotive.

TNG in numbers:

- Revenue 2018: 45 Mio. €
- Current # of employees: 400+
- Growth rate: 20%+
- Graduates ratio: ~ 99%
- Ph.D. ratio: ~ 60%

www.tngtech.com

► **LOCATIONS:** Europe

► **VACANCIES:** Software Consultants (unlimited number of vacancies).

We are constantly looking for experienced specialists as well as recent graduates with a proven academic record who wish to join TNG as IT-Consultants.

► **INTERNSHIPS:** For students of scientific and technical programs with a proven academic record, we regularly offer internships. Start and duration of internships with us are flexible and stipulated individually. Payment is competitive.

► **WORK EXPERIENCE:** Once a month we offer insight days for visitors, where students can join us for talks and workshops on different science and IT themes. Registration is possible under recruiting@tngtech.com.

► **RECRUITMENT CRITERIA:** Passion for IT; preferably work experience in software development; university degree from a scientific, technical program; willingness to work in a dynamic, customer-oriented project environment.

► **APPLICATION PROCESS:** Please send us an email with your application documents including a CV, transcripts and all relevant references. The applications are welcome any time, there are no deadlines.

► **TRAINING:** We offer continuous training, to be always at the cutting edge of technology. Four times a month, we organize our so-called 'Techdays', where all co-workers meet at our headquarters and take part in a wide range of talks, workshops, and reading groups. In addition, we host a major conference (www.bigtechday.com) once a year and encourage our co-workers to attend external training and conferences.

► **CONTACT FOR APPLICATIONS:** Marie Haude

► **EMAIL:** recruiting@tngtech.com

► **PHONE:** +498921589966

TPP is a market leading UK based IT company, dedicated to delivering innovative software solutions to the UK healthcare industry. After 22 years of success, we now operate on an international scale with projects ongoing across the Middle East and China.

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 2017/18 by The JobCrowd. Most recently, we were in the top 100 Graduate Employers in 2018 by The Times.

tpp-careers.com

► **LOCATIONS:** England – Yorkshire and the Humber

► **VACANCIES:**

Software Developer

Business Analyst

Account Manager

Marketing and Communications

Technical Operation

► **INTERNSHIPS:** Software Developer – Summer internship 2020

► **RECRUITMENT CRITERIA:** 2:1 or above, A*AA

► **APPLICATION PROCESS:** To apply, please visit <https://tpp-careers.com/role-categories/graduates-postgraduates/> and book on to a Logic and Reasoning test nearest to your location.

Successful candidates will usually be contacted within two weeks. Please be aware that applications will be kept on file for up to 12 months.

► **CONTACT FOR APPLICATIONS:** Emma Brownless

► **EMAIL:** careers@tpp-uk.com

► **PHONE:** 0113 2050082

Start-up fund management company, located in Oxford, establishing a model-driven, quantitative, systematic hedge fund, which is to be based on a successful, currently active portfolio management strategy; at present, the strategy is being implemented through a distinguished family office at which our CEO is a partner. The fund will invest in a variety of asset classes including equities, fixed income, listed futures, commodities and FX, and there is to be initial seed funding of at least \$50m. We plan to launch the fund in 2020.

Currently there are three employees: two mathematicians – the CEO and a Senior Quantitative Analyst – as well as a COO. We are looking to hire further mathematicians to enhance our team, develop the extant models, and create new quantitative models going forward. Highly competitive salaries and a generous bonus scheme are on offer for the right candidates. Some equity in the fund management company may be offered as part of the bonus scheme, subject to ability and contribution.

www.xeqos.com

► **LOCATIONS:** England – Oxfordshire

► **VACANCIES:** Quantitative/Senior Quantitative Analyst

► **RECRUITMENT CRITERIA:** Maths: first class (or expected) undergraduate maths degree/ masters with distinction (or expected)/ PhD. Alternatively, MSc in Mathematical and Computational Finance with distinction (or expected).

Strong probability essential, related subjects beneficial.

► **SUBJECT AREAS FOR PHDS/POSTDOCS:** As above.

► **APPLICATION PROCESS:** Please send through your CVs, and if suitable you'll be invited to interview.

► **CONTACT FOR APPLICATIONS:**
James Hosking

► **EMAIL:** james@xeqos.com

► **PHONE:** 07884435366

Do you enjoy solving challenging problems?

Move the entire stack to another rod, obeying the following rules:



1. Only one disk can be moved at a time.
2. Each move consists of taking the upper disk from one of the stacks and placing it on top of another stack or on an empty rod.
3. No larger disk may be placed on top of a smaller disk.

7 moves are needed for 3 disks. How many moves would be needed for 5 disks? What about N disks?

Are you looking to:

- continuously learn and develop your skills, working on advanced data processing systems?
- work for a company that has a relaxed and collaborative environment with a passion for helping customers?
- have regular opportunities to travel?

Sound too good to be true?

Let's talk



UKcareers@abinitio.com



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Do you have what it takes to discover hidden relationships in dynamic financial markets? Find out during our 8-week paid summer internship programme.

- Run your own projects researching real world data
- Work and learn alongside experienced quants
- Get the chance to be offered a place on our Graduate Scheme

**Have you got
what it takes?**

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*Begin your journey at our
beachside headquarters in
Austinmer, Australia.*

- Structured graduate training programme
- Ongoing external and in-house courses
- Challenging, dynamic and innovative work
- Generous relocation package