MATHS
ADDS
20th Edition

2017/2018

careers guide

***maths & stats** create more pathways*

Explore more jobs online at
MATHS**ADDS**.AMSI.ORG.AU

AUSTRALIAN MATHEMATICAL SCIENCES INSTITUTE

ADVICE FOR YOUR FUTURE

Dr Alan Finkel AO
Australia's Chief Scientist

MATHEMATICS IS POWER. I'm reminded of it every time I'm out to dinner and the moment comes to split the bill. My colleagues reach for their phones. I'll have a split worked out before they can open their apps.

Once again, a bit of maths puts the power in my hands. It's just lucky for them I like to play fair.

I've seen the same phenomenon play out in boardrooms, government committees, real estate auctions, engineering project teams – every situation, in fact, where human beings make hard decisions that come down to numbers.

Balance sheets. Betting odds. Budget papers. Blood test results. **Whatever the numbers, it's the mathematicians who know how to put them to work.**

They're not just bulletproof in the face of faulty analysis. With mathematics on your side, you read the patterns that others just fail to see. And you tend to see much further, and faster, as a result.

Every smart leader makes a good friend of a great mathematician (assuming, of course, that the mathematicians themselves aren't running the show).

The power of mathematics is nothing new. Mathematicians have been winning wars, fighting crime, building cities, tackling epidemics and driving research – not to mention getting rich – for quite some time.

The fact remains, they have never been more vital than they are today, in the data-hungry world their skills brought about.

We know that the days when a particular degree led to a predictable career are long gone. **Nobody can say where expertise in mathematics might take you.** How could they, when there's no limit to the ways in which those skills can be applied, or missions that mathematicians will be called on to serve?

There's still one thing we can say for certain. Study mathematics, and the power is yours: to make your future by helping to remake your world.

JUST PROMISE ME YOU'LL CHOOSE TO PLAY FAIR.

MATHS
ADDS
CAREERS GUIDE

A guide for students to the job market 2017/2018

We're delighted to present the 20th edition of MATHS**ADDS**, our annual guide to careers requiring maths and statistics.

Over the two decades this guide has been in print, we've found that most of the top 10 best jobs—based on work environment, income, job outlook, stress and other factors—call for backgrounds in mathematics and statistics.

MATHS**ADDS** features just a small fraction of online job advertisements from 2016-2017. The common theme of these ads is mathematics and statistics, but the actual jobs vary across all sectors— bioscience to computing, teaching to engineering, meteorology to finance.

Just about every area of employment will depend, at some point, on handling and interpreting data, and on predicting and modelling outcomes—the kind of expertise offered by people with training in the mathematical sciences.

MATHS**ADDS** highlights opportunities available to students who include mathematics or statistics in their degree. While many of the jobs listed here are based in big cities, others offer opportunities to work in regional centres or overseas.

Whether you have a career plan or not, obtaining skills in the mathematical sciences can only add to your future career options!

AMSI AUSTRALIAN MATHEMATICAL SCIENCES INSTITUTE

LA TROBE UNIVERSITY

aamt

amsi.org.au
latrobe.edu.au/mathstats

MATHS**ADDS** *has been prepared by La Trobe University in partnership with AMSI. We thank our contributors, who kindly gave permission to reproduce their employment advertisements in this publication.*

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GET ON THE PATH YOU WANT WITH **MATHS AND STATS**

LEVEL 1

ACCESSIBLE THROUGH YEAR 12 COMPLETION OR CERTIFICATE I / II

BANK TELLER *BARTENDER* **DEBT COLLECTOR** *HOSPITALITY WORKER* **INSURANCE AGENT** *PAYROLL OFFICER* **RETAIL BUYER** *SALES ASSISTANT* **TRADES ASSISTANT**

LEVEL 2

ACCESSIBLE THROUGH DIPLOMA OR CERTIFICATE III / IV

AIRCRAFT ENGINEER *DRAFTSMAN* **BIOMEDICAL TECHNICIAN** *CONSTRUCTION MANAGER* **CARTOGRAPHER** *CIVIL ENGINEERING TECHNICIAN* **COMPUTER TECHNICIAN** *DATA PROCESSOR* **ELECTRICIAN** *INSURANCE CLERK* **LABORATORY WORKER** *LINE MECHANIC* **MECHANICAL TECHNICIAN** *PERSONAL TRAINER* **PROCUREMENT MANAGER** *PRODUCTION MANAGER* *TELECO ENGINEER*

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Head of Department, Mathematics & Statistics, La Trobe University

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Collation by Charles Gray, design and layout by Michael Shaw, editing by Associate Professor Luke Prendergast and Melissa Trudinger

MATHS & STATS DEGREES

The AMSI website includes links to many Australian university mathematics and statistics departmental web pages where you can discover the best course for you.

amsi.org.au/membership/members/

AMSI would like to thank the employers who kindly gave permission to reproduce their employment advertisements in this publication.

LEVEL 3

ACCESSIBLE THROUGH BACHELOR DEGREE

ACCOUNTANT *AIR TRAFFIC CONTROL*
ANALYST **BIO TECHNICIAN** *BUSINESS*
ANALYST **COMPUTER SYSTEMS ANALYST**
COMMERCIAL UNDERWRITER
CRYPTOLOGIST *DATA ANALYST*
ECOLOGIST *GAME DESIGNER*
INDUSTRIAL DESIGNER *INSIGHTS*
ANALYST **MARINE SURVEYOR** *MARKET*
RESEARCH ANALYST **METEOROLOGIST**
NURSE **OPTOMETRIST** *PHARMACIST*
PHARMACOLOGIST *PILOT QUANTITY*
SURVEYOR **SOFTWARE ENGINEER** *SYSTEMS*
ANALYST **TEACHER** *VETERINARIAN* **WEB**
ANALYST *WEB DEVELOPER*

LEVEL 4

ACCESSIBLE THROUGH BACHELOR DEGREE & POSTGRADUATE

ACTUARY *AERONAUTICAL ENGINEER*
ARCHITECT *AUDITOR* **ASTROPHYSICIST**
BIOINFORMATICIAN **BIOMEDICAL ENGINEER**
BIOSTATISTICIAN **CHEMICAL ENGINEER**
CIVIL ENGINEER **DATA SCIENTIST**
ECONOMIST **ELECTRICAL ENGINEER**
ENVIRONMENTAL ENGINEER **FINANCIAL**
ANALYST *GEOLOGIST* **GEOMATICS**
ENGINEER *GEOPHYSICIST* **GEOSPATIAL**
SPECIALIST *MECHANICAL ENGINEER*
MARINE ENGINEER *MATHEMATICIAN*
METEOROLOGIST *MINING ENGINEER*
NAVAL ARCHITECT *OPERATIONS RESEARCH*
ANALYST **PHYSICIST** *QUANTITATIVE*
ANALYST **RESEARCH SCIENTIST** *RISK*
ANALYST **ROBOTICS ENGINEER**
STATISTICIAN **UNIVERSITY LECTURER**

MATHS**ADDS** ONLINE

Explore more JOBS ONLINE at **mathsadds.amsi.org.au**

MORE JOB ADS

The links below are examples of online resources for job seekers. Search using keywords such as 'mathematics' and 'statistics' and see where a degree in mathematics and statistics can take you!

- Adzuna **adzuna.com.au**
- CareerOne **careerone.com.au**
- Seek **seek.com.au**

MATHS & STATS AT WORK

Need more inspiration? Use the links below to discover more about maths and statistics futures.

Maths Careers
- **mathscareers.org.au**
- **www.maa.org/careers/career-profiles**

Career resources
- **www.ams.org/careers**

MORE USEFUL WEBSITES

- Australian Mathematical Society **austms.org.au/careers**
- Statistical Society of Australia **statsci.org/careers.html**
- Myfuture - career information & exploration **myfuture.edu.au**

bhpbilliton Foundation

Supporting education supports society.

Education is fundamental to Australia's future. Encouraging the study of science, technology, engineering and maths (STEM) is vital to fostering innovative thinking and problem solving abilities that will help to address sustainable development challenges.

That's why we're working to change the under-representation of girls and Aboriginal and Torres Strait Islander peoples in maths and science through our commitment of $55 million to STEM education across Australia.

We've partnered with the Australian Mathematical Sciences Institute (AMSI) on CHOOSE**MATHS** which is designed to encourage girls into mathematics, and we'll keep investing in programs to increase interest and academic achievement in STEM subjects.

The BHP Billiton Foundation is a charity funded by BHP Billiton, a leading global resources company, and through our programs we address challenges that are directly relevant to the resources sector.

bhpbilliton/foundation

BIOSCIENCE & SCIENCE

Diverse opportunities

Charles Gray

MATHEMATICAL STATISTICS PhD STUDENT AT LA TROBE UNIVERSITY

BIOSTATISTICIANS ARE SPECIALISTS IN THE EVALUATION of biological data as scientific evidence. They provide the mathematical framework to interpret scientific data generated in biology, medical sciences, public health and other health sciences.

Charles Gray is working towards a PhD in Mathematical Statistics at La Trobe University, with a focus on the big data generated by the biosciences. A former musician, and a passionate advocate for women in science, she was responsible for sourcing all of the job listings that are found in this year's edition of MATHS**ADDS.**

I was only in Year Eight, when I left home and dropped out of school. After a few years on the streets, I realised education was my gateway to the stability I craved. In the end my Year 12 results surprised even me.

Asked what I'd like to do next, I responded "mathematics". I was quickly told it was a silly idea and I wasn't smart enough. I don't think I am unique in this experience.

I first entered the University of Melbourne intent on helping others through social work, but ended up instead drawn to music's mathematical axioms and a musicology degree. While I loved many things about music, and still do, surviving from gig to gig and through teaching was very uncertain.

I was inspired to return to my maths dream after watching my housemate complete her physics degree in her thirties. I remember thinking, well if she can, I can

Initially I studied pure mathematics but decided to transition to mathematical statistics for my PhD. I am in love with my field. On any given day, I could be working on code; deriving mathematical equations; creating interactive simulations; or discovering data visualisation.

We need role models at every level; I want to share this magical world of numbers that I've discovered. I want everyone to know that you that you can solve the problems of today and tomorrow while doing something endlessly fun and exquisitely beautiful.

Charles Gray is an ambassador for the CHOOSE**MATHS** *Careers Awareness Campaign - choosemaths.org.au*

CHOOSE
MATHS

AN **AMSI** SCHOOLS PROJECT

DELIVERED BY AMSI Australian Mathematical Sciences Institute

SUPPORTED BY bhpbilliton Foundation

I am more than a number

Maths arms you with skills needed for a global, fast-paced world.
When you CHOOSE**MATHS** a world of possibilities opens up.

My name is Karin Ditchfield Read my story at

C H O O S E **M A T H S** . O R G . A U

BIOSCIENCE & SCIENCE

Senior Statistician

PHASTAR - Newcastle NSW

Why PHASTAR?

PHASTAR is a specialist CRO, offering statistical consulting, clinical trial reporting, data management and medical writing services, by providing expert consultants and managing and delivering in-house projects.

If you would like to work with a team of expert statisticians, in a company run and managed by statisticians, where your skills will be valued and nurtured, then our roles may be right for you. PHASTAR are a team of expert statisticians and programmers, working in the medical field. There are a number of reasons you may wish to join the PHASTAR team:

Learn from PHASTAR's internal experts and from personnel with specialist PhDs.
A better way to work: PHASTAR have a unique approach to statistical consulting and data analysis. Our approach ensures high quality consulting and data analysis.
A relaxed place to work. PHASTAR encourages a hard working but friendly and sociable office environment.
This vacancy can be based from one of our offices in London, Macclesfield and Glasgow.

Job description:

Manipulate, summarise and analyse clinical trial data using a variety of statistical methods
Function as statistical support across a number of studies
Preparation of study protocols and development of statistical analysis plans
Ability to communicate Statistical issues across multi-disciplinary team
Supervise work of less experienced Statisticians
Being a client contact for the Biostatistics team

Requirements:

PhD or MSc in Biostatistics or related discipline
Experience working within a clinical trials environment (Pharma, CRO or academia)
Previous experience working with SAS
Excellent written and verbal communication
Familiarity with GCP and ICH guidelines

What we offer:

Advancement of your career in an intellectually-stimulating, dynamic, supportive environment
Variety of projects in statistical consultancy and clinical trial reporting (range of therapeutic areas and phases)
Excellent remuneration (competitive salary, pension, healthcare, conferences and other courses etc)

Job Type: Full-time

Required education:

Master's

Required experience:

Statistician: 5 years

Statistical Consulting, Data Management, Statistics, Data Analysis, Biostatistics

BIOSCIENCE & SCIENCE

Statistician, Medical Technology Development

Statistics, Statistical Methods, Statistical Theory, Data Analysis, Statistical Analysis, Statistical Modelling, Mathematics

About the business and the role

LBT **Improve Patient Outcomes** by making healthcare more efficient.

We develop automated products that use **Intelligent Imaging** and **Interpretative Software** to improve healthcare delivery.

LBT Innovations Limited (ASX: LBT) improves patient outcomes by making healthcare more efficient. Based in Adelaide, South Australia, the Company has two world class-leading products in microbiology automation: MicroStreak®, which provides automated culture plate streaking and Automated Plate Assessment System (APAS®). Based on LBT's intelligent imaging and interpretative software, US FDA-cleared APAS® automates imaging, analysis and interpretation of culture plates following incubation. LBT has entered into a joint venture, Clever Culture Systems AG (CCS) with Hettich AG Switzerland to commercialise APAS® products. LBT's third product WoundVue® is in early development; this is a proposed automated solution to assist in the management of chronic wounds.

Job tasks and responsibilities

The Statistician for Medical Technology Development is responsible for applying robust statistical theories and methods to support bringing technology to market. This role must work closely with cross functional teams to understand the regulatory, business and technology context required to statistically support the product claims of the technology. Providing leadership in deciding what data is required to answer specific questions, along with performing the actual analysis and presentation of complex data is critical to the success of this role.

Job tasks and responsibilities include:

- In collaboration with functional teams, develop a comprehensive data capture and analysis methodology to support the effective routine capture of information that facilitates efficient analysis;
- Setup systems and process to ensure efficiency of statistical analysis with a goal that this becomes a core capability of LBT;
- Provide input into engineering and clinical design protocols that ensure statistical rigour is embedded in the process so that relevant data can be presented to a variety of stakeholders such as Regulators and Auditors;
- Bring expert knowledge of statistical theory to design: laboratory experiments for product development and testing, clinical studies and customer surveys or opinion polls, and any other applications that require statistical theory to be applied within the LBT business;
- Perform data analysis, using various statistical tools, interpret the results with understanding of the business intent, and write reports which meet the needs of the customer(s);
- A particular focus is on developing documentation to support submissions to regulators throughout the world. This will involve, but not limited to:
  - Perform statistical modelling to decide st
  - Prepare statistical analysis s
  - Discuss protocol wi
  - Contrib

...gn: laboratory
...d testing, clinical
...s or opinion polls, and any other
...quire statistical theory to be applied within
...business;
- Perform data analysis, using various statistical tools, interpret the results with understanding of the business intent, and write reports which meet the needs of the customer(s);
- A particular focus is on developing documentation to support submissions to regulators throughout the world. This will involve, but not limited to:
  - Perform statistical modelling to decide study design;
  - Prepare statistical analysis section of study protocol;
  - Discuss protocol with regulators as required;
  - Contribute to management of clinical research organisation (CRO) to:
    - Prepare statistical analysis plan (SAP)
    - Prepare data management plan (DMP) [set up & validate data collection tool; host and manage databases, generate and manages data queries, lock database, perform analysis to SAP, prepare line data, prepare analysis report]
    - Write final study report.

- Critical thinking with an ability to keep an open mind to understand the business context and apply statistical methodology to support business and technology outcomes.

Skills and experience

- Tertiary qualifications in statistics or mathematics; PhD would be highly regarded;
- Critical thinking – use logic and reasoning to identify strengths and weaknesses of potential solutions, conclusions or approaches to problems;
- Math skills – ability to use statistics, calculus and linear algebra to develop models and analyses;
- Programming skills – Expert use of specialised statistical software;
- Ability to program custom analyses as required;
- Problem solving – overcome problems in data collection and analysis;
- Communication skills – ability to present statistical concepts and information so that others can understand;
- Writing skills – report writing to explain technical matters to people without their level of expertise;
- An understanding of quality systems and regulatory requirements (e.g. FDA, TGA, CE, ISO13485, ISO 9000);
- Ability to work collaboratively with cross-functional teams;

BIOSCIENCE & SCIENCE

Data Scientist

About the business and the role

The Yield is hiring. Come join us change the face of agricultural technology and help feed the world without wrecking the planet. We are looking for a Data Scientist who is passionate about solving real world problems and providing insight via advanced analytics.

The Yield is an Internet of Things (IoT) agriculture technology company. We take the guesswork out of growing. We help improve customers' yields by providing on-farm sensors and a customised information service to make faster decisions. We work with leading farmers.

The world needs to produce 70% more food by 2050 to feed the planet at a time of unprecedented resource constraints and the impact of climate change. Our aim is to be a global leader in intelligent solutions in the food industry. We are developing our IoT solutions in Australia before scaling aggressively globally.

The Yield has a highly-focused team that brings together world-leading agriculturists, scientists and technologists. We partner with some of the global giants of technology services like Bosch, Intel and Microsoft. We have a strong commitment to open innovation and collaboration both internally and externally. A core value is that we work with the best and share the rewards.

Our founder and Managing Director has spent her life time promoting inclusion and diversity at work. Our business is committed to creating the right culture, systems and flexibility for everyone regardless of gender, race, ethnicity, disability or sexual orientation to thrive and reach their full potential. We were awarded the Australian Information Industry Association (AIIA) inaugural #TechDiversity award in 2016 in recognition of our achievements. Check out our video below.

Job tasks and responsibilities

The Data Scientist role is part of the Data Science Team based in Sydney.

In this role you will be working within a multi-disciplinary team to create previously unknown insights, model and codify inherent knowledge and provide local on farm predictions using cutting edge methods and techniques. You will be working with varied data sets, ranging from multiyear climate data, observation data collected by on farm sensors and outputs of publicly available agricultural models.

Responsibilities

The Data Scientist is responsible for:

1. Developing supervised and unsupervised predictive models, algorithms, geospatial data analytics and models that support The Yield's product road map and are scalable to cloud architectures;
2. Identifying and acquire additional sources of data to enhance and expand our ability to deliver unique and valuable predictions and insights to our growers;
3. Ensuring compliance with The Yield's systems to protect its intellectual property, its digital assets and customer' privacy and confidential information;
4. Working with the Engineering, Business Analysis, Sales & Marketing and Hardware teams to develop solutions to release in our product;
5. Ensuring continuous improvement and development, keeping up with and leveraging new breakthroughs and advances in Machine Learning, AI and Deep learning;
6. Contributing to a cohesive, diverse and high-performing team that is genuinely inclusive and gender-balanced;
7. Establishing good internal and external relationships, communicating verbally and in writing with key stakeholders;
8. Be flexible, we need people who will do whatever it takes to get the job done.

Skills and experience

To be successful in this role you must have:

1. A track record (min 4 years experience) of development of models using Machine Learning or AI to achieve a business or commercial outcome preferably in areas such as environmental, climatic, geospatial, marine or agriculture modelling;
2. Have experience in manipulating, handling and
large structured and unstructured
the following: time series
weather or clim
3. Stro

...ing team that is
...external relationships,
...ally and in writing with key stakeholders;
..., we need people who will do whatever it takes to get the
job done.

Skills and experience

To be successful in this role you must have:

1. A track record (min 4 years experience) of development of models using Machine Learning or AI to achieve a business or commercial outcome preferably in areas such as environmental, climatic, geospatial, marine or agriculture modelling;
2. Have experience in manipulating, handling and extracting data from large structured and unstructured data sets including one or more of the following: time series data, predictive atmospheric models, weather or climate data, satellite imagery and geospatial data;
3. Strong problem solving skills with an understanding of the constraints on developing commercial solutions;
4. Experience with Python (including NumPy, SciPy, scikit-learn etc) or the proven experience of multiple other languages allowing you to compress complex data / relationships into commercial / production grade models
5. Solid working knowledge of quering and manipulating data sets and had exposure to at least one industrial strength database
6. Empathy for end-users and a creative ability to apply data and data relationships across multiple sources and domains to help solve real business problems for growers and food producers;
7. Strong organisational, communication and collaboration skills to build and strengthen working relationships.

Qualifications

A degree with a strong quantitative focus in areas such as Statistics, Mathematics, Economics, Science, Computer Science, Environmental Science or Agricultural Science; or equivalent experience.

More about you

You are a natural collaborator who thrives working with new data, identifying relationships and solving problems. You will have real world experience delivering data driven solutions to high scale production environments. You thrive in an environment of rapid change and innovation. You aren't afraid to take responsibility for your work, to stretch yourself and to be challenged. We also hope you love all things food and can relate to producers across the value chain.

More about us

We are looking for talented women and men who share our passion and hire on both skills and values. We are a truly diverse company and are actively striving to be an industry leader in building inclusive technology teams. We offer a supportive and flexible working environment, including giving our staff the tools needed to work remotely.

Check out our LinkedIn company page for details (https://www.linkedin.com/company/the-yield)

Enquiries and Applications: recruitment@theyield.com

Data Science, Analytics, Modelling, Predictive Models, Algorithms, Problem Solving, Statistics, Mathematics

Model your future

Statistics, **Analytics** and **Mathematics** at RMIT is outcomes-focused.

Our programs develop your analytical and problem-solving skills so that you can apply your knowledge to banking and finance, sports analytics, engineering, environmental modelling, biomedical research, cyber security, logistics, business and more.

An emphasis on work-integrated learning and placements ensures you have the skills to help organisations make informed, data-driven decisions.

Flexible learning opportunities include the option to study a semester at one of our partner universities in Europe, Asia or the Americas.

Study programs include:

- Bachelor of Analytics (Honours)
- Bachelor of Science (Mathematics)
- Bachelor of Science (Statistics)
- Master of Analytics
- Master of Data Science
- Master of Statistics and Operations Research
- Master of Applied Science (Information Security and Assurance)

www.rmit.edu.au/science

CRICOS provider number: 00122A

RMIT UNIVERSITY

BUSINESS & MARKETING

Read between the lines…

Steve Morris

TELSTRA'S GENERAL MANAGER,
TECHNOLOGY & ANALYSIS – BIG DATA

BIG DATA, IT'S EVERYWHERE and many businesses are getting involved. Job titles in the commercial sector don't often include statistician or mathematician, however, if you're a mathematical scientist, you're exactly who they're looking for. From statistical analysis to modelling and problem solving, your skills are in demand.

Steve Morris is Telstra's General Manager, Technology & Analysis – Big Data. He and his team use analytics in a variety of areas, such as reducing fraud and optimising network investment.

I'm an engineer by background and have always been interested in seeing real world behaviours follow mathematical principles. Over time my interest has broadened from the mathematics of well controlled scenarios into more complex models, and in recent years its practical business application.

At Telstra, our purpose is to enable our customers to thrive – using analytics to deliver improved customer experiences. We are champions of the network effect of data, which is data from different sources coming together.

While advanced analytics or machine learning grab attention, behind these results is a team of quiet achievers dealing with complex open source platforms, network connections, and even routine data quality challenges.

There are many exciting opportunities in the telecommunications sector… data underpins them all.

Steve Morris works with AMSI Intern to place PhD students in internships at Telstra - amsiintern.org.au

Data Scientist - Perm - Sydney

- **Perm role based in a very prime location!**
- **Required - Very strong hand on experience in SQL, R, ML and stats**
- **Australian citizenship - Very highly regarded**

My client is seeking a Data Scientist with at least 2-3 years of commercial hands on advanced analytics experience to be part of a very high performing team of analysts, data scientists, and consultants.

In this role, you will apply machine learning, statistics and advanced analytics concepts and models to extract insights from large datasets. You will be part of a growing team and contribute towards some really exciting projects.

Your responsibilities:

- Explore large datasets, discover trends and patterns and extract insights
- Apply Statistical/Machine Learning techniques to build data product and features.
- Develop scripts to extract and analyze large data sets and build statistical models
- Test and verify scripts and models to ensure accuracy of the results
- Work with domain experts to validate and interpret findings

Your skills and experience:

- **Australian citizenship** - Very highly regarded, due to the nature of the job and clients. If you are an Australian citizen, please mention in your resume.
- Post graduate qualification in either of the following: **Statistics/ML/Mathematics**
- At least **2-3 years** of experience in a commercial advanced analytics and insights environment
- Solid skills in **SQL and R** for data extraction and manipulation and to create reports and dashboards.
- Skills in **NLP, text mining, or network analysis** - Highly Preferred
- Passionate about Data science and what it can do
- Great team player
- Loads of enthusiasm!

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www.infopeople.com.au

infopeople®

Data Science,
Statistics, Analytics,
Modelling,
Large Data Sets,
Mathematics

BUSINESS & MARKETING

Data Analytics, Data Science, Statistical Modelling, Predictive Models, Regression Modelling, Mathematics, Statistics

Data Scientist / Statistical Modeller

Our client is an Australian market leader in suppling Data Analytics and Insights based solutions to the countries leading consumer based based businesses. Due to the ongoing success of the business a brand new position has been created for a Data Scientist / Statistical Modeller to join the Sydney based team. With the key focus on delivering client driven predictive modelling projects the responsibilities of this role will include:

- Engaging with internal and external stakeholders to consult around analytical project requirements, discuss methodologies and negotiate deliverables.
- Supplementing client's consumer data with extensive data assets to uncover compelling insights into customer acquisition, retention and growths strategy (requires SQL, SAS, R or Python skills)
- Deliver a range of bespoke analytics projects leveraging techniques that may include; Customer propensity/regression modelling (churn, acquisition, cross sell), segmentation analysis (cluster), marketing campaign analytics, hypothesis testing, credit risk analysis, credit scorecard development, price optimization, customer lifetime value analysis, next best offer analysis, decision trees, neural networks, etc. (requires SQL, SAS R or Python analyst skills)

The successful applicant will come from a strong background working in a data driven insights environment and will be able to demonstrate:

- Commercial experience building a range of statistical models relating to customer marketing strategy (Acquisition, retention, growth) or credit risk analytics (scorecard development and validation)
- Strong technical skills and experience using SQL, SAS, R or Python to extract, manipulate and merge large customer behavioural or transactional data set from a variety of source systems (e.g. SQL Teradata, Oracle SQL, SQL Server, MYSQL, SAS Base, Python or R)
- Educated to a minimum of degree level in an analytical discipline such as - Mathematics, Statistics, Econometrics, Actuarial Studies, Data Science, Computer Science etc.
- A genuine passion to build a career in Data Analytics / Data Science, implementing analytical techniques and concepts such as; Customer propensity modeling (churn, acquisition, cross sell), segmentation analysis (cluster), marketing campaign analytics, hypothesis testing, credit risk analysis, credit scorecard development, price optimization, customer lifetime value analysis, next best offer analysis, decision trees, neural networks, etc. (requires SQL, SAS, Python or R analyst skills)

To apply for this position please click on the 'Apply' button below

www.correlateresources.com

Correlate Resources are your trusted Data Analytics Recruitment Partner
Register with us to receive exclusive opportunities, industry insights and ongoing career support.

BUSINESS & MARKETING

Statistics, Statistical Techniques, Data Analysis, Predictive Models, Modelling, Mathematics, Problem Solving Skills, Quantitative Analysis, Large Datasets

Associate Quantitative Analyst

- **Exciting and Unique company**
- **Potts Point moving to the coolest office space in the CBD in March**
- **Casual, social, sporty office environment**

We are after a Quant to work for this cool company in Potts Point which will soon be moving to a new office in the CBD. The vision they have for the office will compete with Google on a smaller scale! Think: Lounge, library, cubby house, games area, stand up / sit down desks, coffee and snacks.

Skills & Experience required

You must possess a passion for data and sports with an in depth level understanding of statistics and the application of statistical techniques to data analysis, specifically in the field of predictive model development.

- Minimum 2 years' commercial experience
- Exceptional academic record
- University studies in a quantitative field such as mathematics / statistics (or engineering) Bsc (hons), MSc+
- Experience using quantitative software packages (R, Python, Matlab, Mathematica)
- Exposure to big data processing frameworks (Apache Flink, Spark, Beam) is an advantage
- Exposure to object-orientated programming or a scripting language is an advantage
- Knowledge of SQL / understanding of relational database concepts is an advantage
- Proficient Excel / Tableau skills, with ability to analyse and present summary level data effectively
- Strong problem solving skills, ability to work in a team with an eye for detail
- Strong communication skills with fluency in English and excellent writing skills
- A passion for all things Football (Soccer)

Role Description

In your role you will act as an analyst within the Research & Development team focusing on feature development and exploratory data analysis while providing general quantitative support to Senior Quantitative Analysts in their specialist area. Use your in-depth knowledge and understanding of correlation, multivariate regression and all aspects of massaging data together to discover & investigate relationships in sports data for use in predictive modelling.

- Perform quantitative analysis on sports data, reporting on the coverage, integrity and validity of data sets
- Using your drive & resilience to persevere with challenging and detailed investigations into discrepancies
- Perform integration and quality assurance testing of model features and data processing components
- Using your passion & in depth knowledge of team sports, you'll build on existing research and develop new ideas to improve models.
- Documentation & technical writing

For more information please apply

Ashdown People
Level 9, 50 Margaret St
Sydney NSW 2000
Tel: (02) 8296 9888
Web: www.ashdownpeople.com.au
Skype: ashdownpeople
Email: Please click the 'Apply Now' button below.

Analysis, Data Mining, Maths/Stats

Customer Insights Analyst - SAS/SQL

Summary of the Position

This is the perfect position for an insights analyst looking to join a company with a great culture in a fast paced environment. The position sits within a high performing analytics team and look to keep themselves on the cuting edge. There are a broad range of stakeholders and a strong culture. This is a company in which initiative and also innovation are not only expected but also encouraged.

Summary of your Role

- Provide customer insights through analysis and data mining Conduct customer segmentation and data modelling Creates dashboards
- Present findings to senior stakeholders
- Liaise closely with the other teams in order to drive customer buy in Communicate areas in which the business should be focusing attention
- Help grow the insights teams presence within the business
- Aid the company in becoming more customer focused drive an insights led culture

Experience Required

- Minimum of 2 years experience within customer/marketing analytics
- Prior work experience with customer analytics and segmentation
- Excellent SAS and SQL skills would be a bonus
- Proven ability to provide customer insights
- Excellent communication skills in order to champion the analytics team and also liaise with different areas of the business
- Be able to present findings in laymen's terms
- A tertiary degree in maths/stats/commerce etc.

If you are interested in this position and feel you have the required work experience please apply directly

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BUSINESS & MARKETING

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- Sydney or Melbourne Based

About IAG & Satellite

IAG is the largest general insurance group in Australia and New Zealand, with a growing presence in Asia. IAG owns some of the region's most trusted brands, including NRMA Insurance, CGU, SGIO, SGIC, WFI and Swann Insurance.

At IAG, we believe that everyone has a unique point of view to share, shaped by their life experiences, cultures & passions. We celebrate and commit to:

- #Proud to be me – we value difference, not sameness
- #Together – harnessing our collective wisdom enables us to bring our best for our customers & each other
- #No boxes – it's not about labels, boxes or categories, rather it's about building a diversity, inclusion & belonging mindset into everything we do

In addition to a diverse and inclusive culture, some of our benefits include 13% superannuation, 50% insurance discounts, flexible work and leave options, generous parental leave and return to work program, recognition and reward program, and various corporate partner discounts. Visit our website to find out more www.iag.com.au

Powered by IAG, our Satellite division has a mission to fast track the future of a safer world for everyday Australians. We will pave the way for change and will create and deliver value for all our customers. We share the values and purpose of iag however we will take a bold new low cost approach to disrupting the market and our people are at the heart of all that we do!

About the Role

Reporting to the Coles Profit & Loss Manager, the Coles P&L Lead is responsible for leading the business activities that will assist the business achieve financial objectives for the Coles Insurance portfolio.

Key Responsibilities

- Assisting the management of the Coles portfolio to achieve growth and profit targets
- Lead the relationship with other internal and external stakeholders to drive activities to achieve portfolio objectives
- Working with the broader Coles Insurance team to ensure alignment of product and pricing strategy
- Recommend and implement pricing changes based on portfolio and competitor insights. Co-ordinate and implement new pricing and underwriting rules to ensure performance in line with key budget targets
- Living and breathing a test and learn philosophy to ensure Coles Insurance maintains its title as the bold challenger in the insurance market
- Lead the analysis of portfolio and financial insights (portfolios KPIs, claims, competitor monitoring, and financial budgets) to formulate product / pricing recommendations for Coles Insurance portfolio, to ensure the team manages Profit & Loss responsibilities
- Leading budget and reforecast requirements and monitoring monthly performance to targets
- Providing monthly reports on portfolio performance and identifying activities and other initiatives needed to align back to budget expectations

Skills & Experience

- Tertiary qualifications in Finance, Commerce, Mathematics or related field
- Minimum of 6-8 years' insurance experience in either a product, pricing or portfolio management role
- Exceptional knowledge of the insurance industry evident from numerous positions in a large and complex organisation
- Proven analytical, negotiation and problem solving skills with the ability to identify risks and impacts
- Demonstrated ability to form effective relationships at senior levels across and outside an organisation
- Ability to drive results, operate and make decisions independently to achieve target outcomes
- Ability to influence and lead challenging conversations with internal management and external partners
- Demonstrated ability to meet tight deadlines and have exceptional flexibility
- Advanced user of Microsoft Office and excellent reporting skills
- High level communication skills, both verbally and written
- Exceptional organisational skills and ability to manage multiple domains
- Financial acumen and strong analytical skills

How to Apply

To submit your interest in this role, please click the 'Apply' button below and attach your resume and cover letter.

Insights Coordinator / Executive

Data Analytics, Statistics

As Australasia's most progressive Outdoor advertising company, APN Outdoor has experienced great success in this dynamic and fast paced sector. Why? Because we are committed to investing in research, innovation and cutting-edge digital developments to produce improved results for our advertisers.

The role

We are currently seeking a junior researcher to join our team in Sydney. The title of this role may be adapted for the right candidate and will be hired at either coordinator or executive level, depending on experience. The role is to assist the insights department in all activities which support the selling and marketing of APN Outdoor's suite of media formats in Australia and New Zealand.

You will report directly into the Research and Audience Insights Manager, as part of the Marketing team. The role is responsible for assisting the sales team in their responses to briefs, maintaining insights lead marketing material and utilising and understanding audience measurement systems.

Key Responsibilities

- Assist in the development of insights driven marketing material around the Outdoor audience
- Support Sales teams across Australia and New Zealand with research requests for brief responses
- Become familiar with MOVE, the Outdoor audience measurement currency, and strategic use of its outputs
- Develop presentations based on bespoke studies or surveys
- Support the broader team with trade campaigns and product marketing material
- Assist with survey writing and programing questionnaires
- Maintain inventory libraries and backend of all research resources
- Perform administrative tasks maintaining efficient operation of the insights team
- Develop relationships with external research suppliers and internal stakeholder
- Assist in the development and implementation of internal training initiatives

Essential experience / skills

- 1-3 years of exposure to consumer insights in either agency, media owner or research provider.
- A keen interest in story telling through research and statistics
- Experience with analysing and understanding audience insights
  Detail orientated and well organised, great time management and an ability to multitask
  Strong communication and interpersonal skills
  Experience using data analytic tools (such as but not limited to Nielsen CMV, Roy Morgan, Emma, Q, Sparq, and GeoEmma) preferable.
  Intermediate skills in in Microsoft office tools; PowerPoint, Excel etc.

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What will you start here?

sydney.edu.au/science/maths

THE UNIVERSITY OF SYDNEY

CRICOS 00026A

COMPUTING & TECHNOLOGY

Distinguish yourself from the rest

Ally Watson

DEVELOPER AND FOUNDER OF CODE LIKE A GIRL NETWORK

The combination of mathematical skills with computational abilities gives immediate benefits in the pursuit of a career in either field.

Mathematics is becoming an increasingly important aspect of many programming jobs; analytical skills, the ability to understand and simplify, and the energy to deeply comprehend the problem domain are highly valued.

Founder of Code Like a Girl, Ally Watson works for Melbourne digital agency Deepend. Ally has a degree in computer science from Glasgow University in Scotland.

Growing up in Airdrie, Scotland, my big dream was to get into Art School, however after years of rejections I decided to give something else a go and enrolled in Computer Science.

After six months, I was hooked. Studying Interactive Systems, my creative side became a real strength. I realised humans play a huge part in programming. There's so much psychology involved, from picking a particular button to choosing layouts, the design element is crucial to the user experience.

I became inspired by this marriage of creativity and science as well as the intellectual excitement of computer science.

By day I work on creative online projects, coding websites at the agency. My evenings and weekends are devoted to 'Code Like a Girl', which provides girls with the support, tools and knowledge to enter and flourish in the world of coding.

First and foremost, mathematics is about problem solving, this makes it a great foundation for budding programmers. Working as a web developer touches on basic maths such as using equations and formulas, but more complex areas of programming like Artificial Intelligence and Machine Learning requires a much deeper mathematical understanding. That's why maths is great for everyone, no matter what your skill level.

Ally Watson is an ambassador for the CHOOSE**MATHS** *Careers Awareness Campaign choosemaths.org.au*

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WESTERNSYDNEY.EDU.AU/DATASCIENCE

The answer to this

$$\frac{dx}{dt} = \sigma(y-x)$$

$$\frac{dy}{dt} = x(\rho-z)-y$$

$$\frac{dz}{dt} = xy-\beta z$$

can help predict this

CRICOS Provider 00002J

If you want to help predict the next cyclone, studying maths at Macquarie University is a great place to start. Meteorologists use models like the Lorenz equations to predict and explain atmospheric convection and other features of weather systems. Whatever your future holds, studying maths in the Bachelor of Science will give you the answers you need.

Find out more at courses.mq.edu.au/BSc

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COMPUTING & TECHNOLOGY

Graduate Data Analyst - Melbourne

Data and Spatial Analysis, Problem Solving, Data and Spatial Visualisation, Mathematics, Statistics

- Permanent full time position
- Young and dynamic office
- Analyse how cities function to inform policy and investment advice.

SGS is a highly successful Australian advisory firm which aspires to innovate and constructively contribute to the formulation of good public policy and investment decisions. We have a flat structure and the successful candidate will be required to work directly with a highly talented and multi-disciplinary team across a wide range of projects.

SGS work centres around understanding how cities and regions function and we have established strong capabilities in data creation, manipulation and visualisation. We are looking to expand our Data and Spatial Analytics Area of Service to support this capability.

The successful candidate will be required to extract and manipulate large datasets, operate and develop economic models and create innovative data and spatial visualisation solutions to effectively communicate clear policy insights.

The successful candidate will be curious, proactive, a problem solver, a proud data geek, and have an interest in public policy and spatial visualisation.

This position would be ideally suited to a recent graduate in computer science, mathematics, statistics, economics or econometrics. An honours degree and previous work experience will be highly advantageous.

The role requires a proficiency in Excel (including VBA), SQL, Python or R. Additional programming language is a plus. Experience in GIS and Data Visualisation packages will also be viewed favourably (that is, Q-GIS, ArcGIS, Tableau, CartoDB, AzureML)

Come and join our enthusiastic team of economists, planners, statisticians and urban geographers who are passionate about making a difference to public policy.

Please send a cover letter, resume, and academic transcripts to employment@sgsep.com.au

Applications close Friday 10th March 2017

Note: Applicants must have the right to work in Australia.

Graph Theory, Computational Geometry, Modelling, Complex Mathematical Problems, Algorithms

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A Little bit about us
- We have a very cool warehouse style office in Sydney
- Regular Social Events: BBQ's/Fully Stocked Kitchen/Rooftop Terrace/Pool Table
- We have a talented Research Team working on interesting problems
- Flexible working hours offering full work life balance potential

About you
- Experience Leading a talented Engineering team
- Stakeholder Management skills
- Able to deal with complex mathematical problems and algorithms
- Strong development backgtound in C++
- Work in a small startup environment without lots of procedures to follow
- Solid mathematical background - statistics/modelling etc

Please Apply now to be considered for this highly sought after position

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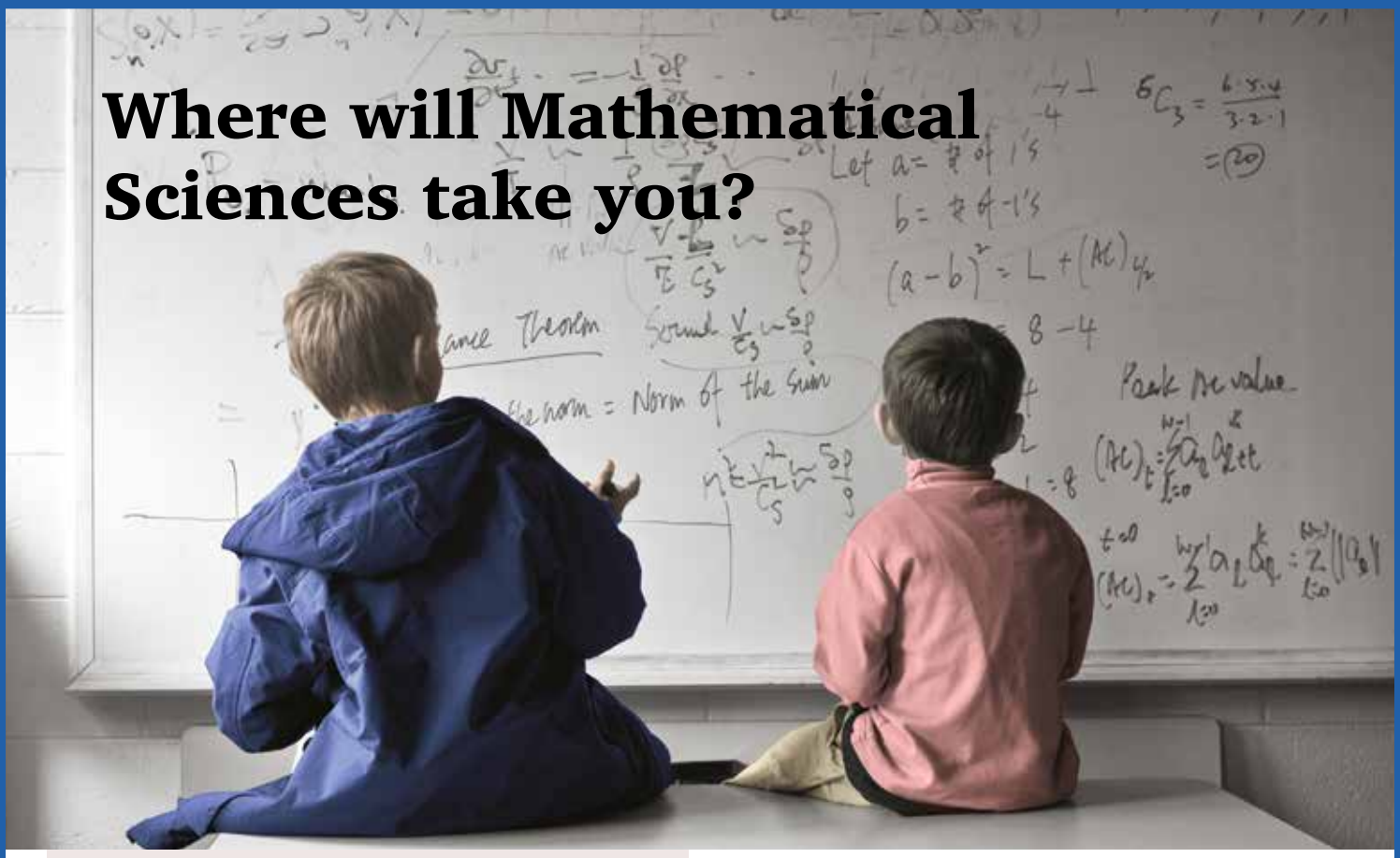
Where will Mathematical Sciences take you?



"Young people must come to see science and math degrees as key to opportunity. If we fail at this, we won't be able to compete in the global economy" – Bill Gates

Mathematical Skills Can Make All The Difference: you will develop general skills in problem solving, critical thinking, modelling, analysis, research, and creativity, which can be used wherever your career may take you.

CAREER OPPORTUNITIES

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Computer Programmer
Cryptologist
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The School of Mathematical Sciences offers undergraduate and postgraduate programs in:

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- Pure mathematics

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Students can study topics from a range of areas in mathematics, including:

- Algebra and number theory
- Geometry and partial differential equations
- Mathematical physics
- Statistical techniques and applications
- Probability
- Financial mathematics
- Stochastic processes
- Operations research

These can be combined with studies from other areas including engineering, commerce, IT, law and arts. Mathematics is commonly taken with other science areas of study.

Further Information
Monash University Undergraduate Handbook
www.monash.edu.au/pubs/handbooks

Enquiries
School of Mathematical Sciences
9 Rainforest Walk, Monash University, Victoria, 3800
Telephone: 03 9905 4465
Email: enquiries@maths.monash.edu.au

MONASH University

For more information on studying mathematics at Monash visit **maths.monash.edu**

COMPUTING & TECHNOLOGY

Graduate Data Analyst - Sydney

Analysis, Data and Spatial Visualisation, Data and Spatial Analytics, Modelling, Mathematics, Statistics

- Permanent full time position
- Young and dynamic office
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Come and join our enthusiastic team of economists, planners, statisticians and urban geographers who are passionate about making a difference to public policy.

Please send a cover letter, resume, and academic transcripts to employment@sgsep.com.au

Applications close Friday 10th March 2017

Note: Applicants must have the right to work in Australia.

Mathematics, Analytical Skills, Problem Solving

KONAMI

Graduate Game Designer

- **Mathematician with a Creative Flair**
- **Botany Location with on site parking**
- **Excellent Career Opportunity**

Konami Australia Pty Ltd is one of the Australia's leading manufacturers of Gaming Solutions.

We are seeking a recent, or soon to be, graduate in Mathematics or similar to join our R&D team.

You will assist in developing mathematic models and providing creative input for Gaming products with a career path to move to Game Designer and beyond.

Selection Criteria:

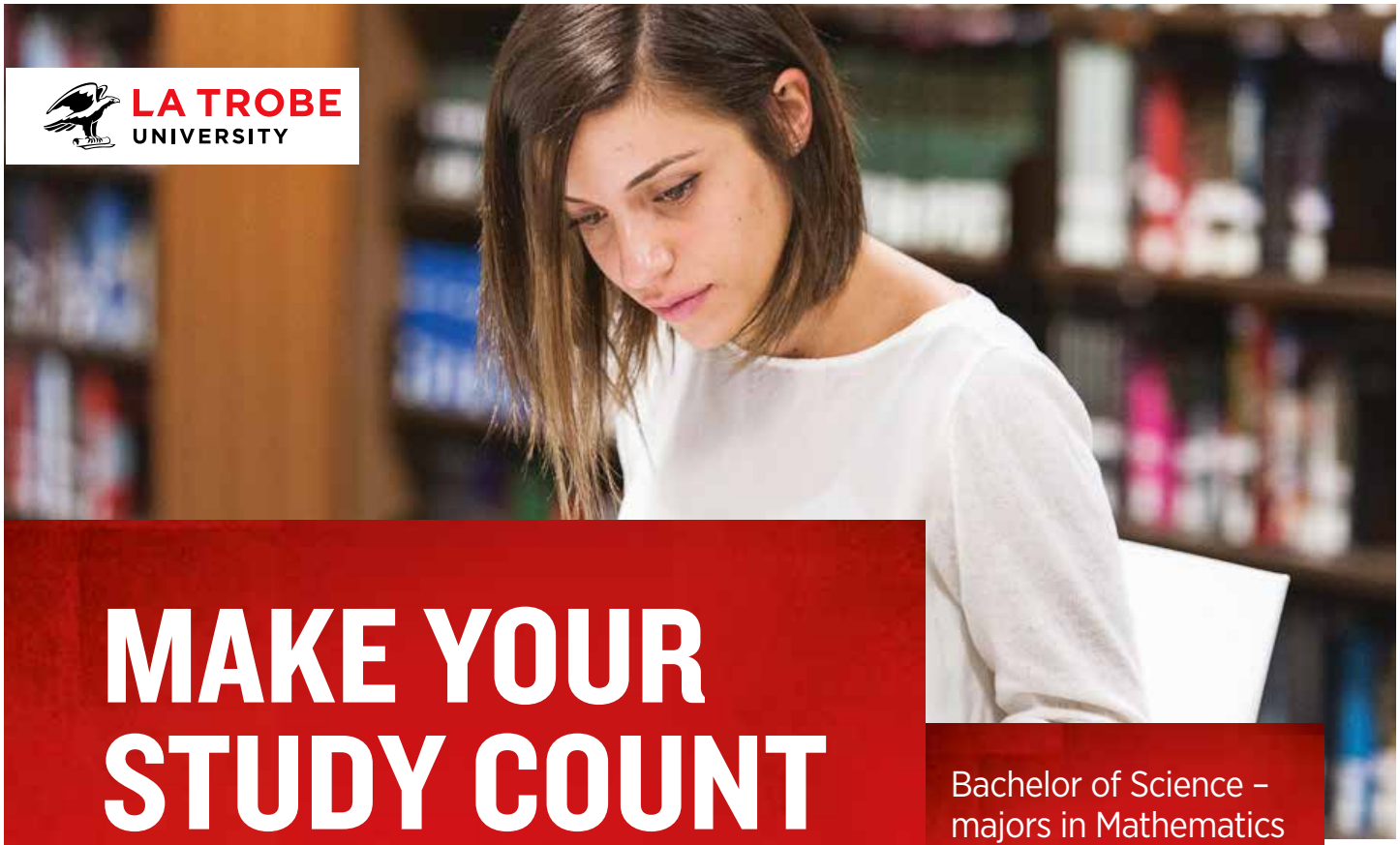
- Tertiary qualifications in Mathematics or similar.
- Good verbal & written communication skills.
- Strong Excel skills.
- Good analytical & problem solving skills.
- Ability to work in a team environment.

If you are creative, enjoy working in a team environment, crave a challenge and are serious about your career, then we want you!

A competitive salary is on offer for the right candidate.

To apply for this exciting opportunity please send a covering letter addressing the selection criteria and a copy of your resume by using the Apply Now button below.

All applications will be treated with strict confidence. Only shortlisted candidates will be contacted within 7 days of application.



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Mathematics and Statistics at La Trobe University has a long and proud tradition of providing excellent teaching with world-leading research.

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La Trobe has a team of world class researchers. La Trobe's research in Statistics is rated well above world standard, and our research in Pure Mathematics is rated above world standard, based on the 2015 Excellence in Research for Australia Report.

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With a Bachelor of Science at La Trobe, students can combine a major in either mathematics or statistics with one of 14 different science disciplines - from genetics to environmental geoscience - to gain the knowledge and expertise that matches their career goals.

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COMPUTING & TECHNOLOGY

Analytical Skills, Mathematics

Mathematician, Mathematics, Statistics

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Project Systems Assurance Manager

From locomotives, trains and trams, to rail infrastructure including electrification, communications, control systems and signaling systems, Siemens has a comprehensive range of solutions to enable safe and accessible mobility across Australia and New Zealand. As well as rail transport, we also offer solutions in airport logistics, postal automation, and intelligent transport technologies.

We currently have a fantastic opportunity for an experienced **Project Systems Assurance Manager** to join our Siemens Mobility team. Based in Eight-Mile Plains, Brisbane, the successful candidate will have the opportunity to work within an area of the Siemens business that has immense market potential. The Siemens Mobility team is looking for an individual that is aligned with our company values: excellent, innovative and responsible.

Key Responsibilities include:
• Analyse and monitor all technological and functionality regulatory standards and requirements
• Manage project systems assurance activities and provide systems assurance advice to both the project and the ASEAN Systems Assurance Manager
• Identify and manager the risks on the project using your analytical skills and produce systems assurance reports and documentation to ensure the project's risks are managed
• Key contributor to project requirements, providing substantial knowledge from a Safety, RAM, Security, Human Factors, V&V, quality and regulatory perspective
• Cooperation with other engineers in ensuring the minimization of project risks

To be considered for this role you will display a minimum of **5 years experience in systems safety** within the **Rail transport industry** or **Defence industry** highlighting the **standards of ISO/IEC 15288, IEC61508, EN50126, EN50128 and EN50129**. Additionally, you will hold a relevant tertiary qualification in Engineering, Science or Mathematics. You will have excellent written and verbal communication skills, and your ability to build sound working relationships internally and externally will ensure your success in this role. Prior experience in managing a small team and experience with ETCS L2 systems would be highly advantageous.

For further details on this opportunity please email recruitment.au@siemens.com

Mathematician / Programmer

- Full time permanent role
- $100K-$120K + Super (Negotiable)
- Lower North Shore Location

Our client is a leader in their field of energy solutions and have made solid investment in IT which is driving the business forward. Working in a small IT team you will be responsible for enhancement of existing .Net desktop applications and ASP.net web applications and development of new modules. Unique opportunity for a motivated programmer who enjoys being able to contribute to design and see their ideas come to life.

As the workload just continues to grow the team are in need of a Developer with the following skills and experience

• C# development (ASP.net)

• Tertiary qualifications (Computer Science, Engineering, Mathematics etc..)

• Linear programming theory and practice (e.g. AMPL)

• Data manipulation, visualisation GUI's

• Mathematics and statistics, operations research, optimisation

• Database (SQL Server, Oracle)

Convenient **lower North Shore location** away from CBD will be ideal for the right candidate living on North Shore train line. **Generous salary** will be negotiated and you will enjoy a friendly team atmosphere with flexible conditions.

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THE UNIVERSITY OF MELBOURNE

CRICOS: 00116K

ENERGY & RESOURCES

Maths grads, we need you!

Laura Tyler

BHP BILLITON'S CHIEF OF STAFF AND HEAD OF GEOSCIENCE

Energy and resources forecasting and simulation involves sophisticated statistics to model both environmental impact issues and consumer costs. Mathematicians are invaluable; they use optimisation to improve efficiency of distribution and consumption of energy, water and other consumables.

As BHP Billiton's Chief of Staff and Head of Geoscience, Laura Tyler uses maths in every aspect of her job. Her passion for maths is bolstered by the need for STEM graduates in all aspects of the resources industry.

Without maths I wouldn't be where I am today. I am a geologist by training and studied chemistry, biology and pure mathematics with mechanics.

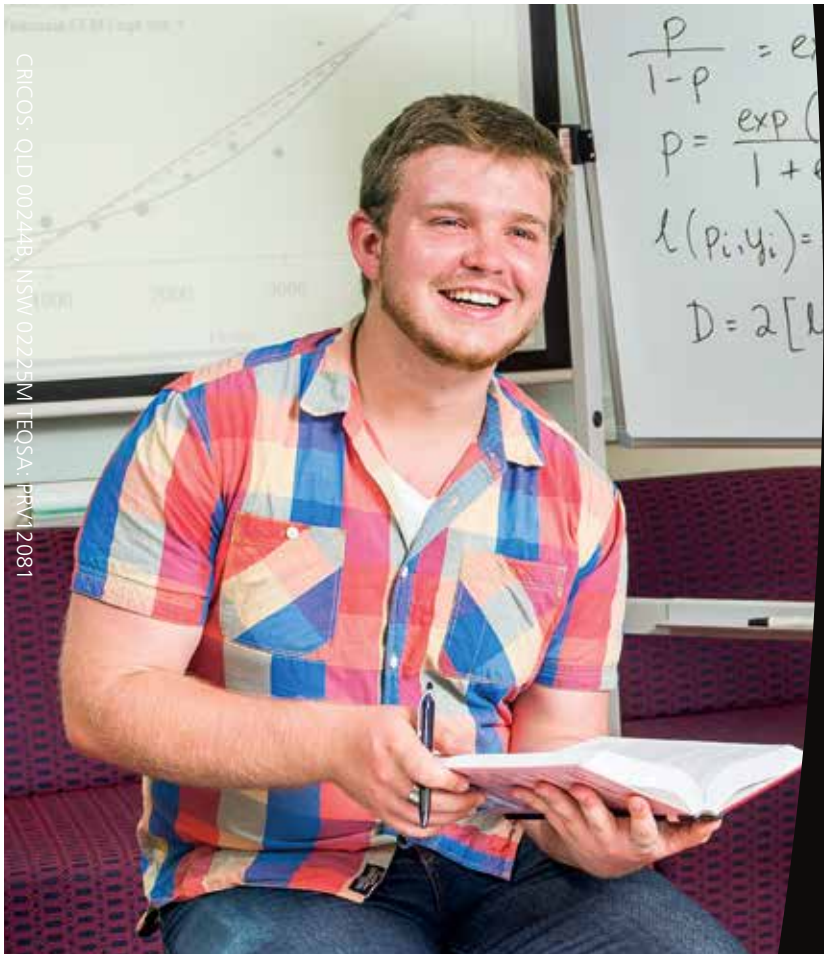
Earlier in my career my roles focused heavily on technical skills for geoscience—engineering geology, geostatistics and ore deposits generation—all of which use applied maths

Although my day to day job is now less hands on with the technical aspects of geoscience, **I use maths every single day in different and wonderful ways**—whether reviewing a technical report, reviewing performances data or trying to understand and solve a business-related problem. It does not need to be specifically about geology for me to apply my science, technology, engineering, and mathematics (STEM) skills.

There is enormous variety for STEM graduates in the mining and resources sector. As with any big company, BHP Billiton employs people in all sorts of finance, science and engineering roles all around the globe.

The future of our industry depends on our ability to get STEM graduates into business critical roles. We are effectively in competition against airlines, IT, the army – you name it. They all need STEM graduates! We must increase the pool of people considering these careers.

AMSI is collaborating with the BHP Billiton Foundation on the CHOOSE**MATHS** *project to empower Australian students to pursue mathematics - choosemaths.org.au*



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AUSTRALIA ECU EDITH COWAN UNIVERSITY

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ENERGY & RESOURCES

Analysis, Logic, Analytics, Problem Solving, Mathematics

Analytics & Reporting Business Analyst

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Roy Hill is currently seeking an experienced Business Analyst. The position will be based at the Remote Operations Centre located near the Perth International Airport.

Working as part of the analytics and reporting team, the Business Analyst will be responsible for gathering requirements and assisting the team to rapidly deliver high impact visualisations in a variety of tools. The prime function of this position is to work with key stakeholders to help them clearly identify the decisions that need to be made and how analytics and reporting can provide a solution.

Key responsibilities include, but will not be limited to:

- Lead business stakeholders and application support analysts using a logical thinking process to define problems that will be solved with analytics and reporting.
- Undertake requirements gathering activities to deliver effective and optimised reporting and analytics services.
- Proactively engage relevant stakeholders in the development of fit for purpose visualisations.
- Work with application support teams to ensure that proposed solutions promote efficiency and effectiveness, and follow the principles of continuous improvement.
- Assist with ongoing reporting and analytics issues and provide solutions.

Essential Selection Crit

- Prov

that will be

ering activities to deliver effective
porting and analytics services.
tively engage relevant stakeholders in the development of fit for purpose visualisations.
- Work with application support teams to ensure that proposed solutions promote efficiency and effectiveness, and follow the principles of continuous improvement.
- Assist with ongoing reporting and analytics issues and provide solutions.

Essential Selection Criteria:

- Proven track record of agile delivery.
- Efficient problem solver that works effectively as part of a team.
- Ability to mentor and be a thought leader to others.
- Exceptional interpersonal and customer relationship skills.
- Comfortable working with raw data sets as part of data discovery.

Desirable Selection Criteria:

- Demonstrated ability to design appropriate visualisations that accurately represents the data and provides answers to specific and relevant questions.
- Relevant development experience in the iron ore industry.
- Bachelors and/or Master's Degree in Computer Science, Information Technology, Mathematics or Engineering.

If you meet the requirements for this position and would like to play a key role in the landmark Roy Hill Project, please apply online now. **Applications will close on 17th April 2017.**

Roy Hill is an Equal Opportunity Employer and encourages cultural diversity, gender equality and non- discrimination. To be eligible to apply for this role you must be legally permitted to work permanently in Australia.

Please note that unsolicited applications from recruitment agencies will not be accepted.

LEAD I CARE I THINK I PERFORM
careers.royhill.com.au

CRICOS Provider Code: 00126G DCS000082

The careers of the future count on maths.

75% of the fastest growing jobs in Australia require maths and stats on a daily basis.

A diverse range of industries now count mathematicians as their most valued employees.

With UWA's flexible course structure, you can combine your passion for maths with your interests in just about any industry. You'll enter the work force with more than just a maths degree; you'll possess the critical skills that employers value most.

The possibilities are endless.

studyat.uwa.edu.au/mathematics

THE UNIVERSITY OF WESTERN AUSTRALIA

ENGINEERING

Set the wheels in motion ...

Lee Turnley

COMPOSITE RESEARCH ENGINEER AT BOEING RESEARCH AND TECHNOLOGY AUSTRALIA

USE YOUR MATHEMATICAL PROBLEM SOLVING SKILLS to design and implement tomorrow's technological breakthroughs from energy and power to technical support and information technology.

Lee Turnley has a double degree in Engineering and Science (Biotechnology) from Swinburne University and is a composite research engineer at Boeing Research and Technology Australia. She has also been selected to participate in Boeing's fast-track management development program.

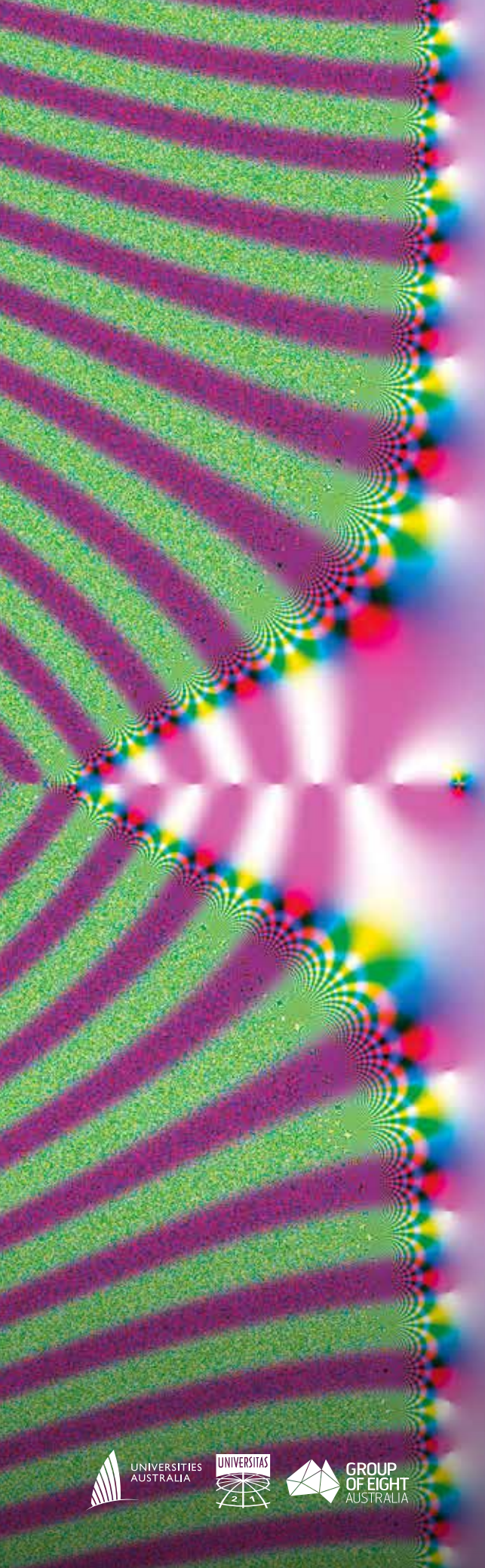
I think my Year 11 Chemistry teacher helped grow my love of the sciences. She had previously worked in industry so had a lot of great stories about being a science graduate and work life. I found it so exciting and could see a lot of myself in her.

I ended up studying a double degree in Engineering and Science (Biotechnology) and am now a Composite Research Engineer for Boeing Research and Technology Australia.

Maths is behind everything we do, from designing, analysing and building the next generation of carbon fibre aircraft parts and testing new materials to introducing automation (robotics) within the factory and building developmental test articles.

Aerospace and engineering is still very male dominated but it is improving as attitudes change. Every year I see more women around Boeing, and this year we have three female interns. It is great to see more girls sticking with science and maths and coming through University and into the workplace.

Lee Turnley is an ambassador for the CHOOSE**MATHS** *Careers Awareness Campaign - choosemaths.org.au*



Pursue your passion for Mathematics at UQ

The University of Queensland offers the broadest range of specialisations across mathematics and statistics in Queensland.

A UQ degree could be your stepping stone to a career in mathematics, statistics, actuarial studies, quantitative finance, meteorology or teaching. But it's more than that. With your critical, analytical and abstract thinking skills you will be in demand from employers across a range of sectors including economics and business; engineering; the physical and life sciences; and operations research and big data analytics.

Access UQ's broad range of courses in pure mathematics, applied mathematics and statistics through the Bachelor of Mathematics, or with a mathematics or statistics major in the Bachelor of Science, the Bachelor of Advanced Science (Hons) or the Bachelor of Arts. Expand your options even further by combining your advanced mathematics studies with economics, commerce, engineering, education, information technology or a science in a dual program.

Develop your critical, analytical and abstract thinking skills in classes taught by world class researchers and participation in industry projects, research-based courses, and an active student society.

Further information:
https://future-students.uq.edu.au/

Image: The vertical series of white dots in the image show zeros of the Riemann zeta function. The proof that these lie perfectly on a line continues to elude mathematicians, and is key to understanding some fascinating properties of prime numbers.

UNIVERSITIES AUSTRALIA
UNIVERSITAS 21
GROUP OF EIGHT AUSTRALIA

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

Create change

CRICOS Provider Number 00025B

ENGINEERING

CHANDLER MACLEOD
MINING & ENERGY

Process Engineer/ Analyst

- **Leading Australian Iron Ore Mining Company**
- **Temp role 6 months - Perth based**
- **Immediate Start**

Our client, a leading Australian Mining Company is in need of a process engineer/analyst for a contract based role for a 6 month period to begin with to perform a time and motion study for Plant Controllers.

You will be required to work Monday -Wednesdays 12 hr days and Thursday 8 hour duration each week.

The Time and Motion study will include collection of data and analysis of plant controller activities to look at process improvement using control system or other systems.

Key requirements are:

• A continuous focus towards zero-harm

• A degree qualification in metallurgy, mineral processing or chemical engineering and data analysis capability

• Substantial iron ore processing plant (process and control system) understanding

• Strong operational acumen

• Ability to quickly build good report with Controllers (On site and Head Office)

• Modelling and statistical packages knowledge

• A proven ability in achieving continuous improvement initiatives

• Strong communication, interpersonal & facilitation skills

• Self-motivated, results focused and team orientated

If you have the relevant qualification, Time and Motion Study experience, requirements listed and have a strong safety focus please apply now direct online now

Ref No. 183699A

jobs.chandlermacleod.com

PLAN | SOURCE | ASSESS | DEVELOP | MANAGE

Data Analysis, Modelling, Statistics

2017/18 INTERNSHIP PROGRAM

The RBA Internship is an excellent opportunity for high-achieving students to get first-hand experience of working in Australia's central bank.

The RBA is looking for a high level of analytical skill and a genuine interest in working for an institution that has an effect on the lives of all Australians. Applications are accepted from third-year (or equivalent) students majoring in mathematics and statistics, economics or finance who intend to complete honours or similar research-based programs.

The RBA offers successful candidates a paid eight-week work placement over the summer. As an intern you will be supported as you undertake project work that culminates in a research paper that is presented to your peers and senior staff.

During your placement, you will attend targeted training as well as interactive information sessions designed to provide you with a more comprehensive understanding of the role of the RBA.

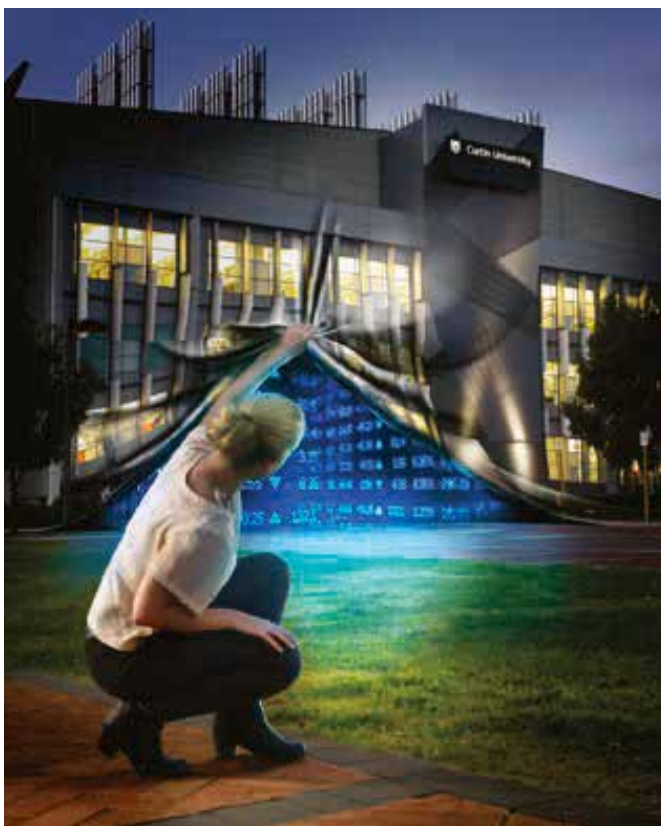
Interns may also be offered a place on the Graduate Development Program, which commences the following year. Interns who accept a graduate offer will be provided with financial support during their final year of study.

Applications open 20 February 2017 and close 4 May 2017 (or earlier if all places have been filled). Strong candidates may be invited to undertake online skills tests immediately. Interviews will commence as suitable candidates are identified and offers made on a rolling basis throughout the application period.

Applicants must hold Australian citizenship or permanent residency at the time of application.

For more information or to apply, visit careers@rba.gov.au.

RESERVE BANK
OF AUSTRALIA



An actuarial science or maths degree at Curtin reveals a whole new world.

Are you a critical thinker who enjoys challenges such as modelling and solving real-world problems or calculating risks? Do you want to use your analytical and computational skills to help change the future of global organisations? Then turn your passion into a career with a science degree majoring in:

- Actuarial Science
- Data Science
- Financial Mathematics
- Industrial and Applied Mathematics

Our courses will equip you with the expertise you need to deal with an increasingly technological world.

Visit scieng.curtin.edu.au/science

Make tomorrow better. Curtin University

CIRCOS Provider Code 00301J.

2633SE

FINANCE

Not just for commerce graduates

Murray David Neuzerling

LA TROBE UNIVERSITY PhD STUDENT

THE USE OF SOPHISTICATED QUANTITATIVE TECHNIQUES has become the norm in the financial sector. As a consequence, graduates trained in mathematics and statistics are in high demand across the sector, including accounting, banking, and the investment and insurance industries.

Last year, La Trobe University PhD student Murray David Neuzerling took his first steps toward a career in big data with an AMSI Intern placement at ANZ. While his research has been in pure mathematics, his move into big data involves a career shift into statistics.

I'm a mathematician, through and through. I fell in love with the subject in the second year of my undergraduate degree, when I learnt about different "sizes" of infinity. There's a depth and beauty to the subject that can get lost in memorising formulas, but it's there.

Statistics is a field of mathematics, so I consider the jump to be quite small. I saw a need for data scientists in the market, and I saw that gap as a way for me to turn my love of mathematics into a career.

Sure, I needed to learn new mathematical techniques, but that's what I've been doing for the past eight years!

It's a myth that universities can or should produce "job-ready" candidates. Academic study doesn't equip students for stakeholder engagement or with the skills to present the same material to different audiences with differing perspectives and levels of mathematical knowledge.

The opportunity to work with ANZ has opened the door for me to turn my passion for data science into a career. My internship has taught me essential skills, such as how to consult on a business problem and distil it into a question solvable with statistical techniques. It provided exposure to environments where I can develop these soft skills, although I imagine it will take many years to become expert at them.

Murray Neuzerling completed an internship with ANZ in 2016 through the AMSI Intern program - amsiintern.org.au

THE UNIVERSITY of ADELAIDE

Create and innovate with Mathematics at Adelaide

Learn mathematics, the universal language to describe, model and understand today's complex world.

Creativity and innovation

With mathematics you can play a vital role in tackling real-life issues, in Australia and beyond.

You will be prepared for rewarding and flexible careers in diverse areas such as finance, cyber security, health and data science, as well as fundamental research.

Study with us

Bachelor of Mathematical Sciences

Bachelor of Mathematical Sciences (Advanced)

Bachelor of Mathematical and Computer Sciences

The University of Adelaide

We are ranked in the top 1% of universities worldwide.

Learn from our passionate lecturers and world-leading researchers in Pure Mathematics, Applied Mathematics and Statistics.

Our graduates are highly regarded for their creativity, problem solving abilities and research skills, and are sought after by a wide range of employers.

School of Mathematical Sciences

facebook.com/MathsUOA

twitter.com/MathsUOA

For further information visit ua.edu.au/maths

CRICOS Provider Number 00123M 2451-10

FINANCE

Risk Model, Analysis, Mathematics, Statistics, Quantitative Modelling, Problem Solving, Analytical Skills, Numerical Skills

Principal Statistician

- One of Australia's leading general insurers
- Flexible working environment
- Career development opportunities

About Us

IAG is the largest general insurance group in Australia and New Zealand, with a growing presence in Asia. IAG owns some of the region's most trusted brands, including NRMA Insurance, CGU, SGIO, SGIC, WFI and Swann Insurance.

At IAG, we believe that everyone has a unique point of view to share, shaped by their life experiences, cultures & passions. We celebrate and commit to:

- #Proud to be me – we value difference, not sameness
- #Together – harnessing our collective wisdom enables us to bring our best for our customers & each other
- #No boxes – it's not about labels, boxes or categories, rather it's about building a diversity, inclusion & belonging mindset into everything we do

In addition to a diverse and inclusive culture, some of our benefits include 13% superannuation, 50% insurance discounts, flexible work and leave options, generous parental leave and return to work program, recognition and reward program, and various corporate partner discounts. Visit our website to find out more www.iag.com.au.

The Role

We currently have an opportunity for a Principal Statistician to join our Natural Perils division located in Sydney on a full time basis. This will be a lead role in the statistical and scientific modelling of weather, climate and other natural perils risks in Australia, New Zealand and other regions, for the purposes of reinsurance modelling, risk-based pricing, major event support, and reinsurance claims settlement.

- Lead the technical development of natural perils risk models, with an emphasis on weather and climate perils, for both reinsurance and risk-based pricing applications
- Deliver technical pricing results to IAG business units, and collaborate with stakeholders on their implementation within pricing engines
- Identify and solve outstanding analytics problems within the reinsurance area
- Mentor, train, and manage team members to fulfil the objectives outlined above
- Liaise and collaborate with the domestic and international scientific community, to address critical IAG knowledge gaps

Keys skills and experience required

- Broad, expert-level knowledge of modern applied statistics, including spatial statistics, exotic regression models, and statistical computation.
- Broad, expert-level knowledge of weather and climate science.
- Ability to locate, access and manipulate climate and weather data.
- Expertise in computational data analysis (R, Matlab, SQL, parallel computation, etc.)
- Extensive (>5 years' post-master's degree) interdisciplinary and collaborative research experience in applied statistics, and weather, climate or other peril science
- Extensive research-level experience applying computationally intensive data analytic techniques to weather and climate data, in order to arrive at actionable results.
- Experience leading research initiatives.
- Experience in a mentorship and/or teaching role.

How to Apply

To submit your interest in this role, please click the 'Apply' button below or contact 02 9292 3438 for a confidential discussion.
For more information visit www.iag.com.au/careers.

Statistical Modelling, Risk Models, Applied Statistics, Spatial Statistics, Regression Models, Statistical Computation, Problem Solving, Computational Data Analysis, Analytic Techniques

Model Validation Analyst

Risk Model Validation Analyst

- Exciting role in a specialised team
- Significant future career prospects
- Adelaide based

The Bendigo and Adelaide Bank Group provides banking products and services to the Australian community. As part of our journey toward Basel II advanced accreditation, an exciting opportunity has become available to join our Risk Model Validation team as a Risk Model Validation Analyst.

The Risk Model Validation team sits within the Group Risk Division of the Bank to deliver independent validation requirements across multiple risk streams, including in support of Basel II Advanced Accreditation.

Reporting to the Senior Manager Model Validation, the Risk Model Validation Analyst will be responsible for helping to maintain, improve and execute the Bank's risk model validation framework, standards and processes. This will include supporting the analysis, validation and reporting of risk model performance such that management can have confidence in the level of model risk to which the organisation is exposed.

Key responsibilities will include, but are not limited to:

- Supporting the maintenance and execution of risk model validation processes, and providing input into ongoing development and refinement of risk model monitoring, validation and reporting frameworks and methodologies;
- Oversight of ongoing risk model monitoring and reporting;
- Ongoing management and maintenance of the Risk Models Inventory
- Administrative support for the Risk Models Committee, which provides advice and recommendations to Risk Management and Board committees for all APRA Regulatory Risk Models and Risk Management Decision-Making Models;
- Supporting risk model validations consistent with APRA and Basel II advanced accreditation guidelines and industry leading edge techniques.

To be successful in this role, you will hold a degree specialising in mathematics, statistics, econometrics, operations research, actuarial science, computer science, commerce and/or banking & finance. Strong computer literacy is essential, and experience in a quantitative/analytic environment is highly desirable. Your strong communication skill and ability to engage and influence at senior levels will also be a key selection criteria.

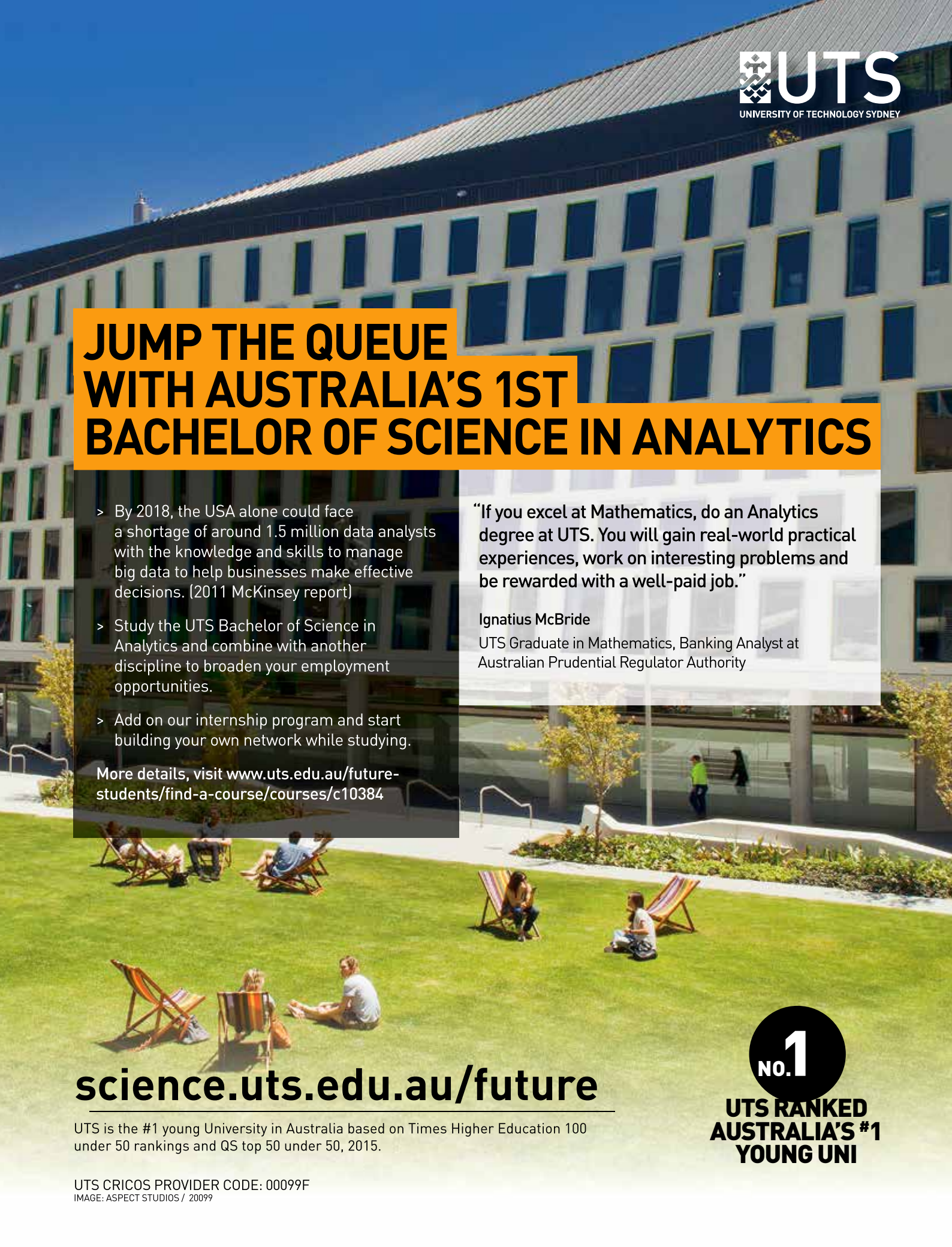
Desirable skills include:

- Basic knowledge of financial products and/or quantitative modelling in the financial industry.
- Proficient in mathematics and statistics with a basic awareness of risk model management.
- Ability to work both independently and in a team-orientated, collaborative environment is essential.
- Solution and outcome focused, with a high degree of quality, accuracy and attention to detail.
- Strong analytical, numerical, research and problem solving skills.
- Well developed interpersonal, written, oral and presentation skills.
- Ability to execute tasks effectively in a high profile and high-pressure environment is crucial.
- Highly proficient in MS Office applications.
- Above average computer skills, including SAS / SQL / VBA / Matlab programming skills, or an ability to attain within a short time-frame.

Experience preferred:

- Experience drafting reports and presentations for senior management
- Previous experience in financial services working on risk, capital, pricing and/or cash flow models.
- Experience/exposure to database software and/or database query tool such as SAS, Microsoft SQL, Oracle, MS Access and etc.

If you believe you would be a great fit for this role, apply now



UTS
UNIVERSITY OF TECHNOLOGY SYDNEY

JUMP THE QUEUE WITH AUSTRALIA'S 1ST BACHELOR OF SCIENCE IN ANALYTICS

- By 2018, the USA alone could face a shortage of around 1.5 million data analysts with the knowledge and skills to manage big data to help businesses make effective decisions. (2011 McKinsey report)
- Study the UTS Bachelor of Science in Analytics and combine with another discipline to broaden your employment opportunities.
- Add on our internship program and start building your own network while studying.

More details, visit www.uts.edu.au/future-students/find-a-course/courses/c10384

"If you excel at Mathematics, do an Analytics degree at UTS. You will gain real-world practical experiences, work on interesting problems and be rewarded with a well-paid job."

Ignatius McBride
UTS Graduate in Mathematics, Banking Analyst at Australian Prudential Regulator Authority

science.uts.edu.au/future

UTS is the #1 young University in Australia based on Times Higher Education 100 under 50 rankings and QS top 50 under 50, 2015.

NO.1
UTS RANKED AUSTRALIA'S #1 YOUNG UNI

UTS CRICOS PROVIDER CODE: 00099F
IMAGE: ASPECT STUDIOS / 20099

FINANCE

Quantitative Analysis, Quantitative Risk, Modelling, Mathematics, Statistics

Analytics, Risk Models, Analysis, Statistical Modelling, Risk Analytics, Data Analysis, Mathematics, Modelling, Numerical Algorithms, Statistics

TalentWeb

Quantitative Analyst

The risk and analytics team provides quantitative capabilities supporting global risk management and data management which develops a consistent set of risk and capital models that drive the organisations tech infrastructure.

The Quantitative Analyst plays a pivotal role within the risk portfolio which driven by accurate analysis, statistical modelling and risk analytics.

Responsibilities

- Develop price verification, capital or stress test models
- Provide ongoing testing and support for existing models
- Facilitate identification of problem areas through data analysis to minimise risk
- Produce clear and coherent technical documentation for internal and regulatory purposes
- Report and escalate compliance concerns, issues and failures
- Continue to support business improvement for reviews, development of risk report and analytical tools

About you

- Excellent understanding of mathematics, modelling and numerical algorithms
- Good knowledge of statistics and time series analysis is highly desirable
- Strong programming skills and experience with SAS in particular
- Tertiary qualification in Statistics, Mathematics, or Actuarial
- Knowledge of financial services or insurance industry highly desirable

Apply via Seek

talentweb.com.au

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Sydney
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E. info@talentweb.com.au

Senior Quantitative Analyst

My client, a leading Financial Services organisation, seeks a **Senior Quantitative Analyst** to join its team in the Sydney CBD. This role, reporting to the Senior Manager of Quantitative Risk, will be responsible for the development and implementation of derivative pricing models in addition to managing data and processes to estimate and report on risk exposures faced by the organisations' counterparties.

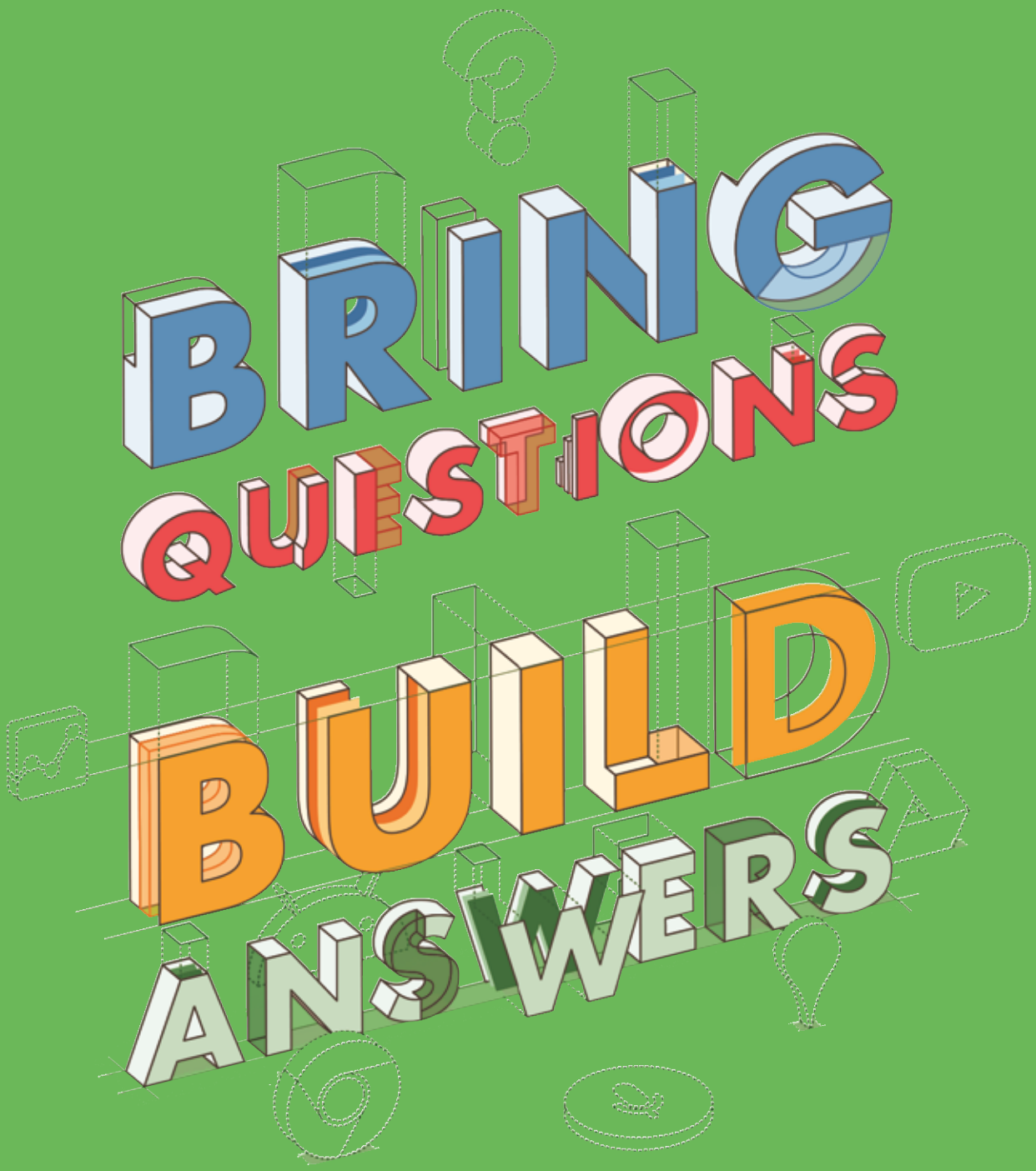
The primary responsibilities of the role are:

- Model development and stress testing.
- Instrument valuation and pricing across all Equities and Fixed Income products (Exchange Traded and OTC)
- Maintenance of existing models
- Concentration and liquidity risk analysis
- Development of code for risk models (predominantly in C#, R and SQL)
- Contribute to the development of Stress Testing methodologies.
- Assist and contribute to key projects in the organisation.

Who we're looking for:

- 5+ years in a Quant/Risk role
- Educational background in Mathematics, Econometrics, Statistics or other highly numerate field.
- Strong understanding of Derivatives
- Exceptional knowledge of Equities and Rates products
- Strong coding experience in C++, C#, Python, R or SQL
- Experience working on a trading floor highly regarded
- Excellent stakeholder engagement skills.

On offer is a chance to join a well known and very well respected organisation with exceptional career growth potential.



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GOVERNMENT

Make a difference

Cassie Pennicuik

PROGRAM MANAGER AT THE COUNTRY FIRE AUTHORITY (CFA)

GOVERNMENT DEPARTMENTS AND AGENCIES REQUIRE personnel of the highest quality to make important decisions affecting the everyday lives of average Australians. Maths and stats prepares graduates to become analytical thinkers highly suited to this work. Statistics even has its own government agency—the Australian Bureau of Statistics—providing statistics on social and economic matters used by state and federal governments and the community.

In her role as Program Manager at the Country Fire Authority (CFA) Cassie Pennicuik is dedicated to improving the CFA's community service delivery through the introduction of more fire fighters, emergency appliances and new and modified stations.

At the CFA, I manage both the Project Management Office and one of the largest projects at CFA. This project has a large and complex budget dedicated to improving the CFA's service delivery to the community through the introduction of more fire-fighters, emergency appliances and new and modified stations. The role requires careful and robust planning.

Maths has equipped me to drive process-focused problem solving while using my planning skills to break down complex problems and support organisational management of timely and cost-effective solutions.

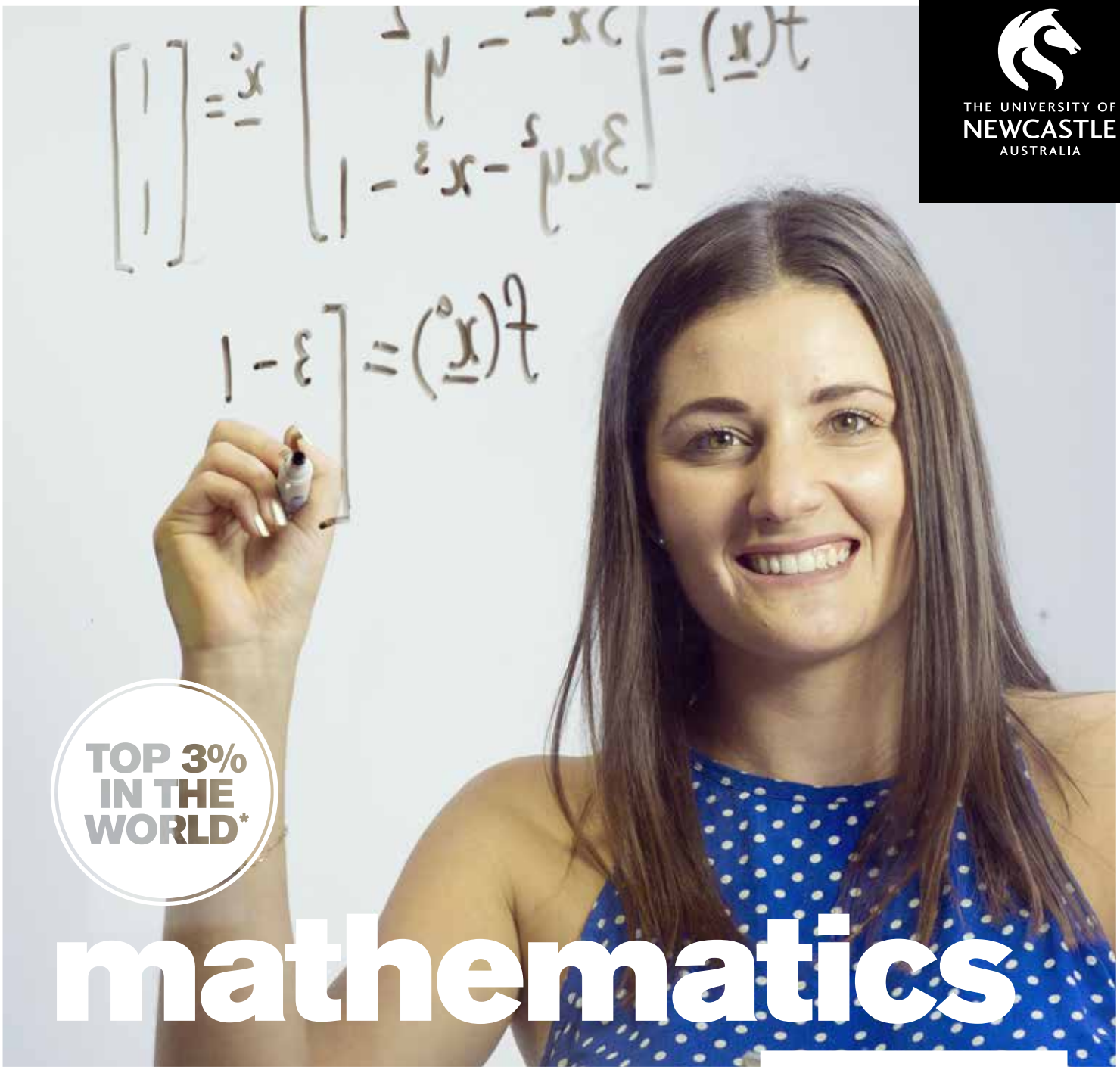
As well as research skills, my studies provided the scientific knowledge to communicate complex technical concepts and issues to broad audiences.

These skills are critical when facilitating stakeholder-brainstorming sessions or helping teams meet deadlines or goals through logic and organisation, rather than chaos. Maths is a fantastic base for so many careers, with the transferrable skills it provides.

Being younger and being female has at times had its challenges, but I work hard to be recognised on my merit, and believe that my work will speak for itself. I don't hesitate to put myself forward for something I am interested in – on the soccer field or in my career – I don't mind what was done before me or what stereotypes I might challenge. I believe in trying to make everything I work on better than how I found it.

Cassie Pennicuik is an ambassador for the CHOOSE**MATHS** *Careers Awareness Campaign - choosemaths.org.au*

THE UNIVERSITY OF NEWCASTLE AUSTRALIA



TOP 3% IN THE WORLD*

mathematics

STUDY A BACHELOR OF MATHEMATICS AT THE UNIVERSITY OF NEWCASTLE

The University of Newcastle offers one of the few specialised Bachelor of Mathematics programs available in Australia. Our leading academics contributed to our university being ranked among the top in the country for applied mathematics in the 2015 Excellence in Research for Australia rankings, as well as being ranked in the top 300 in the world according to the 2015 QS World subject rankings**.

Without maths, interpreting the real world would not be possible. Mathematics is the language of science and underpins most technological advances that we rely on every day. It enables modern society to operate more efficiently, to invent new technologies and to understand and modify the world around us.

According to a 2014 CareerCast study, the job with the best growth prospects is a mathematician, which has a projected career growth of 23% by 2022.

Mathematics is both a rewarding and engaging field to work in with graduates finding employment in education, government agencies, top tier firms and research roles.

Studying a Bachelor of Mathematics at the University of Newcastle will give you essential skills and knowledge in logic, mathematical modelling, experimental design and data analysis.

Find out more **newcastle.edu.au/mathematics**

*Times Higher Education World University Rankings 2015 and QS World University Rankings 2015 ** QS World University Subject Rankings 2015

GOVERNMENT

Statistics,
Statistical Skills

Quantitative Analysis,
Modelling, Statistics

Quantitative Analyst and Economic Modeller

Independent Competition and Regulatory Commission

Administrative Services Officer Class 6 to Senior Officer Grade B
Salary Range: $78,644 - $131,229 (PN: 33070)

The Commission is seeking a person with quantitative expertise for the role of Quantitative Analyst and Economic Modeller to support a small economic regulation team. The successful candidate will need to have well developed skills in excel spreadsheets and the use of macros ideally in the development and use of building blocks models, expertise to program in the R language, and specialist training and relevant experience in statistics or econometrics.

Note: This is a temporary position available for a period of 12 months, with the possibility of extension and/or permanency from this process. This position will be filled at either the ASO6, SOGC or SOGB level, dependant on the skills and experience of the successful applicant. Applications are advised to address the selection criteria.

For further information, please visit www.jobs.act.gov.au

Applications Close: 13 March 2017

Australian Bureau of Statistics

General Manager Industry Statistics, Senior Executive Service Band 2

You will strategically lead the Industry Statistics Division through a significant period of transformational change. This role requires someone who will deliver high quality, timely economic statistics that inform discussion and decision making in government, community and private industry.

You will also play a key role in partnership with the Deputy and other general managers in prioritising the statistical program, in transforming economic statistics while delivering the agreed work program on time, on budget and to the specified level of quality, while building people capability and fostering the next generation of ABS leaders.

Economic or statistical skills, and/or private sector or senior level public sector policy or program experience would be beneficial.

Senior Executive roles are generally located in the ABS Canberra Office, however our office locations and flexible work arrangements (including part-time) offer a range of prospects for candidates based outside Canberra noting that travel to Canberra would be required on a regular basis. Consideration will be given to candidates wishing to move on a temporary basis.

For further information about this role please contact: NGS Global on 1300 138 863 or +61 3 8626 0600

PURE CLASS

Researchers in the Mathematical Analysis and Modelling Research Group at UNE solve problems in both pure and applied mathematics. They develop theoretical techniques through analytical as well as geometric and algebraic tools. It's a satisfying way to use a true language of science to model complex real life conundrums.

At UNE you can learn from, and alongside, teams of dynamic researchers and experienced lecturers in mathematics and statistics. If you are inspired by geometry and numbers, or wonder about the population dynamics of cane toads, let's talk. You could be the head of the next wave of Australian mathematicians.

une University of New England

School of Science and Technology

une.edu.au/maths
Assoc. Professor Gerd Schmalz:
schmalz@une.edu.au

Australian Bureau of Statistics

Unleash the power of statistics for a better Australia

Statistics play a key role in helping us understand the economic, environmental and social issues that drive social disadvantage.

As Australia's national statistical agency, the Australian Bureau of Statistics (ABS) delivers high quality and timely official statistics, providing insight to inform decisions on issues of importance to Australia.

Each year, the ABS seeks to employ highly skilled graduates, who are passionate about contributing to the future shape of our nation through enabling informed decision-making. The ABS is Australia's official statistical agency and as an ABS Graduate, you will join a world leader in its field.

Within the ABS, the Methodology Division (MD) provides the expertise on methods relating to the design, collection, compilation, analysis, dissemination and management of statistical data. MD uses innovative and relevant research to continually improve ABS' methods and approaches, and support the statistical areas of the ABS in implementing best practice in their data collections and data analysis.

The ABS Graduate Development Program will provide you with:

- A structured and tailored curriculum that will assist you to transition into the ABS and the Australian Public Service;
- The opportunity to utilise your degree and encourage you to expand your existing knowledge and skills;
- Enhanced statistical capability including an understanding of the statistical cycle and associated processes.

The ABS encourages and values a diverse workforce.

The Australian Public Service (APS) offers you a diverse range of challenging roles and the opportunity to make a major contribution to the public service.

Find out more about how our services can help you unleash the power of statistics, visit **www.abs.gov.au** or contact our National Information and Referral Service on **1300 135 070**.

GOVERNMENT

onpoint 365 recruitment

R&D Grant Assessment Officer

Mathematics, Statistics

Our Federal Government client has contract positions available for 6 months initially with the option to extend in Grant Assessment for an R&D incentive scheme.

The Role
Be part of a national network which is responsible for delivery of the Government's largest program supporting innovation. Under the integrity assurance framework for the program the team conducts formal eligibility assessments (Findings), engages stakeholders.

The Duties
In this role you will:

- Analysis of R&D activities, business information including proposals, business plans, R&D plans, industry and market data
- Assessing the eligibility of registrations for programme support, analysing applications for merit against the legislative requirements and making recommendations supported by evidence
- Understanding the needs of individual businesses and making recommendations of appropriate support and advice; providing guidance on how to access the programme.
- Proactively engaging with businesses and stakeholders

Mathematics, Analysis

To succeed, you will:

- Be inquisitive
- Take personal responsibility for managing your work and achieving required outcomes
- Be flexible and able to deal with competing priorities while maintaining quality
- Ability to build positive working relationships
- Well developed research and analysis skills with the ability to reach evidence based conclusions
- Relevant qualifications e.g. Science, Technology, Engineering, Mathematics (STEM) or Business
- High level communication skills - written, verbal - able to present information and recommendations clearly and concisely; ability to present confidently and get your message across.
- An understanding of business, an ability to identify and respond to business needs. You will be passionate about making a difference for business

To Apply:
If you are looking to step into a rewarding role where you can directly see your impact, click the apply button or call on 1300 111 365 for a confidential discussion.

If this job isn't quite right for you but you are looking for a new position, please contact us for a confidential discussion on your career.

onpoint is a national recruitment and technology services company. Our committed and talented professionals connect world class talent to clients, IT and business consulting services.

onpoint is committed to all forms of workforce diversity and we invite and encourage applications from diverse backgrounds, and particularly Indigenous Australians.

onpoint365.com.au

onpoint 365 connecting people

APRA

- **Start your career with a view from the top of the financial services industry**
- **Ongoing training and development**
- **Brand new offices in Sydney CBD (Martin Place)**

2018 APRA Graduate Program

Kick start your career in the financial services industry with a unique perspective.

The Australian Prudential Regulation Authority (APRA) is the prudential regulator of the financial services industry. We oversee Australia's banks, credit unions, building societies, life and general insurance companies and reinsurance companies, friendly societies and most of the superannuation industry.

Apply your university knowledge to real-world situations, and acquire valuable, transferable skills at APRA. APRA offers graduates the opportunity to make a difference. With unmatched exposure to the Australian banking, insurance and superannuation industries. APRA presents a career kick-start, to help you advance your career further, faster. A

PRA invests in contemporary technologies to enable our employees to achieve work life balance, via flexible working practices. We are dedicated to cultivating a diverse and inclusive workplace that fosters collaboration and continuous improvement.

APRA is an affirmative action and equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, colour, religion, sex, sexual orientation, gender identity, national origin, age, or disability status.

For a role statement and to apply, visit www.aviewfromthetop.com.au

The closing date for applications is **Sunday, 2nd April 2017**. For further information or assistance, please e-mail recruitment@apra.gov.au. Please do not apply to this e-mail address.

Eligibility criteria:

- Australian or New Zealand Citizen or Permanent Resident
- Minimum credit average
- Degrees in Commerce, Business, Finance, Mathematics, Statistics, Law, Public Policy, Econometrics, Actuarial, Banking, Financial Modelling

Applications for this role are to be submitted via the APRA website. To apply, please click the 'Apply Now' tab below which will direct you to the APRA site.

www.apra.gov.au
Australian Prudential Regulation Authority

Australian Government
Bureau of Meteorology

If you love maths and science, **you could end up forecasting these...**

Severe thunderstorms threaten safety and damage property—our best protection is knowing they're on the way. If you have a background in mathematics, with a knowledge of differential equations, and some physics, you could be on the frontline—providing Australia's severe weather warnings as a meteorologist.

Find out more at **www.bom.gov.au/careers**

GOVERNMENT

Analysis, Data Analysis, Statistics

UNSW Global
AUSTRALIA

Never Stand Still

Senior Reporting and Analysis Manager

- **Newly created role – make it your own!**
- **Rosebery location**
- **Leading international assessment provider**

UNSW Global is a not-for-profit and wholly owned enterprise of The University of New South Wales (UNSW). EAA is our leading international educational assessment organisation specialising in large-scale assessment programs in Australia, South East Asia, India, South Africa, New Zealand and the Pacific region. EAA has been involved in educational measurement since 1967 and is the largest independent provider of school assessments in the region.

Due to company growth, this newly created role opens the possibility for a leading professional to join our prominent Educational Assessment team.

The Senior Reporting and Analysis Manager oversees the EAA Psychometric/Data Analysis and Reporting groups, undertakes statistical analysis and provides detailed measurement advice ensuing the technical quality of our brand in the market.

You will need to be proficient in designing and developing equating methodologies, contributing to research and the development and testing of new, high-quality computer-based assessment products.

Key necessities of this role include but are not limited to:

- A doctoral degree in educational measurement, statistics or closely related field. A Master's degree plus a minimum of four years relevant experience may be considered.
- Demonstrated experience in data analysis, statistics and psychometrics (including item response theory, scaling and equating) in paper and pencil as well as online testing environments.
- Competence in the use of SPSS, SAS or R and the ability to develop macros or functions in at least one of these programs.
- Competence in the use of IRT software.
- Ability to train and mentor others in the development of efficient data analysis processes.
- Experience working on government and/or commercial projects.

See our website www.unswglobal.unsw.edu.au/jobs/ for full details and follow the instructions to apply.

To be considered for this position you must provide the following:

- A CV detailing your qualifications and referees
- A cover letter
- A response addressing the selection criteria as outlined in the separate position description.

Please submit applications to jobs@unswglobal.unsw.edu.au quoting reference number **#327** by **Sunday 9th April 2017.**

The position description including selection criteria & information on 'How to Apply' is available from our website: http://www.unswglobal.unsw.edu.au/jobs.html

GOVERNMENT

Data Analysis, Statistics, Data Science, Mathematics, Analytics

VICTORIA State Government | Premier and Cabinet

Senior Data Analyst

An exciting opportunity exists for a senior data analyst to be part of the Victorian Centre for Data Insights – a dynamic new team at the Department of Premier and Cabinet (DPC).

The Victorian Centre for Data Insights will help transform the way the Victorian Government uses data to inform policy making and service design.

You will be passionate about working for the people of Victoria by helping the government achieve its strategic objectives.

You will have demonstrated experience in developing analytical products such as reports, dashboards or visualisations for a wide range of stakeholders, using tools such as SQL, R, Excel, Python, Scala, Power BI, Tableau, Qlik or ESRI.

You will have strong project management and service delivery skills.

Ideally, you will have a tertiary qualification in statistics, data analysis, data science, mathematics, epidemiology, actuarial sciences or equivalent demonstrated experience.

You will use your skills to perform a range of duties, including but not limited to:

- design, develop and build solutions for analytics projects
- identify, gather and use statistical information from a variety of sources to develop systems and data solutions
- develop and maintain effective relationships and networks across government agencies and external stakeholders, including with data custodians.

This is an excellent opportunity to use your skills and abilities to be part of a dynamic new team working to improve government policy planning and service design, for the benefit of all Victorians.

The closing date for this position is **Sunday, 9 April 2017**.

This position is only open to applicants with relevant rights to work in Australia.

How to apply:

All applications should include a resume, and a cover letter (not exceeding 2 pages), addressing the key selection criteria, unless stated otherwise.

Please refer to the contact on the Position Description if you have any questions regarding the job vacancy.

Other relevant information:

Employment of successful candidates will be subject to a National Police Check.

DPC is an equal opportunity employer and our recruitment process focuses on essential skills and abilities. We welcome applicants from a diverse range of backgrounds, including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse (CALD) backgrounds and people with disabilities.

DPC values its people and is committed to attracting, developing and retaining diverse talent. DPC actively promotes diversity and inclusion in the workplace and does not discriminate based on age, sex, carer or parental status, disability, race, religious belief, sexual orientation, gender identity or other characteristics.

DPC is committed to supporting our employees balance their work and life commitments. Flexible working arrangements give our employees more control over when, where and how they work. All roles at DPC can be worked flexibly, the types of flexibility may differ from role to role.

The Department of Premier and Cabinet's vision is to be recognised and respected leaders in whole-of-government policy and performance.

We work for the people of Victoria by helping the government achieve its strategic objectives. We do this by supporting the Premier, Deputy Premier, Special Minister of State, the Ministers for Aboriginal Affairs, Equality, Multicultural Affairs, Prevention of Family Violence, Veterans and Women, as well as the Cabinet.

Website: http://www.dpc.vic.gov.au

Statistical Consulting, Analytical Thinking, Data Management, Data Analysis

Manager, Education and Training Statistics

Established in 2000, the Social Research Centre is Australia's leading provider of social research services. We provide the social research community with access to world-class survey research and a full range of survey design, survey data management, statistical consulting, analytical thinking and qualitative skills. As a wholly owned subsidiary of the Australian National University (ANU), we enjoy unprecedented access to ANU researchers and ANU's world class research environment.

Leading a small team, this strategically important research role will be responsible for continuing to expand the Social Research Centre's presence and enhance our reputation in the broad area of education and training research.

The main focus of this position is to service established contracts with educational authorities, including the Department of Education & Training, the Education Departments in several States, the National Centre for Vocational Education Research and almost all higher education institutions across Australia.

Key Responsibilities:

As a lead expert in the area of collecting, processing and presenting data you will:

- Develop and implement data management models for the production and support of high quality data outputs from various data collection methods, mainly in the field of educational policy and evaluation;
- Process data for research analysis and prepare files to a standard suitable for lodgement with the Australian Data Archives;
- Ensure that inputs to and outputs from the data collection process are undertaken within a framework of continuous improvement and with a focus on maximizing both quality and efficiency;
- Support research staff and end-user clients in the execution of projects;
- Lead authorship of high quality and detailed research and analytical reports.

Key Selection Criteria:

- Tertiary degree in a relevant discipline or an equivalent level of expertise gained in a large and complex work environment
- Demonstrated advanced experience and knowledge of data analysis methodology and use of analytical tools and market research software such as SPSS, SAS as well as Microsoft Office (Word, Excel) and other software that is relevant to projects
- Demonstrated high level experience and skills to consistently produce high quality data outputs in a timely and effective manner, including a strong understanding of data manipulation and complex data structures
- Working knowledge of approaches to sampling and weighting
- Exceptional attention to detail with a real focus on quality with the ability to work independently and efficiently
- Demonstrated ability to produce high quality reports
- Sound time management skills and the ability to multi-task and meet tight deadlines are essential
- Experience working in the tertiary education sector and a knowledge of administrative collections such as HEIMS or AVETMISS is desirable

To apply and for more information

Please send your resume, cover letter, and responses to the selection criteria to: hr@srcentre.com.au. Applicants who do not address the selection criteria will not be considered.

Applications for this position will be accepted until 5:00pm (EST) on Wednesday 12th April 2017.

For more information or to see the Position Description, please contact our Human Resources department on (03) 9236 8500 or hr@srcentre.com.au. To be eligible for this position you must have full working rights in Australia.

Social Research Centre
An ANU Enterprise business

SWIN BUR NE

SWINBURNE UNIVERSITY OF TECHNOLOGY

STUDY MATHS

AT A UNIVERSITY RANKED IN THE TOP 200 INSTITUTIONS IN THE WORLD IN SCIENCE*

Swinburne's Bachelor of Science majoring in Applied Mathematics offers an opportunity to gain a broad understanding of the mathematical and numerical methods used to describe phenomena and predict behaviours in the everyday world.

Explore how to make sense of big data and complexity, and learn to model fundamental processes in physical and life sciences, industry, social sciences, consumer behaviour and finance.

Graduates are highly sought after for their excellent analytical ability and broad scientific skills. Career opportunities include data analyst, quantitative analyst, mathematical modeller, scientific programmer, actuary, meteorologist and climate modeller.

swinburne.edu.au/science **1300 275 794**

* 2016 Academic Ranking of World Universities

CRICOS: 00111D

HEALTH & SOCIAL SCIENCES

Of critical importance

Ben Waterhouse

DIRECTOR OF MODEL SOLUTIONS

MATHS AND STATISTICS IS CRUCIAL TO THE FUTURE OF OUR HEALTH – current and future healthcare heavily relies on the analysis of numerical data. From cancer research and epidemiology to modelling new drug treatments, this work is of vital importance and roles in this sector are varied.

Dr Ben Waterhouse is the owner of Model Solutions. As well as a combined Bachelor of Science and Arts majoring in Maths and German, he also has a PhD in Mathematics.

I was originally going to study a Bachelor of Commerce, but fate had other ideas when **my maths teacher advised commerce was a terrible idea and I should study maths**. A few months later, I started my maths degree. She was clearly very persuasive.

My first job after graduating from university was with a consulting company. I learnt an enormous amount from this experience, in particular how little I knew. Eventually I returned to university to complete a maths PhD. Not something I had ever really planned, **it turned out to be the best years of my life.**

After completing my PhD, I started Model Solutions. My company uses data every day to answer questions about pharmaceutical drug use. We work with clinicians, pharmaceutical companies and government agencies on a range of complex questions and problems within that sphere.

Our work varies from helping launch a new treatment or ensuring a drug is used in line with its approvals to writing an academic paper about how treatment of a particular disease is changing.

Business success requires a toolbox of different skills. As well as getting along with people, you need to be able to prioritise and execute different tasks and make decisions. Increasingly you also need the ability to both understand and critically interpret large volumes of data.

Ben Waterhouse is an ambassador for the CHOOSE**MATHS** *Careers Awareness Campaign - choosemaths.org.au*

Australian National University

> There are really great lecturers, enthusiastic tutors and excellent facilities at ANU.

Huon Porteous

Bachelor of Mathematical Sciences

The Bachelor of Mathematical Sciences is an elite, research-focused program for exceptional students who want to master quantitative problem-solving, mathematical modelling and critical thinking at Australia's highest-ranked university.*

A stream of advanced courses is available in the Bachelor of Mathematical Sciences from first year through to Honours. There are also opportunities to become involved in our world-class research programs at the best place to study maths in Australia.#

If you're torn between degree options, you can study this program as part of a Flexible Double Degree to extend your interests even further.

Find out more **maths.anu.edu.au**

* (QS World University Rankings 2016) # (QS World University Rankings by Subject 2017)

Why study mathematics at ANU?

- Ranked first in Australia for Mathematics#
- Research projects individually supervised by some of the best mathematicians in Australia.
- Classes among the smallest of Australia's top ranked universities.
- Wide choice of courses and research projects in pure and applied mathematics.
- Ability to combine our Bachelor of Mathematical Sciences with another degree from the ANU Flexible Double Degree options.
- Access to state-of-the-art computing facilities such as the National Computational Infrastructure supercomputer.

CRICOS#00120C | MO_CPMS171485

HEALTH & SOCIAL SCIENCES

Data Analytics, Analytics, Statistical Modelling, Mathematics, Statistics, Data Analysis

Customer Analytics and Reporting

- **Support our Donor and Lottery teams fundraising efforts**
- **Full time Monday to Friday position**
- **Based in Bowen Hills close to public transport**

The Surf Life Saving Foundation (SLSF) is the national fundraising body for Surf Life Saving in Australia. The Foundation manages a range of activities that raise much-needed funds to make our beaches a safer place for the millions of visitors our beaches get each year.

Based in Bowen Hills, you will work as part of a small but passionate team of people, all working to make a difference within the communities in which we operate, and supporting the front line volunteers that make our beaches safer for everyone. While we do work hard to achieve our goals, we know that it is equally important to enjoy our work and we have a great workplace to offer.

Our Values are:

- We inspire confidence by our actions
- We are driven to achieve results
- We invest in our people
- We are stronger together

We are looking for a person who ideally has 1 – 3 years' experience in a similar insight driven data analytics area with a focus on marketing analytics, statistical modelling preferably in financial services or related education and project work. Our workplace is lively, fun and fast paced, so it will suit someone that enjoys working with and around people.

You will work on multiple data related projects at any given point in time and be a detail oriented operator with a passion for marketing and analysing a business and its customer base to get the most out of future fundraising activities. The successful candidate will have strong experience with SQL, advanced Excel skills and a tertiary qualification in a relevant Mathematics, Engineering, Marketing, Commerce/Business, Actuarial Studies, or Statistics discipline. Proficiency in using "R" would be advantageous.

Responsibilities of this role include:

Reporting to the Customer Insights Manager (CIM) and with a primary focus of Donor and Lottery functions and associated activities, this role will support SLSF Revenue Managers and the SLSF Executive by providing:

- Regular and bespoke database selections for direct marketing and other supporter communications;
- Producing and developing regular and one-off reports on fundraising & commercial performance and effectiveness;
- Design and deliver analytical projects to inform fundraising & commercial selections and strategy; and, identify across the organisation opportunities to use reporting and analysis to drive improvement in foundation performance
- Maintain the integrity and security of SLS data and information.
- Assist with the implementation and coordination of campaign plans, segmentation and development
- Deliver campaign data accurately and on time in accordance with data briefs
- Apply all customer privacy and opt out rules in accordance with government requirements at all times and investigate customer complaints in regards to use of data
- Provide pre and post campaign analytics and reporting based on data accessed from CRM
- In response to briefs provided, produce timely, effective and accurate reports in relation to data analysis / identified trends as established with CIM and other SLSF Revenue Managers.
- Provide effective and timely assistance to CIM and SLSF Revenue Managers through the proactive identification and presentation of data trends, data analysis, data opportunities, organisation wide capabilities and further analysis and reporting opportunities using available IT tools and knowledge of industry best practices.
- Provide daily reporting and analysis on face-to-face recruitment tracking.
- Effective use of Geo-demographic (I.e. Mosaic) profiling tools to assist CIM and SLSF Revenue Managers.
- Monitor and report on all external data transfers as well as undertake regular and effective data health checks when required.
- Provide assistance to CIM by participating in the development of effective data selection and segmentation strategies and processes designed to improve response and return rates from SLSF supporters.
- Use customer data to build next best action and response predictive models and enhance customer segmentation
- Build interactive dashboards for SLSF Revenue Managers
- Effectively assist the CIM in the development and maintenance of current processes and documentation outlining methodologies and protocols in relation to all aspects of the use, security and reporting of SLSF data.
- Utilise a developed working understanding of SLS and SLSF business and activities (i.e.: Marketing, Operations, and Sales Channels) to assist SLS Fundraising & commercial objectives.

This is a fantastic opportunity to contribute to raising funds for a vital cause, and one of Australia's most iconic organisations. Please submit your resume and cover letter by clicking the link below.

You must have the right to live and work in Australia.

Applications close at 5pm on Monday, 13 March 2017.

Submissions from external recruitment providers will not be accepted. Thank you.

Biarri

Do you have what it takes to transform the most complex projects carried out by the largest companies around the world with maths?

Find out today.

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Australian Government
Department of Defence

AUSTRALIAN SIGNALS DIRECTORATE

Do you want a career in Mathematics that makes a difference?

statistics

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physics

cryptography

machine learning

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web: asd.gov.au/careers
email: asd.cryptd@defence.gov.au

RESEARCH

Everyday applications

Karlie Noon

MASTERS STUDENT IN THE FIELD OF ASTROPHYSICS

RESEARCH IS NOT CONFINED TO ACADEMIA – you can work for all sorts of innovative companies or industries. As a researcher, you solve problems, bring theory to life, and help others learn through your progress. Many popular research fields now require mathematicians to help interpret data, so you could end up working in medicine, biology, health or engineering – the only limit is your imagination.

Karlie Noon completed a double degree in maths and physics at the University of Newcastle. Currently she is researching for a Masters in the field of astrophysics.

Growing up, my school attendance was very poor and I struggled to stay engaged. In the end, I left school altogether in Year 8.

After two years at TAFE, I returned to school in Year 10. This time I was there by choice rather than force.

The first in my family to attend university, I was also the first Indigenous Australian in NSW to complete a double degree in Maths and Physics. While many see this as a remarkable achievement, for me it's the reverse – I should be the 500th! I want to lead the way for other Indigenous people and show they can achieve anything.

I am currently working on a theoretical astrophysics research project with the CSIRO. This aims to understand how stars are formed in the galaxy. Based on current knowledge the Milky Way is producing more stars than it should. I'm trying to explain why by identifying the source of the gas needed to produce them. This research requires the use of high volumes of data, programming and lots of maths.

The key is to believe in yourself and block out the judgements. Now I set goals for myself, and myself only, and I know I can achieve anything.

Karlie Noon is an ambassador for the CHOOSE**MATHS** *Careers Awareness Campaign - choosemaths.org.au*

UNSW SYDNEY | Australia's Global University

UNSW Sydney: Leading the way in Mathematics and Statistics

As a recognised leader in mathematics and statistics in Australia, we offer the widest spectrum of courses.

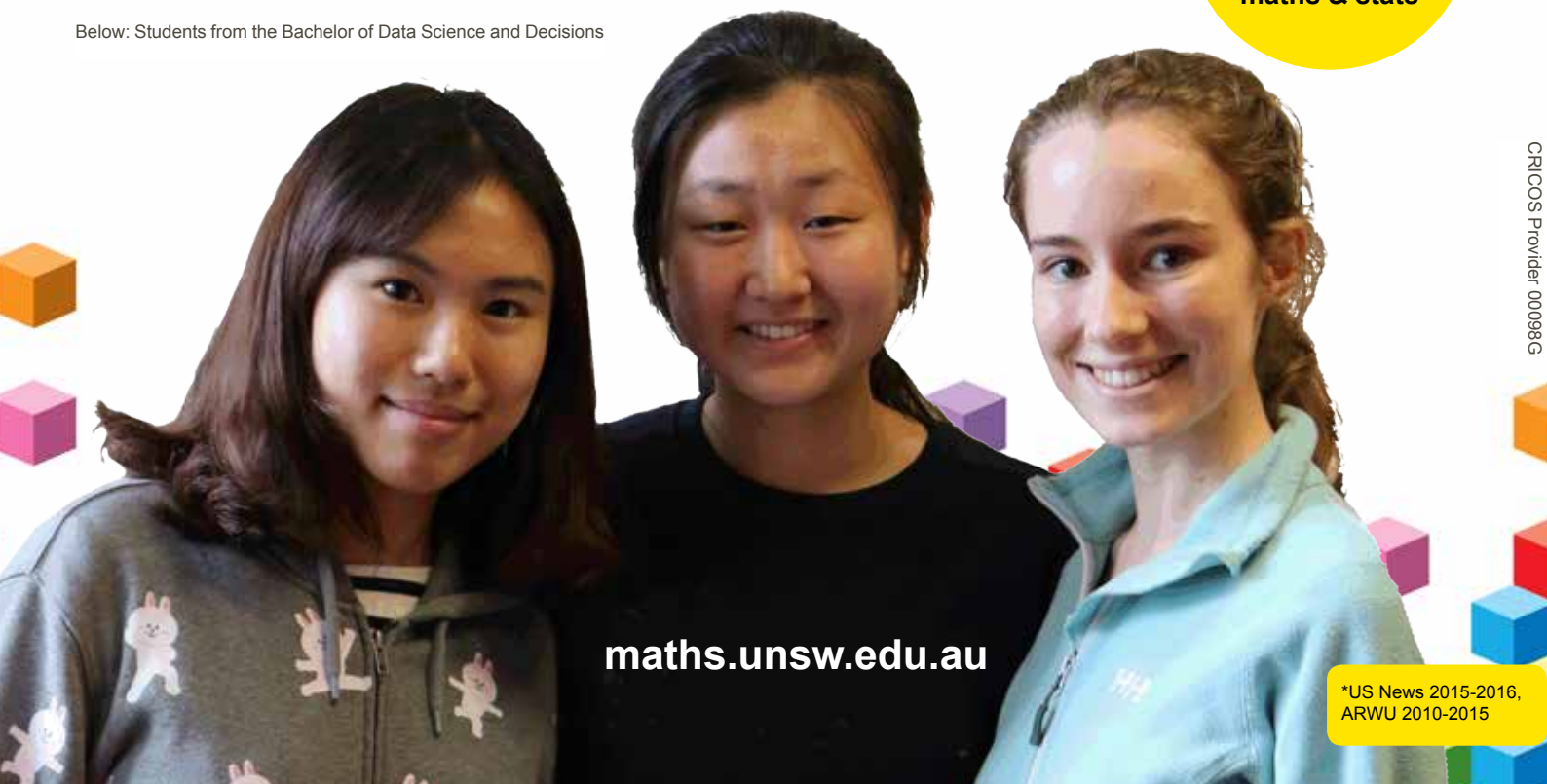
Our **Advanced Mathematics** degree is a premier program for talented maths students. Combining advanced coursework with an Honours-level research project, graduates will become capable of developing new maths, to add to core mathematical knowledge, or to solve important real world problems. It can also be combined with other disciplines – some of the most popular choices include Engineering, Actuarial Studies, and Commerce.

New in 2017, the **Bachelor of Data Science and Decisions** is a unique multidisciplinary program focused on mathematical methods, statistics, computing, business decisions, and communication. Taught across three different Schools at UNSW - Mathematics and Statistics; Computer Science and Engineering; and Economics - this program will train graduates to meet the growing demand for Data Scientists and Analysts nationally and internationally.

We offer a wide **range of scholarships**, such as Co-op Scholarships funded by industry partners, including Commonwealth Bank, the Reserve Bank of Australia, Macquarie Group, Solar Analytics, and PwC.

No.1*
UNSW is a national leader in maths & stats

Below: Students from the Bachelor of Data Science and Decisions



maths.unsw.edu.au

*US News 2015-2016, ARWU 2010-2015

CRICOS Provider 00098G

RESEARCH

Quantitative Methods, Statistical Methods, Biostatistics, Statistics, Statistical Analysis

Mathematical Sciences, Mathematics, Partial Differential Equations, Numerical Analysis, Functional Analysis, Computational Mathematics

Research Fellow (Mathematics)

Job No. 558647
Faculty / Portfolio: Faculty of Science
School of Mathematical Sciences
Location: Clayton campus
Employment Type: Full-time
Duration: 30 month fixed-term appointment
Remuneration: $81,486 - $87,471 pa Level A PhD (plus 9.5% employer superannuation)

- **Achieve at one of the top 100 universities in the world**
- **Where international collaboration is pursued**
- **Plenty of reasons to be inspired**

If you're after a rewarding career, Monash University can help make it happen. With leading academics and world-class resources, combined with a ranking in the top 100 universities worldwide, we offer all you need to build a brighter future.

The Opportunity

Candidates are sought for the exciting position of Research Fellow in Monash's School of Mathematical Sciences. The position requires experience in analysis of partial differential equations. Familiarity with any of the following is desirable: numerical analysis, functional analysis, elliptic and parabolic PDEs, flows in porous media, computational mathematics.

In this position, you will conduct research under the guidance of Dr Jerome Droniou. The research is conducted within an Australian Research Council Discovery Project on Discrete Functional Analysis for models of flows in porous media.

To be considered, you will have a PhD in mathematics or a closely related discipline, research experience in partial differential equations (theoretical or numerical aspects), proven ability to perform independent research, and the potential to publish in high quality journals.

This role is a full-time position; however, flexible working arrangements may be negotiated.

Your application must address the selection criteria. Please refer to "How to apply for Monash jobs"

Enquiries

School of Mathematical Sciences, sci-maths-jobs@monash.edu

Position Description

PD - Research Fellow (Mathematics)

Closing Date

Wednesday 15 March 2017, 11:55pm AEDT

Supporting a diverse workforce

MONASH University

ACU
AUSTRALIAN CATHOLIC UNIVERSITY

Research Fellow / Senior Research Fellow (Statistics)

- **Research design and associated quantitative methods**
- **Collaborate with the Built Environment research stream**
- **Full-time, fixed term (5 years) appointment, located in Melbourne, Australia**

Australian Catholic University (ACU) is an inclusive community which welcomes students and staff of all beliefs. ACU has over 2,500 staff supporting more than 34,000 students across seven campuses – Adelaide, Ballarat, Brisbane, Canberra, Melbourne, North Sydney and Strathfield.

As valued members of our community, all staff members are expected to have an understanding of ACU's **mission** and values and to demonstrate an active contribution to them.

The Institute for Health and Ageing (IHA) aims to enhance the lives of older people and those who support them by approaching issues of ageing through a positive, multidisciplinary lens across a range of settings including community, residential and acute care. IHA has grown rapidly in its first phase of operation, with a focus on creating teams of highly skilled research staff and practitioners whose work intersects with ageing.

Primarily responsible for conducting analyses for the International Physical Activity and the Environment (IPEN) projects, the Research Fellow or Senior Research Fellow will provide high-quality statistical inputs, and conducts research in statistical methodology aligned with research programs in environmental influences on active living and health. More specifically you will:

- enhance the development, design, analysis and reporting of designated research projects as a collaborative researcher
- conduct research in relevant statistical methods and produce conference and seminar papers and publications from that research
- participate in initiatives to enhance the competitiveness of funding submissions
- contribute to scholarly publication, and generate research and commercial funding for the Built Environment research stream.

In addition to a strong track record of high-quality publications, you will need to have:

- a PhD or relevant postgraduate qualification in biostatistics/statistics (preferred), epidemiology or quantitative psychology
- experience in the design and analysis of experiments and complex sample surveys (in biological, health or behavioural / social sciences)
- evidence of ability to show commitment with integrity to the Catholic Identity, Mission and ethos of the University
- exposure to established and novel methods for spatial and other correlated data couple with experience in statistical analysis packages and programming environments (particularly R, STATA and MPlus).

The University pursues an excellence agenda and offers an environment where staff are welcomed and safe, and valued through development, participation and involvement.

How to Apply:

Obtain the Position Description PD Research Fellow - Statistics.pdf. Applicants are expected to address all selection criteria listed in the position description. To apply for this role click the "Apply" link below.

Total remuneration valued to $110,847 - $130,747 pa, including salary component $93,667 - $110,590 pa (for Lecturer, Academic Classification Level B), OR $138,669 - $150,553 total remuneration pa, including salary component $117,361 - $127,518 pa (for Senior Lecturer, Academic Classification Level C), plus employer contribution to superannuation and annual leave loading.

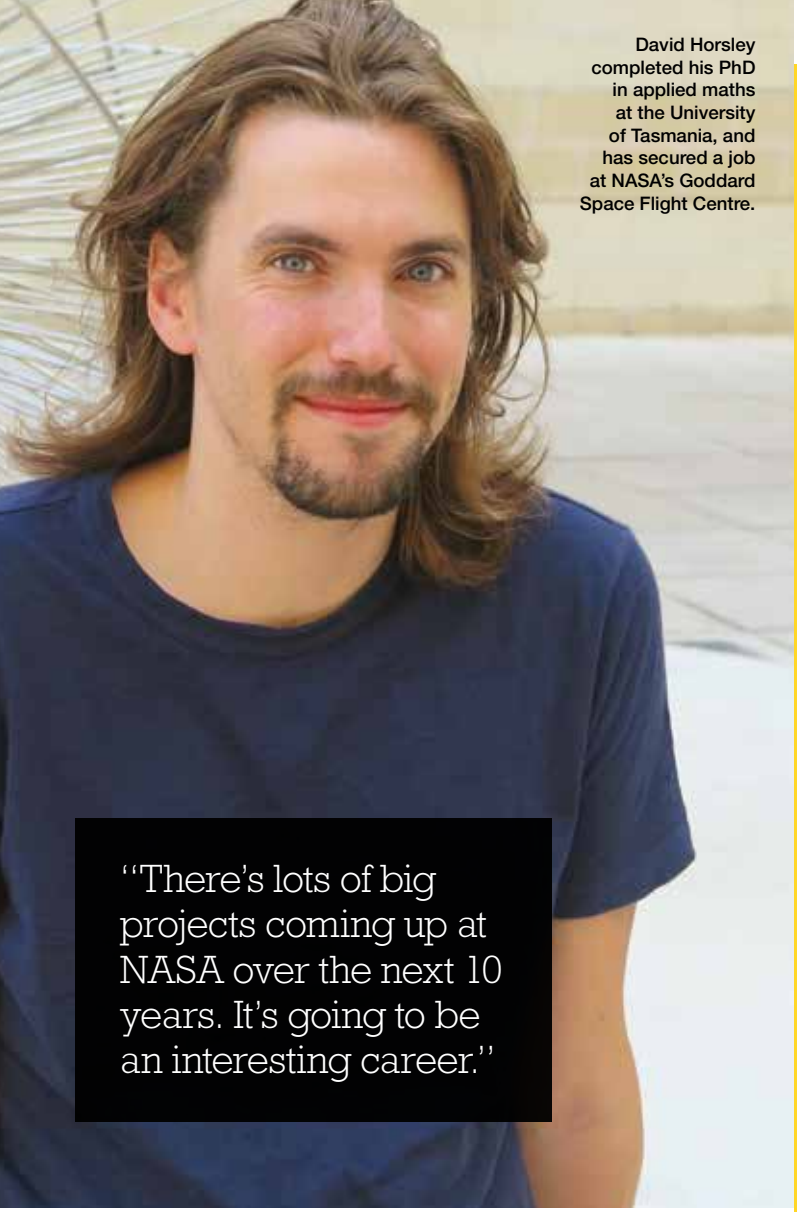
Equal Opportunity and Privacy of personal information is University policy. For more details visit: www.acu.edu.au/careers

ACU is committed to diversity and social inclusion in its employment practices. Applications from Aboriginal and Torres Strait Islander people, people with disabilities and people from culturally diverse groups are encouraged.

Applications Close: Thursday 23 March 2017

#LI-PRIORITY

WGEA Employer of Choice for Gender Equality



David Horsley completed his PhD in applied maths at the University of Tasmania, and has secured a job at NASA's Goddard Space Flight Centre.

"There's lots of big projects coming up at NASA over the next 10 years. It's going to be an interesting career."

Mathematics took David to NASA, where will it take you?

You could be revolutionising healthcare, exploring the farthest reaches of space, or connecting the world's communications. Almost every industry on Earth (and some beyond!) need skilled mathematics graduates like David, who has recently taken a job at NASA after studying mathematics at the University of Tasmania.

We have study options from pathway to postgraduate, covering pure and applied mathematics, statistics, and operations research.

Mathematics can take you anywhere.
Find out more at **utas.edu.au**

UNIVERSITY of TASMANIA

CRICOS Provider Code 00586B

RESEARCH

Mathematics, Algebraic Combinatorics, Algebraic Geometry, Representation Theory, Mathematics

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

UQ

Postdoctoral Research Fellow

Job No: 500300

School of Mathematics and Physics

The discipline of Mathematics is located in the School of Mathematics and Physics in the Faculty of Science. It is the leading provider of applied mathematical and statistical education in Queensland, with extensive undergraduate and postgraduate degrees (MPhil and PhD) and coursework. The Discipline is internationally recognised for its research excellence and hosts a number of first-class research centres. Details of the research interests of academic staff may be accessed on the School's web site at http://www.smp.uq.edu.au/

The role

The successful appointee will work on an Australian Research Council funded Discovery Project in Algebraic Combinatorics led by Ole Warnaar (UQ) and Eric Rains (Caltech). The project concerns questions and open problems in Macdonald polynomial theory and allied areas of algebraic geometry, combinatorics and representation theory.

The person

Applicants should possess a PhD in Mathematics, a track record in Algebraic Combinatorics and demonstrated capacity for research in mathematics as evidenced by publications in internationally recognised mathematics journals.

The University of Queensland values diversity and inclusion.

Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples.

Remuneration

This is a full-time, fixed term appointment for two years at Academic Research Level A. The remuneration package will be in the range $81,545 - $87,535 p.a., plus employer superannuation contributions of up to 17% (total package will be in the range $95,408 - $102,416 p.a.).

Position Description

500300_Postdoctoral Research Fellow.pdf

Enquiries

To submit an application for this role, use the **Apply** button below. All applicants must supply the following documents: Cover letter, Resume and Selection Criteria responses.

For information on completing the application process click here.

Application Closing Date

12 April 11:55pm E.Australian Standard Time

RESEARCH

JOIN OUR TEAM

Postdoctoral Research Fellow

Macquarie is the university of pioneering minds. Globally recognised as one of Australia's leading research universities, Macquarie is a place where extraordinary new possibilities come to light. We've helped people to hear, introduced wireless internet technology to the world and broken through traditional boundaries by appointing Australia's first female vice-chancellor.

At Macquarie you'll join a vibrant community of diverse perspectives, all working towards a brighter future for our communities and our planet. Surrounded by beautiful parkland campus, our students and staff are free to explore and discover, supported by facilities including a high-tech library, private teaching hospital, gym and pools, childcare facilities, a campus train station and the newly expanded Macquarie Centre shopping complex next door.

In Macquarie's Faculty of Science and Engineering you'll join passionate researchers and educators blazing new trails in the spirit of discovery and exploration. Encouraged to think boldly, and supported by some of Australia's most outstanding facilities, brilliant minds converge in our faculty to create incredible new possibilities: the world's first attempt to synthesize complex life, the creation of Wi-Fi, the discovery of dancing dwarf galaxies, and the development of blue LED light. Inspired by challenge and opportunity, we look forward to welcoming you as we imagine a new future together.

Join us and start seeing the world in a different light.

The Role

This role is open to application by mathematicians who have a strong research interest and growing reputation in category theory or cognate fields. The successful candidate will work on the Australian Research Council Future Fellowship Grant entitled "Enriched categories: new applications in geometry and logic" and will collaborate with the project's investigator, Richard Garner, and other members of Macquarie University's Centre of Australian Category Theory (CoACT) to advance the scientific programme supported by this grant. The successful candidate will be expected to make a vigorous contribution in the overall activities of CoACT, to present research progress regularly at the Australian Category Seminar and to publish papers in well-regarded mathematical journals. Where appropriate the appointee may also be asked to assist with the mathematical supervision of PhD research students.

Applications are particularly encouraged from candidates with complementary expertise in algebraic geometry, Lie theory, model theory, or realizability.

Selection Criteria

To be considered for this position applications must respond to the selection criteria below and attach as a separate document in the application process.

Essential

- A PhD, awarded or submitted, in category th… area of mathematics.
- A demonstrated abili…
- Experien…

Category Theory, Geometry, Logic, Mathematics

…research

…encouraged from candidates with …expertise in algebraic geometry, Lie theory, model …ory, or realizability.

Selection Criteria

To be considered for this position applications must respond to the selection criteria below and attach as a separate document in the application process.

Essential

- A PhD, awarded or submitted, in category theory or a closely related area of mathematics.
- A demonstrated ability to publish in the scientific literature.
- Experience of presenting research results at scientific meetings.
- Strong written and oral communication skills.

Desirable

- A background in areas of application of category theory, including but not limited to: algebraic geometry, Lie theory, model theory, or realizability.

Appointment Type: Full-time, 2 year fixed-term. The position will commence in June 2017 or an agreed alternative date.

Package: From $88,420 to $94,760 per annum (Level A Step 6 to step 8; PhD required) plus 17% employer's superannuation contribution and annual leave loading.

Applications Close: Friday, 31 March 2017 at 11:55pm AEST

Macquarie University is an EO Employer committed to diversity and social inclusion. Applications are encouraged from people with a disability; women (particularly for senior and non-traditional roles); Indigenous Australians, people who identify as GLBTI; and those from culturally and linguistically diverse backgrounds

Applications need to be submitted through the Macquarie University online recruitment system. Where circumstances such as disability or remote location prohibit your access to our online system please contact the enquiries person listed in this advertisement for assistance.

MACQUARIE University

CRICOS Provder 00002J

Team Leader - Bioinformatics Research or Computational Cancer Biology

East Melbourne
Permanent Full Time

Applications are invited for the position of Team Leader in Bioinformatics or Computational Biology at the Peter MacCallum Cancer Centre (Peter Mac).

The Peter MacCallum Cancer Centre is the largest cancer research group in Australia, uniquely integrating basic, translational and clinical research with patient care in the setting of a specialist cancer hospital.

The Peter Mac generates large amounts of genomics and other omics data that are providing fascinating new insights into cancer initiation, evolution and treatment. Much of this requires new bioinformatics analysis approaches. With its move to the Victorian Comprehensive Cancer Centre (VCCC), the Peter Mac is expanding its Bioinformatics and Computational Biology Research Program. This is the first of multiple new positions. Their purpose is to develop new independent bioinformatics team and group leaders aligned with the research themes and Peter Mac Research Division Strategic Plan, and complementary to existing bioinformatics expertise, as well as additional leadership in cancer bioinformatics or computational biology.

This role will involve the development of a personal, independent research program, as well as collaborative research within the Research Division and other divisions of the Peter Mac, and across the VCCC. This could include, but is not limited to research into: the analysis of gene expression and gene regulation; statistical or computational bioinformatics methods development; computational cancer biology; or personalized medicine or clinical informatics in collaboration with the Peter Mac Centre for Clinical Cancer Genomics.

The position will be for 5 years with excellent prospects for promotion to group leader at the end of this period subject to satisfactory performance. The team leader will be under a mentor, and will work alongside but be independent of the existing Bioinformatics and Cancer Genomics Laboratory. There will be additional opportunities for mentoring from other senior research staff and clinicians. The Peter Mac Research Division has a dedicated Research Computing Facility, petabyte-scale storage, and access to other compute resources in the precinct.

Applicants should have a PhD in a quantitative discipline such as bioinformatics, computational biology, mathematics/statistics, computer science, or physics and previously undertaken a post-doc in bioinformatics or computational biology. They should have an excellent track record relative to opportunity. Applicants should have demonstrated capacity to bring independence and creativity to developing new approaches to omics data analysis. They should have outstanding writing and presentation skills.

Applications should include a cover letter, CV, the names of 3 referees, a 1 page description of your best scientific contributions, and a 1 page description of your proposed research program.

Applications Close: 03/07/2016

To view the position description or submit your application please click the 'Apply Now' button below.

Offers of employment are subject to the candidate providing a satisfactory National Police Certificate (police check) or the equivalent. You may also be required to obtain a Working with Children Check when applying for a position at Peter Mac.

Australia's only public hospital solely dedicated to cancer. Visit us at www.petermac.org.

Bioinformatician, Statistics, Statistical Approaches, Statistical Analysis

Bioinformatics, Quantitative Discipline, Mathematics, Statistics

Research Officer (Bioinformatician)

- **Contract till 31 Dec 2017 (with potential for extension beyond that date)**
- **Full Time**
- **Generous Salary Packaging Options**

About Baker IDI

Baker IDI Heart & Diabetes Institute is an independent, internationally renowned medical research facility. Our work extends from the laboratory to wide-scale community studies with a focus on diagnosis, prevention and treatment of diabetes and cardiovascular disease.

About the Role
We are seeking a motivated and enthusiastic Research Officer to join our Metabolomics Laboratory. Metabolomics is the systematic study of the unique metabolite (small-molecule) fingerprints of biological systems. The Metabolomics Laboratory uses "state of the art" tandem mass spectrometry to obtain metabolic profiles (primarily lipids and fats) from the blood stream and in model systems to develop new approaches to early diagnosis, risk assessment and therapeutic monitoring of diabetes and cardiovascular disease.

This position will play a key role in the development and implementation of statistical approaches to characterise the dyslipidemia associated with diabetes and cardiovascular disease, create and validate predictive models of diabetes risk and integrate lipidomic data with gene expression and genetic variation profiles to further characterise the pathogenesis of disease.

This position will be required to work closely with a number of the senior investigators on this project to pursue different aspects of the statistical analysis, multivariate model development and validation.

Duties
In this role you will be expected to perform the following key objectives:

- Participate in design, coordination and data analysis of metabolomic based research studies
- Coordinate the formatting and processing of data in preparation for analysis
- Develop new and/or revised analytical approaches as required for analysis
- Conduct of research either as a team member or independently, and the production of conference papers and publications from that research
- Guidance in the research effort of junior members or research-only staff in the area
- Contribution to the preparation, or where appropriate individual preparation, of research proposal submissions to funding bodies
- Involvement in professional activities including attendance at conferences and seminars in field of expertise
- Administrative functions primarily connected with area of research
- Attendance at meetings associated with research and/or membership of a limited number of committees

Skills and Experience
The successful candidate will possess academic knowledge of statistics as evidenced by coursework taken at honours or postgraduate level.

Experience in one or more of the following areas would also be highly regarded:

- Application of statistics in a biomedical / health science related field.
- Demonstrated expertise in MATLAB.
- Programming skills in R/Java

Benefits
The position offers flexibility and generous salary packaging options. Remuneration will be commensurate with the successful candidate's qualifications and experience.

How to Apply
Applications close Friday 13 May 2016 and should include a current resume with details of 2-3 professional referees quoting reference PM01. Please note that interviews will be held on Thursday 19th May. Please forward a list of two referees prior to the interview. To be eligible to apply for this position you must have an appropriate Australian or New Zealand work visa.

Baker IDI
HEART & DIABETES INSTITUTE

RESEARCH

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

UQ

Lecturer/Senior Lecturer

Job No: 500112

Centre for Applications in Natural Resource Mathematics - School of Mathematics & Physics

The Centre for Applications in Natural Resource Mathematics (CARM) is a School Centre in the School of Mathematics and Physics at The University of Queensland. The Centre is co-funded by UQ and the Queensland Department of Agriculture and Fisheries (DAF). The Centre focuses on the development and application of mathematical and statistical theory and tools that will provide outcomes in the management of fisheries, water security, and conservation. It provides UQ students with quantitative skills critical for Australia's future sustainability. More information can be found at http://www.smp.uq.edu.au/CARM.

The University of Queensland is one of the top three universities in Australia, measured by the quality of its comprehensive range of research fields. In addition to providing excellent potential for interdisciplinary research, the University is located in the vibrant riverfront city of Brisbane, whose sub-tropical climate, cultural diversity, and proximity to coastal regions make it an attractive environment in which to live.

The role

The successful appointee will provide teaching and research support to CARM. In the research domain, the person will develop quantitative theory, tools and models for management of natural resources. This includes frequent publication in high-quality journals, participation in and organizing of conferences, international and interdisciplinary collaboration, and attracting competitive research funding. The appointee will also be expected to teach undergraduate and postgraduate courses in the Natural Resource Mathematics program and other programs, where required. Other teaching duties include postgraduate supervision and curriculum development.

The person

Applicants will possess a PhD or equivalent in Mathematical Sciences or a closely related discipline, with an established record of outstanding original research commensurate with career stage. Applicants should address how their research complements and supplements our current research strengths. In addition, successful appointees will have high-quality teaching and supervisory experience at undergraduate and postgraduate levels, with the ability to effectively develop, lecture and coordinate courses in Natural Re... Mathematics.

Candidates with resear... sustai...

Mathematics, Mathematical Theory, Statistical Theory, Quantitative Theory, Modelling, Mathematical Sciences, Spatial Modelling

...petitive ...ed to teach undergraduate ...tural Resource Mathematics program and ...here required. Other teaching duties include postgraduate ...pervision and curriculum development.

The person

Applicants will possess a PhD or equivalent in Mathematical Sciences or a closely related discipline, with an established record of outstanding original research commensurate with career stage. Applicants should address how their research complements and supplements our current research strengths. In addition, successful appointees will have high-quality teaching and supervisory experience at undergraduate and postgraduate levels, with the ability to effectively develop, lecture and coordinate courses in Natural Resource Mathematics.

Candidates with research interests in the application of mathematical tools to sustainable fisheries management are encouraged to apply, especially in areas such as: single and multi species population modelling; spatial modelling; bio-economic and socio-economic modelling; management strategy evaluation; adaptive management; optimal monitoring tool development; and ecosystem-based fishery management.

The University of Queensland values diversity and inclusion.

Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples. Applications are also encouraged from women. This role is a full-time position; however flexible working arrangements may be negotiated.

Remuneration

This is a full-time, fixed term appointment for two (2) years at Academic level B or C. The remuneration package will be in the range:

Academic Level B - $92,142 - $109,419 p.a., plus employer superannuation contributions of up to 17% (total package will be in the range $107,807 - $128,020 p.a.).

Academic Level C - $112,874 - $130,150 p.a., plus employer superannuation contributions of up to 17% (total package will be in the range $132,063 – $152,276 p.a.).

Position Description

500122_Lecturer_Senior Lecturer.pdf

Enquiries

To submit an application for this role, use the **Apply** button below. All applicants must supply the following documents: Cover letter, Resume and Selection Criteria responses.

For information on completing the application process click here.

Application Closing Date

6 March 11:55pm E.Australian Standard Time

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To find out more, go to: murdoch.edu.au/courses and search 'Mathematics', email G.Hocking@murdoch.edu.au or call (08) 93602826.

*Australian Good Universities Guide 2017 MKT230_04/17 CRICOS Provider Code: 00125J

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Aust MS
Australian Mathematical Society

www.austms.org.au

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SECURITY

A billion-dollar business

Regina Crameri

ASSOCIATE DIRECTOR - DEFENCE SCIENCE INSTITUTE (DSI)

SECURITY COVERS A NUMBER OF AREAS, INCLUDING FRAUD, CYBER SECURITY, AND DEFENCE. It's also crucial to the function of everyday life, protecting everyone from banking customers to military personal from potential threat. Mathematics, statistical analysis, and computing techniques all support this billion-dollar industry, and it's one that is growing every year.

For Defence Science Institute (DSI) Associate Director, Dr Regina Crameri, mathematics is a secret weapon of choice. In the digital age, keeping pace with the changing landscape of defence is proving to be a numbers game.

I have had numerous positions at Defence Science and Technology (DST) Group, including investigating the health, human performance and injury management of deployed soldiers during the Afghanistan conflict.

I have also worked within the Technology Forecasting and Futures Team assessing the potential impact of emerging and disruptive technologies for Defence.

Maths is pervasive It is in almost everything you do from programming to statistics to logistics.

Now, as the Associate Director of the DSI, my major activity is in encouraging academics to work with DST scientists and the defence industry to improve the Research and Development of defence-related technologies.

Modelling and simulation — of which mathematics is a major component — is considered one of the core capabilities required for any defence force and the Australian Defence Force is no different. It is considered one of the top potential game changers for how technology will evolve, particularly when it comes to autonomy. Reducing the risk that people are placed in by replacing humans with semi-autonomous/autonomous technology will change how defence works in the future.

A degree in maths can lead to many different careers and you are only limited by your imagination.

Regina Crameri works with AMSI Intern to place PhD students in internships at DSI/DSTGroup and its research partners - amsiintern.org.au

A world of career opportunities across a vast range of industries begins with mathematics.

Mathematics is critical to a huge range of industries including science, information technology, computing, finance, marketing, business, medicine, energy, government, security and education. Graduates with strong mathematical skills have increased employment opportunities across a diverse range of industry sectors.

As a science or IT graduate with specialist skills in mathematics, you'll demonstrate strong quantitative skills, logical thinking, highly-developed numerical confidence, advanced levels of analytical and problem solving skills and could find graduate employment in the following roles:

- data scientist
- decision analyst
- security specialist
- scientific programmer
- teacher
- statistician.

Learn from Deakin's expert mathematics staff in a number of areas including statistics, data analysis, data science, logistics, decision support, modelling and cryptography.

deakin.edu.au/study-maths

Deakin University CRICOS Provider Code: 00113B

DEAKIN UNIVERSITY

SECURITY

Statistics,
Mathematics,
Statistical Modelling

FORENSIC Data Analytics

This position represents a fantastic opportunity to join a truly outstanding international consulting organisation. Employing more than 150,000 professionals in offices in most countries in the world career progression can be confidently presumed.

Our client seeks to identify talented Quantitative Analysts with at least four years of good solid commercial and consulting experience. You will need to have at least three years' experience gained whilst working within a banking environment and in addition you should possess:

• Strong knowledge of rules based routines and advanced analytics around risk including investigations (for example AML, Fraud, ABC)

• Auditing experience (whether in internal or external audit) and

• Great attention to detail

• Knowledge of finance and accounting is a plus.

In addition technically:

• A degree in quantitative subject (e.g. Statistics, Mathematics, Computer Science. Physical Sciences)

• Experience in the business application of statistical modelling techniques such as linear regression. logistic regression. decision trees, machine learning using tools such as Alteryx, R, SAS and SPSS

• Data visualisation and interactive reporting skills (Tableau, QlikView)

• Experience in at least one scripting language such as SQL, VBA, Peri. Python or similar

• Expertise in manipulating and combining large, high dimensional datasets from multiple sources

• Good understanding of relational database models.

To apply online, please click on the appropriate link below.

You will be asked the following questions when you apply:

- Are you eligible to work in Australia?
- How many years experience do you have in a similar role?
- When are you available to start?

SECURITY

Mathematics

Analysing Data, Statistics, Mathematics

Bluefin Resources
Data Analytics Recruitment Solutions

Graduate Fraud Analyst | SQL

Entry level position - graduates are welcome to apply
Leading financial services company
Available for immediate start - initially a 4 month contract

An opportunity exists for an entry level Fraud Analyst within a leading financial institution in Sydney.

In this role you will be involved in collecting & analysing data which relates to financial crime, information security & security risks. There are a number of projects taking place to reduce the impact of Fraud/AML on the bank. This includes involvement in investigating incidents through data mining and analysis, researching financial crime, information security and security related trends and emerging issues, and identifying triggers to alert fraudulent behaviour.

Requirements:

- A degree in a numerate discipline (Statistics, Mathematics, Computer Sciences, Actuarial Studies)
- Strong programming skills in SQL
- The ability to research and analyse information and data and prepare written reports on the findings
- Strong communication

This is an entry level opportunity with a leading Australian brand.

(SK913400A)

IMPORTANT: By submitting your email address and any other personal information when you APPLY to a job, you consent to such information being collected, held, used and disclosed in accordance with our COLLECTIONS NOTICE and PRIVACY POLICY.

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LOCKHEED MARTIN

Graduate Information Assurance Engineer - Melbourne

Lockheed Martin is a dynamic, growing, and energetic organisation offering stimulating, challenging work at the forefront of technology. Lockheed Martin is a leader in Australia's National Security, and our collaboration with Australian industry spans the Aeronautics, Maritime, Surveillance and Defence domains. We employ approximately 98,000 staff worldwide, and over 800 staff in Australia across multiple locations.

We are currently seeking professional and motivated individuals, looking to grow with our business and help us continue to provide support and expertise to our people and clients. In return, you will have access to our unique growth and learning opportunities.

We have vacancy for a Graduate Engineer to join our team in Melbourne.

Reporting to the Information Assurance Engineer Manager, you will be responsible for the following functions under the direction and support of a supervisor:

- Network security system operations, monitoring, hardware/ software updates, tech refresh, security configuration management and sustaining engineering for the Corporation's Internet Gateway security infrastructure
- IT Service Management and Change/ Configuration Management for the hardware/ software for the Corporation's Internet Gateway security infrastructure
- Security for endpoint nodes that include encryption, anti-malware and anti-virus
- AU Internet Gateway security infrastructure with secondary support for LM Corporate global Internet Gateways operations across the entire Corporation.

The successful candidate will complete their tertiary level qualification in IT or Computer Science, Electrical or Electronics, Physics or Mathematics or relevant discipline in 2017, with a sound level of academic achievement. You will possess good IT skills, professional communication skills – both written and verbal, have a flexible approach to managing changing priorities in this fast paced and productive environment, coupled with the eagerness to learn and advance in a growing organisation.

All applicants must be Australian Citizens and must be willing to undergo a Security Clearance.

Lockheed Martin Australia supports Equal Employment Opportunity and Diversity in the Workplace.

What we offer you

From competitive salary packages and benefits to training and development opportunities we show our appreciation for your skills, ambitions and potential.

Refer to the detailed applicable position description on www.lockheedmartin.com.au to obtain further information for this opportunity.

Employment may be contingent on the satisfactory result of criminal and/ or other background screens, which require the collection and transfer of personal information.

Application procedure

If an opportunity to launch your career with Lockheed Martin interests you, please apply online via our website through the below link:

http://www.lockheedmartin.com.au/au/careers/graduate.html

Email: Please click the 'Apply Now' button below.

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TEACHING & EDUCATION

Inspire a new generation!

Eddie Woo

HEAD TEACHER OF MATHEMATICS, CHERRYBROOK TECHNOLOGY HIGH SCHOOL

MATHS TEACHERS ARE IN DEMAND; teaching-out-of-field is far too common in Australian maths classrooms. **Being a teacher is rewarding, secure and flexible**. Teaching offers opportunities to positively influence students, work in urban or rural areas and grow your skills to achieve seniority.

Head teacher of mathematics at NSW's largest secondary school, Eddie Woo uses a modern teaching approach mixing live classroom interaction with online Maths learning through his highly popular YouTube channel, Wootube. Amassing over 4 million views globally and almost 50,000 subscribers, the channel has attracted international media attention.

Two teachers at school showed me that being a teacher is an unparalleled opportunity for serving and positively influencing individuals in the next generation. They taught me through their actions that they cared for every student they taught.

At the same time, through my participation and leadership of various extra-curricular groups as a student, I discovered that I really enjoyed seeing others learn. It didn't matter what I was helping someone to understand, I just fell in love with seeing the "aha" moment in a person's eyes when an idea finally clicked in their mind.

I consistently seek to take maths beyond the numbers so my students, staff and the broader community gain a full and deep appreciation for the whole breadth of mathematical understanding and endeavour. I use modern approaches to teaching and learning to increase the participation and performance not only of students within my school but across the country.

Through Wootube I can support a broader range of learning capacities, with content provided in a self-directed format so that students are able to set their own pace for progressing through learning material. Together with the channel's companion website and social media channels, it demonstrates the unique way that today's technology can be leveraged to improve students' access to learning.

Eddie Woo was awarded a CHOOSE**MATHS** *Teacher Excellence Award in 2016 - choosemaths.org.au*
His YouTube videos and other material can be accessed from his website misterwootube.com

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TEACHING & EDUCATION

Mathematics, Mathematics Education

Mathematics Education, Mathematics, Secondary Mathematics

Professional Learning Consultant - Secondary Mathematics

About the business and the role

The Mathematical Association of NSW Inc. (MANSW) is a not for profit professional teachers' association which has been operating for 100 years and currently has over 1,000 members. We operate from an office in Lidcombe and have a small, dedicated team of professional and administrative staff. The aim of MANSW is to promote quality mathematics education for all in NSW.

Job tasks and responsibilities

We are looking for an experienced, reliable and enthusiastic person to join an expanding professional service team, to develop and deliver mathematics professional learning activities at secondary school level. The responsibilities include:

1. Managing and presenting events in both metropolitan and regional NSW.
2. Providing consultancy to schools.
3. Maintaining the highest quality of professional learning, student service and consultancy events.
4. Developing and managing MANSW projects with a focus on secondary school mathematics education.

Skills and experience

The Professional Learning Consultant Secondary will have the following skills and experience:

1. Expertise in all aspects of teaching secondary mathematics.
2. Highly developed communication, presentation and ICT skills.
3. Ability to work in a team environment and work flexible hours.
4. Experience in budget planning and project management.

Job benefits and perks

The role attracts a salary package commensurate with experience and qualifications and reports directly to the Executive Officer.

To apply for this role please email a cover letter and your current CV, with referees, to execofficer@mansw.nsw.edu.au. Applications close 19th February 2017.

Experts in Education Recruitment

Mathematics Teachers Required

- **Reputable Independent Schools**
- **Leadership Opportunities Available**
- **Graduate and Experienced Teachers Required**

Smart Teachers is working on a number of positions commencing in Term 1, 2017. The roles are for highly reputable and well-resourced Catholic and Independent Schools in Victoria. We welcome direct applications and referrals of Mathematics Teachers for several exciting opportunities.

About the Role:

- Year 7-12 Mathematics (potential HOD) – ongoing role in South Eastern Melbourne
- Year 7-11 Mathematics (potential HOD) – ongoing role in South Eastern Melbourne
- Year 7-10 Mathematics – short term contract in South Eastern Melbourne
- Year 7-11 Mathematics – short term contract in South Eastern Melbourne
- Year 7-12 Mathematics – ongoing role in Eastern Melbourne
- Year 7-10 Mathematics and Science – ongoing role in regional Victoria

About the Schools:

- Highly academic and supportive learning environments
- Collegial departments that encourage collaboration
- Follow 21st century learning practices
- Offer excellent remuneration and career progression opportunities

Benefits of Registering with SMART:

- Completely free service
- Gain access to exclusively listed positions
- Career mentoring, CV preparation and interview coaching
- Full disclosure on the role before your application goes to a school

About You:

- Possess current references
- Hold a teaching qualification recognised in Australia
- Be registered, or have the ability to be registered with VIT

In order to apply for this role please click the 'APPLY' link below.

Please note only shortlisted applicants will be contacted.

Educate with us across Australia and the UK
Freecall 1800 734 758
www.smartteachers.com.au

Maths Challenge for Young Australians

MCYA Challenge

Practise your maths problem solving with a partner in Middle Primary (Year 3–4), Upper Primary (Year 5–6), Junior (Year 7–8) and Intermediate (Year 9–10) over any 3-week period between March and June.

MCYA Enrichment

Jump into one of seven stages of problem solving and learn new techniques through a structured program run over any 12-16 week period, run between April and September, for students in years 4-10.

Australian Intermediate Mathematics Olympiad (AIMO)

Tuesday 12 September 2017

Four-hour competition for talented students up to year 10 to demonstrate their advanced skills in problem solving over a range of interesting questions.

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TEACHING & EDUCATION

Mathematics, Year 7-10 Mathematics, Mathematics Education

Experts in Education Recruitment

Middle Years Mathematics Teacher

- **Coeducational Independent School**
- **Full-Time Contract for 2017**
- **West Melbourne**

Smart Teachers is working with a coeducational Catholic secondary college located in West Melbourne. The school caters to approximately 600 students within a safe and supportive environment. There is a strong focus on providing excellent opportunities for academic, spiritual and personal growth for all students.

About the Role:

- Year 7-10 Mathematics
- Full-time, maternity replacement role
- Contract from May to December 2017
- Potential for further employment from January 2018

About the School:

- Collaborative and supportive team of staff
- Holistic educational environment
- Dynamic student cohort
- Commute against traffic from CBD

Benefits of Registering with SMART:

- Completely free service
- Gain access to exclusively listed positions
- Career mentoring, CV preparation and interview coaching
- Full disclosure on the role before your application goes to a school

About You:

- Possess current references
- Hold a teaching qualification recognised in Australia
- Be registered, or have the ability to be registered with VIT

In order to apply for this role please click the 'APPLY' link below.

Please note only shortlisted applicants will be contacted.

Educate with us across Australia and the UK
Freecall 1800 734 758
www.smartteachers.com.au

Mathematics, VCE Mathematics, Mathematics Education

Experts in Education Recruitment

Mathematics Teacher

- **Academic Independent School**
- **Supportive Work Environment**
- **Melbourne**

Our client is a university with a VCE-level program established to open a secure pathway for international students looking to undertake tertiary study.

About the Role:

- VCE Mathematics Units 1-4
- Negotiable part-time role, 0.5 to 0.75 FTE
- Contract from 15th March to 23rd June 2017
- Strong potential for further employment

About the School:

- Ensures small class sizes
- Provides a rigorous and supportive learning environment
- Convenient location via car or public transport in inner Melbourne
- Generous remuneration in line with experience

Benefits of Registering with SMART:

- Completely free service
- Gain access to exclusively listed positions
- Career mentoring, CV preparation and interview coaching
- Full disclosure on the role before your application goes to a school

About You:

- Possess current references
- Hold a teaching qualification recognised in Australia
- Be registered, or have the ability to be registered with VIT

In order to apply for this role **click the 'APPLY' link below.**

Please note only shortlisted applicants will be contacted.

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TEACHING & EDUCATION

Mathematics, Mathematics Education

PEMBROKE SCHOOL

Mathematics Teacher

Pembroke School is a co-educational, non-denominational, day and boarding School from Early Learning Centre to Year 12. Pembroke School offers the South Australian Certificate of Education (SACE) and is also an International Baccalaureate (IB) World School, offering the IB Diploma and the Primary Years Programme (PYP).

0.70 - 0.85FTE Contract Position
Terms 3 and 4, 2017

Exact FTE each term will be subject to some minor variation which would be discussed with successful applicant.

We are seeking a dynamic, innovative and engaging teacher of Mathematics. The successful applicant for this position will have proven teaching experience, have a passion for teaching Mathematics and will be easily approachable and able to relate to students and parents. The position involves working with Year 7-12 students on our Middle and Senior School campuses. Applicants should be familiar with the Australian Curriculum and ideally have experience in teaching both SACE and IB Mathematics.

The Mathematics Department at Pembroke School is a group of specialist Mathematics teachers who work in an environment that emphasises teamwork, collaboration and support. The Australian Curriculum is taught from Years 7 to 10, where classes are organised into ability-based streams (sets) to aid with enrichment and remediation. There is an extensive acceleration program for the higher ability streams and small lower level classes to cater for the needs of students with learning difficulties. In Years 11 and 12, SACE and IB courses are offered.

For general information on Teaching at Pembroke School please refer to the document Information to Applicants on the School's webpage.

For any enquiries regarding this position please email jobs@pembroke.sa.edu.au

Applications

Full details on this position and can be downloaded from the School's website

www.pembroke.sa.edu.au/positionsavailable

All applications should be submitted with a completed 'Employment Application Form' and emailed to jobs@pembroke.sa.edu.au

Applications close at 9.00am on Monday 27 March 2017

Late applications cannot be accepted.

Pembroke School is an equal opportunity employer.

342 THE PARADE, KENSINGTON PARK, SA 5068
TELEPHONE +61 8 8366 7082
EMAIL jobs@pembroke.sa.edu.au

www.pembroke.sa.edu.au/positionsavailable

Mathematics, Mathematics Education

Moreton Bay Boys' College
Prep - Year 12

TEACHER - SCIENCE & MATHEMATICS

An opportunity has arisen for a full-time, fixed term contract to commence 18 April 2017, to cover a period of maternity leave. We are looking for an experienced secondary Teacher with the ability to teach Biology and Mathematics.

Established in 2003 and still growing Moreton Bay Boys' College (MBBC) is a P-12 Uniting church boys' school set in the leafy bayside suburb of Manly West. We specialise in boys' education and is an accredited International Baccalaureate provider, running the Primary Years and Middle Years programs. For further details on the College, please refer to our website www.mbbc.qld.edu.au

Teachers at the college have a pastoral care role and are expected to support the Christian ethos of the College and the co-curricular and camps programs.

Please refer to the employment page of our website for a full Teacher role description.

Applications should include a current curriculum vitae, contact details, teacher registration details and a response to the following criteria:

- proven ability to teach in the relevant subject areas;
- curriculum innovation;
- understanding of boys' education;
- ability to integrate ICT into teaching;
- ability to work as a member of a team;
- pastoral care experience;
- willingness to support both the Christian ethos and the co-curricular and camps program of the College;
- an interest or experience in the International Baccalaureate Middle Years Program would be an advantage.

Please note: all applicants must declare

any convictions of any criminal offences

that all information supplied is accurate and complete.

Applications close **9am Monday 13 March 2017** and should be sent to:

email: employment@mbbc.qld.edu.au

Previous applicant need not reapply

Moreton Bay Boys' College uses personal information of job applicants in order to assess your application for employment. We may keep this information on file if your application is unsuccessful in case another position becomes available. Please refer to our website and the role description for the full collection notice.

GRADUATE PROGRAMS

Get a headstart in your career!

Graduate programs are a great way to transition from university to the workplace. There are many programs available in government departments and large organisations. They usually run for one or two years, during which time you are an employee of the organisation. You will receive mentoring and training, gain valuable experience in the workplace and benefit from networking and social activities.

Apply for programs in the final year of your studies. The closing dates for applications vary, but some close in April, so make sure you get in early. You can have the security of a job offer before you even finish your degree!

They will also give you an idea of the disparate positions you will be able to apply for with a higher degree in the mathematical sciences. The range of graduate programs changes from year to year. Here are just some examples of opportunities that may be available to mathematics and statistics graduates.

Links to all of the graduate programs listed here can be found on the MATHS**ADDS** website *mathsadds.amsi.org.au/grad-programs/*

Visit your university career centre or search the web to find even more:

gradconnection.com.au
unigrad.com.au

ACCOUNTING	CPA Australia, Deloitte, Ernst and Young , KPMG, McGrathNicol, PWC
CONSULTING	Accenture, AECOM, Capgemini, IBM, SMS Management and Technology
DEFENCE	Australian Defence Force/Department of Defence, DST Group, Thales
EDUCATION	Teach for Australia, teachNSW
ENGINEERING	Arup, Hatch, Aurecon
FINANCE	AMP, ANZ, ASIC, Australian Super, Bankwest, Bendigo Bank, CBA, GE, HSBC, IMC, Jane Street, Macquarie, Pitcher Partners, Reserve Bank of Australia, Sportsbet, Suncorp Group, Westpac Group
GOVERNMENT	Australian Bureau of Statistics (ABS), Australian Electoral Commission (AEC), Australian National Audit Office, Australian Treasury, Bureau of Meteorology (BoM), Department of Education & Training, Department of Human Services, Department of Infrastructure and Regional Development, Department of Premier & Cabinet (WA), Department of Science & Innovation, Queensland Government, Queensland Treasury, Victorian State Government
INSURANCE	Allianz, Gallagher Bassett Services, GE, IAG, Medibank, QBE, Suncorp
MANUFACTURING	Unilever
POWER AND UTILITIES	AEMO, Ergon Energy, Schneider Electric, Sydney Water, Water Corporation (WA)
RESOURCES	BHP Billiton, BP, Chevron, Rio Tinto, Santos, Wood Group, Woodside, WorleyParsons
RETAIL AND CONSUMER	Coles, Woolworths
TECHNOLOGY	Microsoft, Telstra
TRANSPORT AND LOGISTICS	Aurecon, Qantas

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