

*See where mathematics and statistics can take you*

**•18<sup>th</sup> Edition\***

# Maths Ad(*d*)s

**A guide for students to the job market 2015/2016**

*free*  
**Careers  
Guide**

\*Download a copy at [www.amsi.org.au](http://www.amsi.org.au)



**THE HON CHRISTOPHER PYNE MP  
MINISTER FOR EDUCATION AND TRAINING  
LEADER OF THE HOUSE  
MEMBER FOR STURT**

Wednesday 1 July, 2015

**From the Hon Christopher Pyne MP, Minister for Education and Training:**

I commend the Australian Mathematical Sciences Institute for their commitment to making students aware of the possible careers in the field of mathematics and in the fields of STEM – or science, technology, engineering and mathematics – more broadly.

With estimations that 75 per cent of the fastest-growing occupations require STEM skills, more than ever Australia's ability to innovate and compete in the global economy will depend on a workforce that has the necessary capability in these fields.

It is vital that women are a part of this workforce, as they are currently underrepresented in this important field. To counter this, the Australian Mathematical Sciences Institute, in conjunction with BHP Billiton, has launched the *Choose Maths* program which aims to address the decline of women studying maths and entering STEM related careers.

While STEM skills are central to turning new ideas and inventions into internationally competitive Australian products and services, the analytical, problem-solving and critical thinking abilities that they impart are valued highly across a wide range of industries and occupations.

More broadly, these abilities also help us to participate as active citizens within our democratic system, allowing us to understand and make informed decisions about the challenges we face as individuals, as communities and as a nation.

This publication demonstrates there is an extensive array of career choices available to graduates in the mathematical fields.

These are exciting career paths and are, indeed, the jobs of the future.

Yours sincerely



**Christopher Pyne MP**

# Maths Ad(d)s

**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 Ad(d)s gathers together a fraction of online job advertisements from late 2014 and early 2015. The common theme of the ads is mathematics and statistics, but the actual jobs vary across all sectors—health to computing, data analysis to biology and meteorology to finance.

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 Ad(d)s 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!

Maths Ad(d)s has been prepared in conjunction with AMSI by La Trobe University, we would like to thank the employers who kindly gave permission to reproduce their employment advertisements in this publication.

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*Australian Mathematical Sciences Institute*

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## ■ MATHS & STATS DEGREES

AMSI's website has links to many Australian mathematics and statistics web pages where you can discover the best course for you.

[amsi.org.au/members](https://amsi.org.au/members)



## ■ MORE JOB ADS

Search using keywords such as 'mathematics' and 'statistics' and see where a degree in the mathematical sciences can take you!

- CareerOne [careerone.com.au](http://careerone.com.au)
- My Career [mycareer.com.au](http://mycareer.com.au)
- Seek [www.seek.com.au](http://www.seek.com.au)

## ■ MATHS & STATS AT WORK

- Career profiles [mathscareers.org.au](http://mathscareers.org.au)
- Career resources [maa.org/careers](http://maa.org/careers)
- Career resources [careers.amsi.org.au](http://careers.amsi.org.au)
- Career resources [ams.org/careers](http://ams.org/careers)

## ■ USEFUL WEBSITES

- Australian Mathematical Society [austms.org.au/careers](http://austms.org.au/careers)
- Statistical Society of Australia [statsci.org/careers](http://statsci.org/careers)
- Careers in mathematics and statistics [csiro.au/en/Careers](http://csiro.au/en/Careers)
- myfuture - career information & exploration service [myfuture.edu.au](http://myfuture.edu.au)

# BIostatISTICS

## Diverse opportunities

Biostatisticians are specialists in the evaluation of data as scientific evidence. They provide the mathematical framework to interpret scientific data generated in biology, medical sciences, public health and other health sciences.

**Biostatistician / Research Assistant**

- Make a difference within Australia's largest Child Health Research Institute
- Great working conditions
- Generous salary packaging options

We are seeking a part time (0.4 - 0.6 EFT) Biostatistician on a 12 month maternity leave replacement contract to join the Clinical Epidemiology and Biostatistics Unit (CEBU). The Biostatistician will contribute to the research program of the Unit and its parent organisations by providing support in data processing and statistical analysis to a range of research being conducted on campus. The position reports to a senior CEBU statistician, although day-to-day supervision on some projects may be delegated to other members of the Unit.

**You will be responsible for:**

- Performing data processing and statistical analysis under supervision.
- Assisting in the preparation of material, including graphical and tabular presentations, for reports, meetings, publications and seminars as appropriate.
- Contributing to the teaching program of the Unit, for example by participating in the delivery of computer-based training courses (Stata).
- Providing advice and assistance where appropriate on questionnaire design, data management, statistical software, and methods of analysis to researchers.

**To be successful in the position you will have:**

- Working with Children & National Police Clearance (if appointed)
- A degree, preferably at Masters level or higher, in applied statistics or biostatistics or closely related field
- Familiarity with the Stata statistical package (or demonstrable capacity to develop this quickly)
- Experience in the use of statistical methods in clinical and health research
- Experience in the coordination and management of data collection and data analysis activities for research studies

Applications close Thursday 30 April 2015

Ref: 3806/2015

Murdoch Childrens Research Institute is Australia's largest and most prestigious child health research institute. We conduct innovative world class research into identification, prevention and treatment of conditions affecting the health of babies, children and adolescents.

Our partnership with the Royal Children's Hospital and the University of Melbourne's Department of Paediatrics allows us to translate discoveries in laboratory, clinical and public health research into real benefits to help children live healthier, happier lives.

For more information visit us at  
[www.mcri.edu.au](http://www.mcri.edu.au)



## Health Data Analyst / Biostatistician

246504

**Location:** Chatswood

**Status/Hours:** Temporary Part Time

**Salary:** \$86,451.00 - \$102,538.00

### Purpose of Position

Work in collaboration with staff to define and create core content of timely, high quality public reports and information products on the performance of the NSW public health system in areas identified as priority in the work plan.

Undertake statistical analyses of population-based administrative data and / or survey data and support high level interpretation of those analyses, in order to

- (a) evaluate performance of the public health system;
- (b) identify important trends, opportunities for service improvement and potential impact of policy change; and
- (c) benchmark the performance of the system through comparisons.

Contribute to the appropriate positioning of the Bureau as a respected provider of information to the community, clinicians and the NSW Government on the performance of the NSW public sector health system.

This position is Temporary Part Time, up to 12 months, working 32 hours per week and classified as Health Manager Level 2.

**Aboriginal and Torres Strait Islander applicants are encouraged to apply.**

### Selection Criteria

1. Experience and / or training with SAS or a similar statistical software package.
2. Experience conducting statistical analyses, particularly of large datasets, using a range of analytic tools and methodologies.
3. Experience undertaking temporal and case-mix and/or survey data analyses, as well as interpretation of those analyses.
4. Experience collaborating with others to create information that directly informs efforts to improve health care.
5. Knowledge of health care data collections including their strengths and limitations is desirable
6. Experience developing and validating methods and measures to improve public reporting of health system performance is desirable
7. Ability to self-motivate, operate with minimal supervision, prioritise workloads, manage time and collaborate with a highly skilled team to deliver a portfolio of projects.
8. Relevant graduate and / or post graduate qualification, and / or equivalent relevant experience

If you are interested in being part of a vibrant team committed to outstanding performance, this is a great opportunity, so make your application count - **ensure you address the selection Criteria.**

**Closing Date:** 19 April 2015

**NSW Health Service: Employer of Choice**



# BUSINESS & CONSULTING

*Read between the lines...*

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

## Lead statistics consultant - client facing

### Summary of the Position

This is an exciting opportunity for a statistical analyst to join an established marketing agency. This role is not necessarily for the strongest statistician but is for a client facing/project management style statistician. They want someone with a background in stats but the most important is the consultative nature of the candidate and experience in project managing. The company has an excellent culture, it is supportive of its employees and there is a work hard play hard culture. The work is fast paced and dynamic and you will be working on multiple projects at one time. You will find working within this agency is rewarding and you will also have the opportunity to work with well known global brands.

### Summary of your Role

- End to end project work
- Utilise R for modelling
- Deal directly with clients
- Project manage statistical projects
- Work with other statisticians to develop solutions and problem solving
- Analysis of statistical models
- Gather requirements from clients
- Presentation of findings to various internal and external stakeholders
- Help create reports and presentations for clients
- Draw insights from data
- Work across multiple projects at one time
- A chance to innovate and create new efficiencies
- Data extraction

### Experience Required

- A background in statistics
- Consulting experience
- At least 4 years commercial experience
- A maths/stats or related degree
- Knowledge of R
- Client facing skills
- Strong communication and presentation skills in order to liaise and present to stakeholders
- An ability to work in a fast paced environment

If you are interested in this position please apply directly

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ROBERT WALTERS

## > Operations Analyst

Our client is a leading Australian bank with a vast international presence. The exceptional reputation leading its recent growth, this bank is a market leader in retail, business, corporate and institutional banking. This large organisation continues to grow and build for the future. They have a great culture and proven track record of supporting their staff.

### About the role

They are looking for a candidate with a strong numerical and statistical background with relevant work experience, being exposed to financial markets and a variety of banking products. This market leader is currently looking for a Derivatives specialist to join their confirmations team. Your role will be critical to the success and ongoing growth of a business that is looking to grow.

### Key Responsibilities

- Confirmations of Derivative products.
- Cross training across Fixed Income and Equities
- Investigation and resolution of failed trades and working directly with counterparties and other internal departments.
- Involvement in various adhoc projects and process improvement

### Key Requirements

- MUST have a minimum of 18 months experience, ideally with Derivatives. However, Fixed Income or Equities will be considered.
- Exposure to Banking products and financial markets.
- Relevant tertiary education in finance or mathematics.
- The candidate must be a team player capable of working under pressure to meet strict deadlines.
- Strong communication skills, able to interact with other departments.
- Ability to use Excel and Access to intermediate level

The role provides an excellent chance for an ambitious candidate to further their own skills in a fast moving business. Providing a perfect platform for career progression working amongst a successful and motivated team.

**If you would like to apply for this role or find out more, please apply online**

**HOW MUCH ARE YOU WORTH?**  
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www.robertwalters.com.au



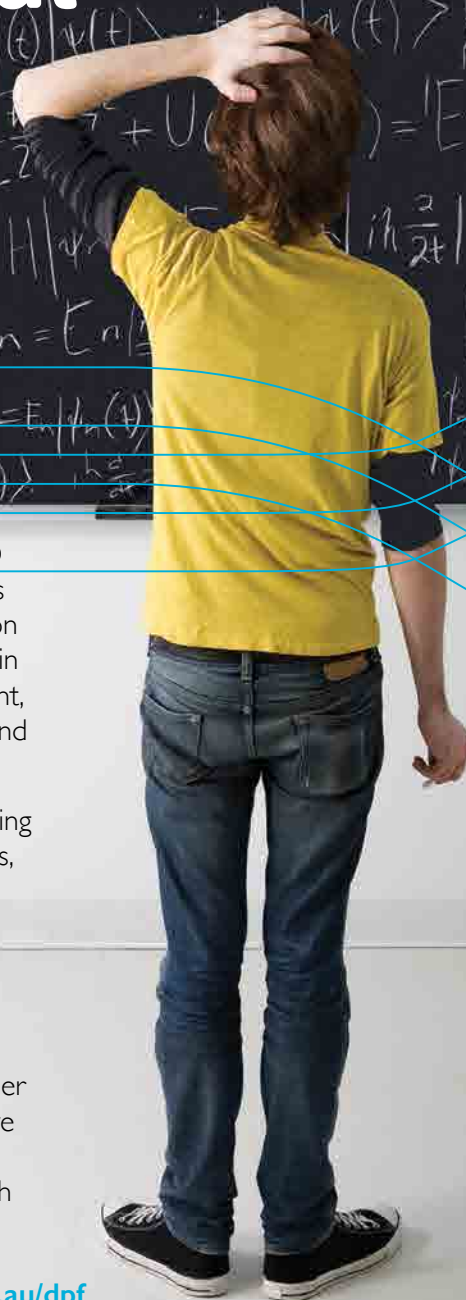
# Thinking about a career in the mathematical sciences?

Come and test-drive a research career at CSIRO using your mathematical, informatics and statistics expertise. Our world leading researchers work on problems for government, industry and business in areas such as health, services, climate, environment, energy, finance, data visualisation, image analysis and computational modelling.

We have loads of great programs on offer including summer vacation scholarships for undergraduates, honours and PhD top up scholarships and post doctoral fellowships.

Our innovative two-year Graduate Fellowship program is like a gap year after your honours degree, giving you a chance to experience a real research career at CSIRO before deciding whether to do a PhD or enter the workforce. You will have an opportunity to work on applied projects, be trained by a mentor and to present your research at a conference.

Sound like fun? Find out more at [www.csiro.au/dpf](http://www.csiro.au/dpf)





# COMPUTING

## *Distinguish yourself from the rest*

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.



### Application Support Specialist

- Support a diverse range of applications to further the use of computation in science discovery
- Work in a professional and technically challenging environment
- Contribute to keeping Australian research internationally competitive

#### The position:

CSIRO Information Management & Technology are currently seeking an additional staff member to meet the needs of users by providing applications support for their computational work. In this role you will work as part of the Science Applications team to port and optimize users applications to parallel computing environments, and to support the users in problem-solving to enable and support CSIRO users' science outcomes. The role will also include identifying potential users and matching users/applications to Scientific Computing (SC) shared and partner systems.

Work may be required at other CSIRO sites within Australia. To be eligible for this position you must have a current Australian security clearance or have the ability to obtain one. To obtain this clearance you must be either an Australian citizen or permanent resident.

#### Your duties will include:

- Provide applications support services as part of the SC team. Work activities are expected to cover both compute and data storage systems, and include:
  - Porting and performance analysis of applications and workflows;
  - Parallelization and optimisation of selected applications and workflows;
  - Problem solving at a high level for applications and workflows;
- Provide user support services as part of a team for the SC and partner systems including:
  - Delivering against researcher needs;
  - Effective request tracking and response to user support issues;
  - Documentation, including

- Contributing to the development and maintenance of user written user guides for scientific computing;
  - Contribute to knowledge sharing within the team by documenting procedures, and be able to liaise effectively with users regarding the delivery of services to meet their needs;
  - Work collaboratively with colleagues within your team, the business unit and across CSIRO, to reach objectives.
- Location:** Clayton VIC preferred, other locations considered  
**Salary:** \$92K to \$100K plus up to 15.4% superannuation  
**Tenure:** Specified term of 12 months  
**Ref No.:** VICN15/00920

#### You will also have:

- High-level skills in the use of C++ including source code management and deployment of applications in a UNIX/Linux environment;
- Strong **maths and numerical** analysis skills such as finite element method, linear solvers, PDEs, ODEs, and familiarity with scalable parallel libraries such as PETSc or Trilinos;
- Demonstrated experience in optimizing and parallelizing scientific applications for high performance computing systems and/or GPUs, including performance analysis and debugging;
- Demonstrated ability to work with independence and self-motivation as part of a small team.

#### About CSIRO:

Australia is founding its future on science and innovation. Its national science agency, the **Commonwealth Scientific and Industrial Research Organisation (CSIRO)**, is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities.

#### About CSIRO Information Management & Technology:

CSIRO IM&T is the enterprise function that meets CSIRO's information management and technology needs. As part of the CSIRO eResearch program, the IM&T Scientific Computing (SC) team provides facilities and services to support computational science by CSIRO researchers. Further details are available at: <https://wiki.csiro.au/display/ASC>

**Applications close Sunday 24th May, 2015 (11 :30pm VIC time).**

**Click on the link below for the full position description and selection criteria.**



For selection documentation and details on how to apply visit [www.csiro.au/careers](http://www.csiro.au/careers) or call 1300 301 509

# A Career that Adds Up

## Mathematical Sciences at RMIT

Studying Mathematics, Statistics or Analytics at RMIT differs from other universities because students are enrolled in a specialised program from the first day, as opposed to a generalist science degree.

RMIT programs focus on applying knowledge to address real-world problems and they are designed to allow students to have global experience opportunities to enhance their employment prospects.

Students will be well supported by a peer-mentoring system, and many RMIT final-year students get a head start in the job market by completing an industry placement.

RMIT graduates are highly employable, with many finding work in banking and finance, environmental modelling, marketing, risk management and engineering.

There is a chronic undersupply in the areas of mathematics, statistics, analytics and information security which has led to an increased demand for skilled graduates in these fields. Now is the time to join this growing and exciting industry.

### Alice Wojcik

Bachelor of Science  
(Mathematics)

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[www.rmit.edu.au/study-with-us/science](http://www.rmit.edu.au/study-with-us/science)



# COMPUTING



## SAS Analyst Programmer

Our client requires a SAS Analyst Programmer who will be responsible for maintaining and enhancing DW & BI solutions within the business.

As a SAS Analyst Programmer you will be responsible for all aspects of the life cycle including requirement gathering, problem analysis and requirements analysis, along with developing reports and programming in SAS

**To be successful for the role you must be able to demonstrate the following:**

- At least 3-4 years extensive experience in SAS, SAS DI
- Solid & proven datawarehouse experience
- Advanced SQL skills
- Degree in Engineering, Mathematics, Computer Science or Statistics
- Ability to elicit information from key stakeholders
- Strong decision making and analytical skills
- Good database and spreadsheet skills
- Strong report writing skills
- Excellent communication skills and customer service orientation are essential
- Ability to work with both technical and non-technical employees at all levels
- Basic understanding of IT Architecture, both Infrastructure & Applications
- Excellent written and verbal communication skills
- Financial Services background desirable

**To be considered for the role click the 'Apply' now button**

**Please note only shortlisted candidates will be contacted.**



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## APPLICATIONS SOFTWARE ENGINEER CNC MACHINERY, JAVA, C++ and MATHEMATICS

- GRADUATE OR EXPERIENCED
- REF NUMBER - APP0305
- START NOW.
- EXCELLENT SALARY
- LARGE COMPANY

Great opportunity to join a successful Australian design, engineering, and manufacturing business that offers capital equipment to the manufacturing industry.

Recently they have begun to break into new markets by programming these machines to succeed to new applications. They are searching for an Applications Software Engineer to join their Software Engineering Team.

You will require relevant CNC machinery industry experience in software development, an excellent mathematical aptitude and be mechanically minded, with a flair for computer programming.

We need an engineer that can design applications software for machine control and automation equipment to improve cost and ease of manufacturing and reliability.

You will be responsible for delivering projects on time and within budget, preparing functional requirements, preparing design documents, ensuring correctness, completeness and reusability of software layers as well as identifying and proposing opportunities for enhancements.

You will perform design calculations as required by the product development project, contribute to the development of tools and processes, and have the ability to contribute, mentor and work in a team environment.

The successful candidate must have mathematical understanding of Algebra, Calculus, 3D Geometry, Numeric Analysis and Kinematics.

You will also have the following:

- Engineering degree in software, computer science, mechatronics, robotics, or mathematics.
- The ability to program in Java and C/C++, with experience in using SWING.
- Proven ability to learn new computing languages.
- Experience in source control practices.
- Design experience in special purpose machine environment.
- Excellent verbal and written communication skills.

This is a fantastic full time opportunity, you will be offered remuneration to suit. They want the best and are prepared to pay.

All enquiries are confidential. Your details will not be given to our client and your current employer will not be contacted without your consent.

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MANAGEMENT  
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AEROSPACE, DEFENCE, RAIL, FOOD,  
PACKAGING, CHEMICAL, OIL & GAS.

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





## COMPUTING

### Software Developers / Engineers - Enterprise BI and Big Data Analytics

We're seeking software engineers with a passion for data and analytics.

You will have a background in software development (Java, C#, C++, Python, SQL) or skills in analytics and statistical packages such as SAS, R and SPSS. The projects will see you working on building Data related software products as well as business intelligence dashboards, customer insight systems and other data centric systems.

#### In return the company offers:

- Hand-picked highly technical team with a genuine passion for Software development, Data/BI and IM products
- Melbourne CBD Location
- Free Life and Salary insurance
- Generous bonus structure
- KPI's based on self-development and training others in the company
- Hackathons and company wide incentives
- Large client base - Banks, Telco, Utils, Insurance
- **Management team are technically hands-on and highly accessible**

#### Role:

- **Strong software development skills, conceptual data as well as excellent SQL skills**
- **Expertise in Java/Python/R/JavaScript would also be desirable**
- Mid, Senior and Principal consulting level roles available
- Strong consulting capability with good communication, presentation and business analysis skills
- The ability to work well with people across both the business and technology.
- Previous experience in a consulting or client -facing role useful. **MUST HAVE COMMERCIAL EXPERIENCE - MINIMUM 12 MONTHS**
- Honours degrees, particularly in Sciences, Mathematics, Engineering, Machine Learning or Artificial Intelligence would be highly desirable
- First class honours degree in any related subject would be a huge bonus

#### Skills that are required and cross-trained on:

- Software Development - Java, Python, JavaScript, R
- Data Platforms - Hadoop, SQL Server, Oracle, Netezza, Teradata, MapR
- BI Development - Tableau, Qlikview, OBIEE
- Also Customer insights, Analytics, Big Data / Data Science

If you would like to learn more please hit the apply button!

# SERVIAN

[www.servian.com.au](http://www.servian.com.au)

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IT Recruitment Melbourne

### Junior / graduate Linux, statistics, SQL, Python \$50K to \$65K

- Interesting role for someone interested in data
- Working with Linux, SQL, grep, awk, Python
- \$50K to \$65K plus super

Junior / graduate Linux, statistics, SQL, Python. In this role you will work with Linux, manipulate data using SQL, grep, awk, Python and Hadoop.

This is an entry level role for graduate to approx 1 to 3 years experience.

You DON'T need experience with the following, but you do need an interest, and a willingness to learn:

- databases
- SQL
- large data sets
- Linux command line
- grep
- awk
- Python

In this role you will be immersed in query, manipulating, investigating and reporting on Internet usage data.

You'll need to be someone interested in data, keen to learn, detail oriented.

You'll need good problem solving skills.


Apply now!

[www.supercoders.com.au](http://www.supercoders.com.au)

## ■ CRIMINOLOGY

*Get the edge on solving crimes*

Preventing and solving crimes relies heavily on mathematics and statistics. These fields provide valuable insight through analysing and modelling crime-rate data and enable us to test and implement sound crime prevention strategies.



**Bluefin Resources**  
Data Analytics Recruitment Solutions

### Fraud Analyst

**CBD location**  
**Leading financial services company**  
**Available for immediate start**

An opportunity exists within a leading financial institution in Sydney, who are looking to take on a Fraud Analyst.

In this role you will be involved in collecting, analysing and modelling data which relates to financial crime, information security & security risks. There are a number of projects taking place to reduce the impact of Fraud 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)
- The ability to research and analyse information and data and prepare written reports on the findings
- At least 1-3 years SAS OR SQL programming experience
- 1-3 years commercial analytics experience
- Strong understanding of retail banking products would be desirable
- Strong communication experience

We are looking for candidates who have a proven track record in interpreting data that is then transformed into insights or report rules. To apply, please send your resume through the link or for more information please contact.

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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[www.bluefinresources.com.au](http://www.bluefinresources.com.au)

# ANDREW PFEIFFER

## AMSI BioInfoSummer 2014

BioInfoSummer 2014 was Andrew's second BioInfoSummer. In 2013 Andrew remembers feeling quite clueless during some of the presentations, but he says that being amongst other young researchers he realised this was the norm: "BioInfoSummer 2013 taught me that as a researcher it is my job to look up the terminology and piece together my own understanding of whatever field I am interested in. It was a great introduction to research life," says Andrew.



*"As someone with a background in mathematics and statistics AMSI's programs motivate me to learn more about computer science and biology."*

"BioInfoSummer confirms the importance of good communication between 'wet-lab' researchers and 'dry-lab' researchers (statisticians, software developers and engineers and mathematicians) to output high quality research for the benefit of all. "The practical sessions are fantastic opportunities to learn new skills and put them into practice. And the careers panel, consisting of researchers from government agencies, universities and private industry, allow us to discuss the state of bioinformatics in Australia and abroad and career prospects for when we graduate," Andrew says.

S T U D E N T P R O F I L E

# MAKE YOUR STUDY COUNT

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

Our graduates are highly regarded for their problem-solving abilities and research skills and are much sought after by employers. A qualification in mathematics and statistics prepares students for a wide range of careers including sports statistician, financial analyst, maths teacher, meteorologist and medical statistician.

## **WORLD-LEADING RESEARCH**

La Trobe has a team of world class researchers, including an ARC Future Fellow and an ARC Dora Professorship, supported by a number of large research grants.

## **STUDENT SATISFACTION**

Results of Australia-wide student satisfaction surveys from the My University website show La Trobe received scores of 95% in overall satisfaction and 95% on the good teaching saqvcale.\*

*\*Results of student satisfaction surveys current at June 2012, available from MyUniversity.gov.au*

[latrobe.edu.au/study](http://latrobe.edu.au/study)

Bachelor of Science –  
major in Mathematics  
and Statistics

## **GET IN TOUCH!**

Department of Mathematics  
and Statistics

College of Science, Health  
and Engineering  
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## ■ DATA ANALYSIS

### *More than just number crunching*

As a data analyst you will use mathematical skills to obtain a challenging and rewarding career. Your statistical knowledge will be applied to solve a range of problems, often working with innovative companies.



**Bluefin Resources**  
Data Analytics Recruitment Solutions

### Head of Analytics

**Lead an innovative analytics team**  
Hands on role with the ability to help change the landscape of analytics  
**Australian household name**

Bluefin Resources has just been exclusively briefed on this Head of Analytics role with one of Australia's best known organisations. This role will lead a team of analysts and data scientists in order to unlock the value of their customer data and create a smooth experience for their customers. The ideal candidate will come from a strong **statistical** background with some exposure to Customer Analytics and are currently leading a team.

**The role - Head of Analytics**

- Direct an experienced team of Analytics professionals, setting a company-wide standard for Analysis and Insight
- Engage with various senior stakeholders within the business championing Analytics.
- Provide regular insight in the performance of significant marketing spends to optimise investment and identify new opportunities.
- You will be hands on so current and up to date use of analytics is required
- Oversee a team spanning Analytics, Data Science and Big Data professionals.

**Experience • Head of Analytics**

- Extensive stakeholder engagement experience, driving change within the business.
- Encyclopaedic knowledge of all things Customer Analytics.
- Previous experience driving strategic change to a large business.
- Hands on Analytics experience with multiple tools (SAS, SQL, Hadoop, R)
- Relevant degree in a subject such as **statistics**, applied **mathematics**, engineering etc

**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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## FINANCIAL INVESTMENTS; A MODELLER'S MINEFIELD

Budgeting, it's a cringe worthy word. Optimisation, that sounds more like it! But have you the faintest idea of what it is? And did you know that mathematicians use it to help financial planners increase the expected size of their client's financial nest egg with risks that are acceptable to them and their stage in life?

AMSI Intern, Wei Wu, is well versed in the mathematical technique of optimisation used in finance. In fact, he recently completed an internship at Optimo Financial. Hugh Bannister, Principal, Optimo Financial, has been building energy and financial models using optimisation techniques for over 25 years. He believes the work completed during Wei's internship will allow Optimo to improve its offerings to the market.

One of the challenges in providing good advice is to take careful account of risk. Depending on the client's attitude and stage in life, a conservative or somewhat more aggressive investment strategy may be appropriate. However, it is very difficult to balance all the factors that would deliver a satisfactory strategy for each client's needs. Standard portfolio theory is more designed for institutional investors than individuals.

"People have different investment needs, some invest for the short-term, saving for a house deposit, or long term, saving for their retirement. I was able to apply my mathematical skills to help financial planners find the best investment strategies for their clients by looking at, and taking into account, numerous factors," Wei says.

Hugh tells us: "Optimo had developed a conceptual approach to solving this problem, but sought academic input through AMSI Intern to ensure the state-of-the-art in the field was recognised. The academic mentors and Wei Wu were able to make certain the proposed approach was theoretically and practically sound and were also able to explore possible improvements."



# ADRIAN DUDEK

## AMSI Winter School 2014

In Year 10 Adrian Dudek realised he was good at maths, making studying more enjoyable and causing him to excel. Now a PhD student at the ANU, his research is in analytic number theory, particularly the Riemann zeta-function and its tender romance with the distribution of the prime numbers. When asked about his experience at Winter School Adrian says: “It was great to have specialist subjects that focus on the usefulness of primes and other discrete structures. Put simply, the blend of chaos and order is what makes our time on the interwebs safe.”



*“I wake up in the morning and say to myself, maths is hard, but interesting and beautiful; it is the beautiful properties of the primes that gets me out of bed!”*

“AMSI’s programs provide an ideal medium for the exchange of ideas within the mathematical community”, remarks Adrian. “The programs are state-of-the-art and help to close the space between the enthusiastic student and the working mathematician.”

Adrian thinks we teach mathematics back-to-front. And he wishes it were taught a little more like music. “When you learn a musical instrument you get to play around with it first, then you do theory and notation. Let’s do that with mathematics!” he says. “Interesting, cool stuff (like prime numbers) first, then the other stuff. ”

## STUDENT PROFILE

## DATA ANALYSIS

auto  general

### Information Analyst

Information Analyst  
Toowong Location

A growing company with a global presence for over 20 years, we have over 8.9 million customers worldwide. In Australia, Auto & General launched in 2000 and we provide motor, home, travel, life and many other personal insurance products to a large and growing customer base.

A team of 1000+ and still counting and we need more talented people to help us continue our sustainable growth. We are looking for a Mathematics or Finance graduate who is looking to commence their career in analysis with a growing organisation.

Reporting to the Senior Manager, System & Process Development, the Information Analyst role will support the Claims & Assessing leadership team through the provision of timely and accurate reporting as well as support in the analysis of data to ensure any emerging trends are able to be identified early so that appropriate action can be taken.

#### Required Skills:

- Data Analysis and statistical methods for analysing and reporting on trends and financial outcomes and align these to the processes and operational impacts;
- A high level of competency in Microsoft Excel Analytical skills and high level of problem solving;
- Report production i.e. designing, displaying and summarising data;
- Superior level of attention to detail and accuracy;
- Excellent numeric and literacy skills;
- Ability to communicate with all levels within the organisation.

#### What is on offer to you:

- Commitment to diversity, inclusion, safety and development, with support from the top;
- An Inclusive Culture that supports work life balance philosophy;
- Be part of the exciting growth, evolution and innovation;
- Ownership and accountability;
- Genuine career progression;
- Comprehensive range of employee benefits including: Additional leave; Insurance discounts; Income protection insurance; Free parking;
- We value high performance and high integrity.

If you are seeking a new challenge and enjoy the opportunity to work in a growing and changing business, click on the APPLY NOW button and submit your application.

#### Auto & General value and encourage diversity in the workplace

#### You will be asked the following questions when you apply:

- Title
- Have you ever applied to our company for a position before?
- Are you the subject of any criminal charges still pending before a court OR have you been found guilty or convicted of a criminal offence?
- If Yes, please provide details? (Insert N/A if not applicable)
- What is your residency status?
- Did an employee of our company recommend you to us?
- What is your expected Salary Range (Please include Superannuation)
- Mobile Number (replace 0 with 61 while entering):

# DATA ANALYSIS



## Reporting Analyst | SQL | Tableau | 6 month FTC | Immediate

Market Leading Brand seeks an experienced Reporting Analyst with SQL  
Opportunity to work for a Top Tier CBD based client  
Diverse and Expanding organisation going through a period of rapid growth

Our Client is a Market Leading Brand, in need of an experienced Reporting Analyst to join a high performing team. Initially this role will be for a period of 6 months in order to provide comprehensive reporting for a growing area of the business.

### Responsibilities:

- Using advanced analytics and complex data, you will deliver reporting insights to key stakeholders
- Providing analysis and reporting on key initiatives
- Ensuring reporting accuracy and exploring new ways to improve current reporting function
- Enhancing the current reporting system through the use data visualisation tools (Tableau)

### Candidates Must have

- Commercial experience of working in an Analytical role using analytics to provide insights, support decision making and drive business decisions
- Strong SQL
- Experience with Spotfire . Tableau or another visualisation reporting tool advantageous
- Strong experience in creating and Reports for Senior Stakeholders
- Solid Stakeholder engagement - Candidates must be articulate and be able to engage
- Degree Qualified in a relevant field (Economics, **Statistics**, Business, **Mathematics**)

This is a 6 month contract role therefore only candidates. currently resident in Australia, with full working rights and on short or no notice period will be considered. If you would like to apply please follow the [link](#)

**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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## Pricing Analyst

### Pricing Analyst

Auto & General is a growing company with a global presence for over 20 years. Worldwide, we have over 8.9 million customers. In Australia, Auto & General launched in 2000 and we provide motor, home, travel, life and many other personal insurance products to a large and growing customer base.

A team of 1000+ and still counting, we are looking for more talented people to help us continue our sustainable growth.

### About the role:

The key responsibility of this role is to provide pivotal analytical support to the Pricing Team and to the group overall. The role brings the opportunity for you to develop your career as the company quickly expands beyond traditional motor and home insurance products.

The high performing Pricing Team has extensive industry experience and you will gain considerable hands-on practice in implementing leading edge, high-quality pricing analytics across new and existing insurance products.

You will have the opportunity to be involved across the company's entire insurance pricing operations and see first-hand the value your work adds to the business. Our great team culture and extensive employee benefits will ensure you are recognised and rewarded for your hard work.

### About you:

As a Pricing Analyst you will have proven analytical and problem-solving capability, as well as an eye for detail. You will be able to conduct complex technical analysis, draw insights and effectively communicate your key findings to stakeholders.

You will have an understanding of **statistical** modelling techniques and, in particular, predictive modelling approaches (e.g. GLMs). Familiarity with statistical software packages (e.g. EMBLEM, SAS, R) is advantageous.

You will be degree qualified in **statistics, mathematics** or actuarial studies (Part I & II qualified desirable). You will have at least 2 years general insurance industry experience.

### What is on offer to you:

- Commitment to diversity, inclusion, safety and development, with support from the top;
- An Inclusive Culture that supports work life balance philosophy;
- Be part of the exciting growth, evolution and innovation;
- Ownership and accountability;
- Genuine career progression;
- Comprehensive range of employee benefits including:
  - Additional leave;
  - Insurance discounts;
  - Income protection insurance;
  - Free parking;
- We value high performance and high integrity.

If you are seeking a new challenge and enjoy the opportunity to work in a growing and changing business, click on the APPLY NOW button and submit your application.

**Auto & General welcome and value diversity in the workplace**



# Curious about qualifications in maths or statistics?

**Charles Sturt University (CSU) offers a Graduate Diploma of Mathematics and a Graduate Certificate in Applied Statistics.**

Currently qualified primary or secondary teachers can use the **Graduate Diploma of Mathematics** course to retrain as a secondary mathematics teacher.

This course also allows students from a non-mathematical background to upgrade their quantitative and problem solving skills. It also provides a flexible and tailored program of study to meet the varied needs of graduates in fields such as secondary education, technical, research and extension work, and students can choose to exit with a Graduate Certificate.

CSU's **Graduate Certificate in Applied Statistics** concentrates on practical skills, enabling students to learn or hone their data-analytic abilities by using modern techniques and software packages associated with workplace requirements.

Organisations in the 21st Century depend on their employees' abilities to research, organise, compile, analyse and interpret data. So this course is suitable for employees in a wide range of occupations counting from health and science to senior secondary teachers, and researchers in fields as broad as finance and the social sciences.

## **A flexible approach**

Subjects are taught using a range of blended learning techniques, including online study materials, video-captured lectures, online meetings, subject forums and additional study resources. Our study flexibility allows students to study these courses online from anywhere in the world.

**[www.csu.edu.au/courses/itc-maths](http://www.csu.edu.au/courses/itc-maths)  
1800 334 733**

 **Charles Sturt  
University**



# DATA SCIENCE

## More than just crunching numbers

Working with leading companies, mathematicians and statisticians are highly employable in this exciting and growing field. Data scientists are described as part analyst, part artist. They use their skills to make discoveries and gain new insights through exploring data.

### resources group

## Data Scientist – Razor Sharp Consumer Analytics

An exciting role for a data nut with natural analytical talent who wants to develop skills working on advanced market research – sample, survey methodology, data manipulation and analysis.

Key responsibilities:

1. Support the side teams as a technical expert
2. Help enhance techniques and new data initiatives
3. Ensure accurate methodology & practice within the organization
4. Apply statistical methodologies to analyse survey data
5. Ability to use data mining to understand complex situation or market using large data

The position sits within a leading market research agency. It has an exceptional reputation and an organisation and structure to provide you with a clear career path, training and development opportunities. You'll enjoy the benefits of strong leadership to develop quickly with strong support, exciting clients and a variety of projects.

The ideal candidate:

- Solid work experience in survey research with hands on experience in developing and executing advanced statistical methodologies (segmentation, modelling, regression etc)
- Bachelor or Master 's degree in Statistics, Mathematics, Operations Research, Econometrics, Engineering or Computer Science with outstanding analytical expertise and strong technical leadership
- Proficient in MS package, SAS, or other statistical packages.
- Strong ability to communicate complex ideas in a simple way
- Accuracy and attention to detail
- Ability to autonomously manage simultaneous projects in a fast paced business environment
- Experience working with large datasets and able to integrate across datasets will be advantage
- Knowledge in programming preferred



Australia's pioneer in  
online education  
provider of innovative, next-generation open learning.

## Data Scientist - Learning

### About the position

The Data Scientist is a key support role for Open Colleges. We believe gut feel is good but data is better and are committed to making data based decisions to drive the business forward. This is an influential role that will be responsible for providing and analysing student data information to provide recommendations and advice to senior Managers.

### Your core functions

In this role, you will undertake the following core functions across the Division:

- Interpret and apply data and insights with key Division stakeholders
- Build data literacy within the organisation
- Design and analyse experiments to improve performance
- Systematically review industry trends
- Develop research to underpin Portfolio and Program Strategies, Plans and Budgets
- Contribute to the evolution of data warehouse and business intelligence tools
- Develop standard metrics and dashboards
- Contribute to the identification of data governance, data quality and information architecture
- Provide advice and support to Division in use of Business Intelligence tools

### To be successful in this role, you will have

#### The following key attributes and skills:

- Proven conceptual thinking abilities
- Strong interpersonal, oral and written communication skills
- Ability to confidently use technology and systems
- Stakeholder management

#### Technical skills and experience:

- Analysis of large complex data sets (at a transactional level) to generate actionable insights
- Technical skills in utilising the capabilities of data warehouses
- Excellent PL SQL scripting skills
- Strong data modeling, mapping and cleansing skills
- Experience using statistical reporting and/or business intelligence (BI) tools
- Experience developing BI reports, dashboards, mashups with tools such as Qlikview (desirable)

#### Experience in:

- Presenting complex data to support business decision making
- Consumer facing digital environments (highly desirable)
- Building data literacy capability amongst a range of different stakeholders, with differing levels of data literacy and experience

#### Tertiary qualifications including:

- Advanced qualification(s) in mathematics, statistics, economics, computer science, or related field(s)

#### About us

We are one of Australia's oldest and largest providers of open learning. For over 100 years we have been helping people from all walks of life to improve their lives through learning. Over this time, we have delivered education and training to more than 700,000 Australians.

Today, we deliver a diverse portfolio of courses spanning three Divisions: Business, Finance and Services; Education, Health and Community Services; and Design, Science and Technology. We focus on meeting the needs of adult learners by providing highly flexible, accessible and affordable education and training.

We have a clear vision and have experienced step-change growth and organisational expansion over the last three years. We are well positioned to sustain strong growth into the future - driven by increased market demand for online learning combined with continued investment in further expanding our course portfolio and improving the learner experience and competitiveness of our courses.

We are committed to delivering a great learner experience and outcomes. We are proud of our achievements in delivering consistently high levels of learner satisfaction and graduate outcomes. At the same time, we are pioneering new learning technologies and pedagogies that will further enhance our proven asynchronous learning and assessment model.

In December 2013, Open Colleges joined Apollo Education Group (NASDAQ APOL) – one of the largest education companies in the world. Apollo Education Group delivers education and training to more than 270,000 students around the world. As a part of Apollo, Open Colleges has the unique opportunity to leverage the experience and expertise of a global leader in online learning.

Our team includes over 300 staff and 150 contract educators. Over the last three years, we have been through a fundamental organisational transformation. We have more than tripled the number of staff and expect to grow to more than 700 staff over the next three years.

#### To apply:

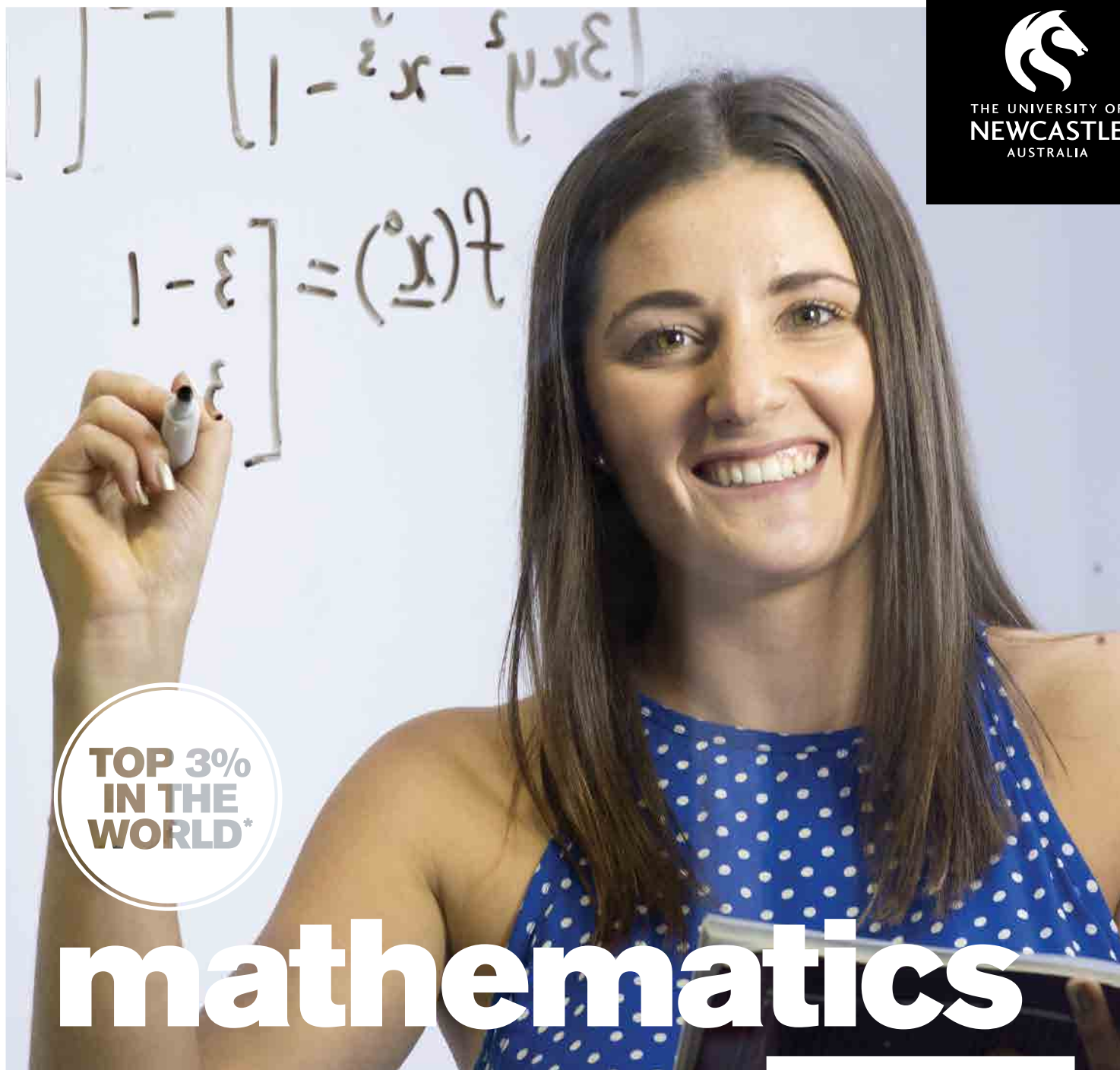
Visit our website, [www.opencolleges.edu.au](http://www.opencolleges.edu.au)



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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 2012 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 provides the language for sciences 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 themselves in education, government agencies, top tier firms and research roles.

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

Find out more [newcastle.edu.au/mathematics](http://newcastle.edu.au/mathematics)



# DATA SCIENCE

## Data scientist / engineer

### The Company

Buildings Alive is a creative, agile and ambitious organisation helping to maximise the operational efficiency of large commercial buildings and thereby limit greenhouse gas emissions and other environmental impacts.

We invest approximately 50% of our capacity in cutting edge R&D and are continually advancing the data analytics platform that sits at the core of everything we do.

Visit our website to find out more: <http://www.buildingsalive.com>

### The Role

We are looking for a Data Scientist / Engineer to join our Sydney-based team working on large volumes of data from environmental sensors and utility (electricity, water, gas) meters. In this role you will contribute to the development and optimisation of our data analysis platform, working in collaboration with our diverse team of highly skilled and experienced engineers and scientists.

The role is based in Sydney CBD; however there is an opportunity to be based in Melbourne's inner north if preferred.

It is a full time position (preferably) and a competitive annual salary package commensurate with skills and experience will be offered.

### Desired Skills and Experience

Ideally, you will have the following attributes:

- PhD / higher-degree research experience in statistics, mathematics, computer science, electrical engineering, bioinformatics, or a related field.
- advanced analytical/computational skills including expertise in platforms such as Python, Matlab, R, C/C++
- a deep understanding of machine learning, statistical modelling and prediction algorithms
- a keen interest and experience in 'big data' and data visualization.

In addition it is essential that you have excellent problem solving and communication skills, attention to detail and the ability to work effectively as part of a team.

We are looking for scientists and engineers with specialisations in complex data analysis to join us early in the life of the company, and grow with us, sharing the rewards of success along the way.

Please send your covering letter and current CV to



## DATA SCIENTIST

- Experienced Data scientist
- Leading analytics consultancy, top 100 ASX client base
- Contract or perm opportunity

My client, a niche consulting house, is looking to strengthen their analytics and insight division. As such experienced senior manager is required to take a leading role as a senior data scientist running multiple project work streams.

To succeed in this role you must be a senior leader with a proven back ground in quantitative analysis, data mining and data modeling. If you can demonstrate this along with C-suite stakeholder management then I would be keen to see your resume.

This is an excellent opportunity to work on a highly complex and challenging programme of work. Due to the nature of the client, their organisation and business goals you will be working with a number of industry leading professionals on an industry leading project.

My client has grown quickly, attracting an elite consulting team over the past 18 months and now need an experienced data scientist to take ownership and to help deliver this time critical project. I will consider both permanent and contract personnel for this opportunity.

### Required experience:

Minimum seven years experience across advanced data modelling and quantitative analysis;

Development and deployment of advance analytical solution to improve business processes and ROI;

Data management - integrity, process mapping, process automation and reporting;

Testing across analytical models, ability to create test strategies and implement them;

Proven consulting skills, either internally or as an external party, specifically senior stakeholder management at C suite level;

Translation of business needs into clearly defined documentation;

Proven change management experience working across multiple business divisions;

Risk management at a stakeholder and business process level;

Team management in matrix environments of both direct and indirect reports;

Any experience with SAP InfiniteInsight would strengthen your application;

Strong communication and problem solving skills.

Reed Technology  
Freecall : Melbourne 1800 007 985 / Sydney 1800 007 970

For more similar job opportunities visit our website  
[www.reedglobal.com.au](http://www.reedglobal.com.au)

Reed Technology is part of Reed Specialist Recruitment.  
Email: Please click the 'Apply Now' button below.

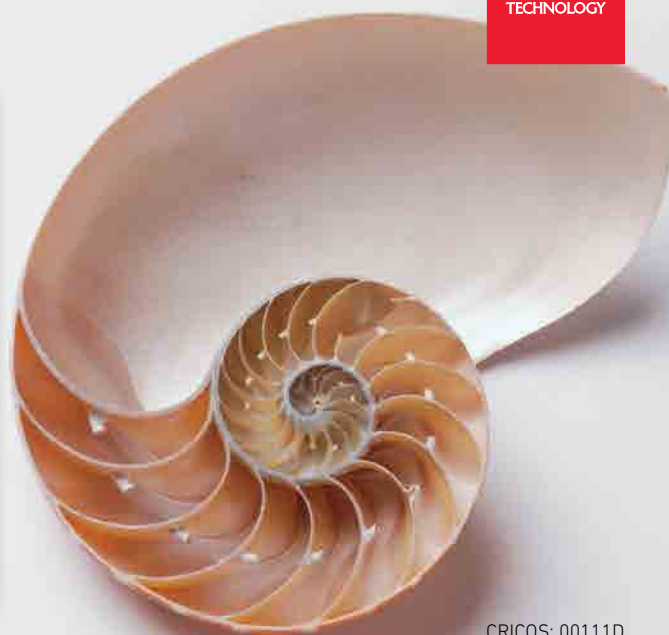
# Study maths at one of Melbourne's best universities\*

Swinburne's Bachelor of Science (Applied Mathematics) offers broad training in applied mathematics. You'll learn how to model the world mathematically and express our understanding of nature, technology and finance.

To advance your maths career even further, consider a Swinburne applied mathematics PhD in fields such as geophysical fluid dynamics, statistical mechanics and molecular dynamics, hydrodynamic instability theory, computational biology, dynamical systems and optimisation.

[swinburne.edu.au/science](http://swinburne.edu.au/science)  
1300 275 794

\* 2014 Academic Ranking of World Universities



CRICOS: 00111D

## UTS:SCIENCE PROBLEM SOLVERS WANTED.



### Study a mathematics degree at UTS Science

Our courses are inquiry-based and research-inspired. You will experience hands-on approach to solving real world situations. Courses on offer include Analytics, Mathematics, Statistics and Computing .

"Analysing big data for a company like Facebook could involve determining the usefulness of a feature such as the 'like' button which proved vital in some cases."  
**Marianne Menictas, PhD in Mathematics, UTS Science.**

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

\*UTS is Australia's top ranked university in the Times Higher Education 100 universities under 50 years old.

# DATA SCIENCE



**SALIENT**

Sales Performance  
Accelerated

## Data Scientist

### The Company

Powerful, disruptive, digital agency which is changing the landscape in their sector. They are in aggressive APAC growth with more investment in research, innovation and new product development than any competitor in their category.

With a culture focused on employee development and providing accelerated career paths, they have exceptional retention rates.

### The Role

- Lead the solving of complex business problems where sizeable outcomes are involved, as are higher levels of uncertainty and complexity about both the problem and the solution
- Determine appropriate machine learning / statistical techniques for application in different products or analytical projects
- Develop POC stage products using R, Java, Python, etc based on defined acceptance criteria
- Work in an Agile SCRUM environment to deliver product POCs against an agreed development roadmap
- Manage the transition of Proof of Concept products / software to IT Development team to move products to a production state
- Creation of comprehensive documentation, including in code, technical specification and user/process guides
- Understand and provide input into conversations related to the technical management of large datasets and complex algorithmic solutions on AWS platform
- Actively promote new innovative approaches by staying abreast of contemporary industry developments
- Develop new Insights product concepts and lead scoping of initial POC design
- Reviewing research and discussion papers to develop own skills and to share with the team
- Presenting at internal and external knowledge sharing seminars

### Demonstrated Capabilities

- Graduate and likely postgraduate degree in Computer Science, Mathematics, Statistics or related discipline
- 2+ years' experience in a Marketing environment, preferably in both a CRM and digital media context
- 5+ years' experience in an Analytics or Development environment, with strong hands on experience utilising a wide array of supervised and unsupervised machine learning algorithms
- Programming experience, preferably R, Java and/or Python
  - Experience with SAS or SPSS syntax will be considered
- Strong SQL skills

### Highly regarded experience

- Experience within an Agile or SCRUM environment
- Hadoop and/or Map Reduce experience a plus
- Strong mathematical background in solving matrix algebraic and linear programming / optimisation problems highly regarded
- Proof of coding experience through examples of statistical programming/library/package development on Github

www.salientgroup.com.au

# LAURA SMITH

## AMSI Vacation Research Scholarship 2015

Laura Smith grew up on a farm in South Gippsland. She always liked problem solving and mathematics. So much so, that when she reached Year 12 and her school didn't offer specialist mathematics she took it up via correspondence – that's dedication. Laura spent her summer as one of fifty-six AMSI Vacation Research Scholarship students. Her research was in fuzzy logic or, the mathematics of ensuring minorities can't skew ratings.



*“The VRS program is important because it encourages students to ‘practice’ research,”*

“Say you have a group of four food bloggers who want to rank three restaurants. Three agree and vote restaurant A the top restaurant, followed by restaurant C then B. However, the fourth is bribed by restaurant C, so gives restaurant C a really high score to increase C's average and A a really low score to decrease A's average.

“Our algorithms can identify and remedy these biases, giving a more accurate view of the majority. In this case the fourth blogger's scores will be given a lower weighting which will result in a fair result: A being voted top restaurant,” Laura explains. While this may seem like a low impact application the same technique is used widely throughout the business sector to manage risk and make decisions where a group of experts each contribute an opinion.

“The VRS program is important because it encourages students to ‘practice’ research and encourages students to continue through to honours and then a PhD.”

STUDENT PROFILE



## Adding maths to your studies multiplies your options.

As a leading global resources company, we offer world-class work experience opportunities including sponsorships, outstanding graduate roles, and top learning events such as our BHP Billiton Foundations for Graduates and our Summer Undergraduate Program. We're always looking for students with a passion for mathematics. We value maths, because it drives our technology, our operations, and the science behind everything we do, across roles like these:

<b>Engineering</b>	Chemical, Communications, Electrical, Environmental, Mechanical and Mining
<b>Business</b>	Accounting/Finance, Human Resources, Information Technology and Supply Chain
<b>Science</b>	Geology, Environmental, Surveying, Health, Chemistry and Occupational Therapy

For a choice that can really take you places, choose mathematics.



## ENERGY

### Maths grads, we need you!

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

**maths:**  
make your career count  
mathscareers.org.au

*My speciality is severe weather forecasting. I forecast the weather for the Emergency Services and produce warnings for critical fire weather days or severe thunderstorms. Weather is ever changing which makes it interesting to watch. It is challenging, particularly at the extreme ends of the scale, so my job is rarely boring. I have to get it right as my decisions affect a lot of people.*

**Meteorologist**  
Claire Yeo  
Bureau of Meteorology



### Energy Market Analyst

- Join the CS Energy team
- Competitive salary and conditions

CS Energy is a Queensland Government owned energy provider with a generating portfolio that includes coal, pumped storage hydro and future-focused renewable and low emission generation technologies. Safety is our first priority. We are powered by experienced, skilled and talented people. Together, we strive to provide effective energy solutions and build a commercially viable and sustainable business for the benefit of our employees and the people of Queensland.

#### The role

As the Energy Market Analyst you will be an integral member of CS Energy's Energy Markets division, facilitating trading system enhancements and performing analysis that contributes towards the optimisation of CS Energy's financial outcomes.

Major elements of this role include:

- Improvements to trading systems capability and efficiency;
- The development of reports and tools that facilitate informed trading decisions;
- Market and revenue forecasting for strategy development, commercial projects and business planning purposes; and
- Contribution to divisional reporting and business planning requirements.

#### The person

To be successful in this role you will have:

- Degree Level qualifications in a quantitative discipline e.g. **Mathematics**, Engineering, Information Technology, Commerce, or Economics;
- Strong quantitative and logical reasoning skills;
- A high level of proficiency in the use of relevant software packages and IT systems, including Microsoft Excel, database applications (including use of SQL), and trading systems. Previous experience in the scoping, development and user acceptance testing of IT systems enhancements will be well regarded.
- Working knowledge of the operations and dynamics of the National Electricity Market;
- 3-5 years experience in a related role; and
- Well developed report writing skills, and the ability to convey complex ideas and concepts.

#### How to apply

Visit [www.csenergy.com.au](http://www.csenergy.com.au) to obtain a detailed Role Purpose Statement and information on how to apply. All applicants are required to submit a cover letter and CV with their application.

Applications close **COB Sunday 18 May 2015**.

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THE UNIVERSITY  
of ADELAIDE



CRICOS Provider Number 00123M

# Sharpen your mind with mathematics at Adelaide

In today's complex environment, a degree in mathematical sciences will teach you a universal language used to describe, model and understand the world around us.

At the University of Adelaide, you'll learn from expert lecturers and some of the world's top researchers in a vibrant environment. You'll specialise in applied mathematics, pure mathematics or statistics. Your degree will help you tackle real world issues and open doors to rewarding careers in Australia and beyond.

As a high performing student, you'll also have the opportunity to undertake an honours year or a master's degree to deepen your mathematical knowledge after completing your bachelor degree. These advanced qualifications are highly regarded by employers and are preparation for research in the mathematical sciences.

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

For a rewarding and flexible career using mathematics and statistics, study at the University of Adelaide - ranked in the top 1% of universities worldwide.

- > Bachelor of Mathematical Sciences
- > Bachelor of Mathematical Sciences (Advanced)
- > Bachelor of Mathematical and Computer Sciences

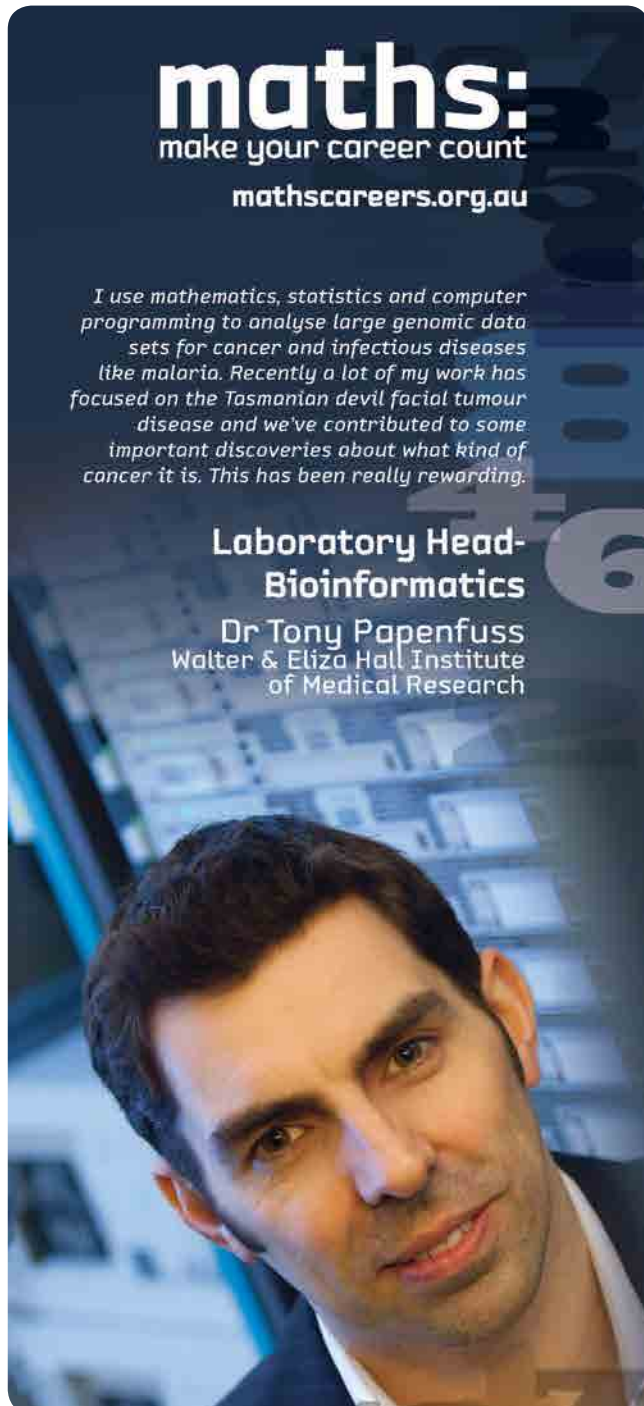
**For further information visit [ua.edu.au/math](http://ua.edu.au/math)**



## EPIDEMIOLOGY

*Uncover a healthy career!*

Epidemiologists study the frequency and distribution of diseases within human populations and environments. Biostatisticians help formulate the scientific questions to be answered and conduct statistical analyses to answer those questions.



**maths:**  
make your career count

[mathscareers.org.au](http://mathscareers.org.au)

*I use mathematics, statistics and computer programming to analyse large genomic data sets for cancer and infectious diseases like malaria. Recently a lot of my work has focused on the Tasmanian devil facial tumour disease and we've contributed to some important discoveries about what kind of cancer it is. This has been really rewarding.*

**Laboratory Head-Bioinformatics**  
Dr Tony Papenfuss  
Walter & Eliza Hall Institute of Medical Research

jobs.nsw



### REF15/45 Trainee Biostatistician, Clerk Grade 7/8, Centre for Epidemiology and E

#### Trainee Biostatistician

NSW Ministry of Health

Location: North Sydney

Classification & Grade: Clerk Grade 7/8

Salary Range: \$85,868 - \$95,050 p.a

Vacancy Type: Temporary Full Time

Vacancy Reference: REF15/45

Closing Date: 15 May 2015

#### Role Purpose

Trainees will gain experience in biostatistics through supervised work placements in a range of locations within the NSW health system, and will undertake a Master of Biostatistics part-time through the University of Sydney. Subject to the signing of a Deed of Agreement, NSW Ministry of Health will pay university fees, and grant study leave. Traineeships will commence in August 2015.

To be successful in this role, you will have successfully completed an honours degree majoring in statistics, or an equivalent qualification, and will have: an aptitude for advanced mathematical work, high level knowledge of statistical concepts and methods, and extensive experience in the use of statistical software packages.

#### Your application should include:

1. a covering letter (maximum two pages) in response to the two targeted questions below;
2. an up-to-date resume which clearly details your skills and experience as relevant to this role, including evidence of your aptitude for advanced mathematical work, for example by a high level of achievement in high school or undergraduate mathematics;
3. a full academic transcript for your relevant qualification(s); and
4. evidence of your residency status.

You are not required to address selection criteria, however please respond to the two targeted questions located at the bottom of this job advertisement

Please review [Applying for a role in the NSW Public Service](#) for more guidance.

#### Job Notes:

- All applications must be submitted on line via [jobs.nsw.gov.au](http://jobs.nsw.gov.au) to be considered.
- Your application **must** include your response to the targeted questions, and an up to date resume/CV.
- Relevant screening checks will be conducted as well as Prior Service checks for internal applicants
- **You are advised not to delete any "Relevant Files"** that you upload in the jobs nsw application system until you know the outcome of your application, including your Resume/CV and/or Cover Letter. Doing so will result in the selection committee being unable to access your application.
- You need to demonstrate your proficiency in the capabilities described in the Role Description. These will be assessed through the recruitment process to determine your suitability for appointment. [NSW Public Sector Capability Framework](#)

For an information package please [click here](#).

## FINANCE

### *Not just for commerce graduates*

The use of sophisticated quantitative techniques in the financial sector has become the norm. As a consequence, graduates trained in mathematics and statistics are in high demand.

It might surprise you to know the majority of people working in the finance sector — that's banking, the stock market, financial planning and management and other forms of investment, insurance and the regulation of these areas — have studied mathematical sciences at university. With advanced quantitative and analytical skills, obtained while studying mathematics and statistics, your ability to describe market behaviour will be second to none. Modelling risk, optimising returns and predicting future gains all rests with mathematics and statistics.

It is definitely not just commerce graduates working in the finance sector.



**Huxley** | BANKING & FINANCIAL SERVICES

### Trader

Qualified candidates will possess excellent quantitative/statistical skills, and exhibit a focused, profit-oriented mindset. Creative problem-solving ability is a must. Must be extremely hard-working, and have a strong passion for markets. Expectations are very high for new hires; only intelligent, highly determined individuals need apply. Only graduates of top-tier schools with excellent academic credentials and strong backgrounds in mathematics/statistics, engineering, economics, or quantitative finance will receive consideration. Must have a minimum of 2 years trading experience. Strong preference is given to candidates with programming experience, particularly Python, but it is not mandatory.

If you feel you will succeed in a competitive environment please contact for immediate consideration.

[www.huxley.com](http://www.huxley.com)



## Applied Mathematics Graduates - Quantitative Trader

Global Proprietary Trading Firm  
Quantitative Assistant Trader Role  
1st Class Hons, Masters and PhD Graduates Wanted

- Global Proprietary Trading Firm
- Quantitative Assistant Trader Role
- 1st Class Hons, Masters and PhD Graduates Wanted

Unique opportunities have transpired for entry level graduates in statistics, physics, actuarial, econometrics and mathematics to work for a global proprietary trading firm as an assistant trader. With an outstanding presence in Asia Pacific, Europe and the US my client boasts an impressive team of dedicated quantitative traders, analysts and computational scientists.

The successful applicant will report to the senior trader and assist in day to day administration and support of trading operations. These will include the analysis of flow and market information, adjustment of options market and management of option books. This is a fantastic opportunity for entry level graduates in statistics, mathematics, engineering, actuarial or physics. It's also a great opportunity for people with experience in another field and really want to get their foot in the door in trading. Finance experience or knowledge in financial markets is not necessary. Candidates with a 1st Class Hons, Masters or PhD are strongly encouraged to apply.

Please note that applicants will be shortlisted on the basis of their academic credentials, which must be at a High Distinction level. Anything less will not be considered, therefore only the top 1 % will be contacted. The type of modelling skills we desired are varied, therefore we are keen to speak to anyone from an applied or pure mathematics background. These include but not limited to; theoretical physics (anything from dark matter/energy to quantum mechanics, computational, flu id dynamics, string theory or condensed matter, etc), plasma or electromagnetism. Engineering (mechanical, electrical, nano, aerospace or financial), actuarial, statistics (probability modelling is highly desired).

Applicants must send their academic transcripts and sit for a 1 hour maths test offsite. (Finance and trading knowledge will not be tested).

**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.

<http://www.bluefinresources.com.au/privacy-policy>

[www.bluefinresources.com.au](http://www.bluefinresources.com.au)



# FINANCE



## Actuarial Analyst | Sydney | SAS

**CBD location**  
**Market leading remuneration**  
**Opportunity to join an expanding business**

A role exists for a Portfolio/Actuarial Analyst to work within a financial institution in Sydney's CBD. The opportunity exists to undertake analysis, develop strategies and implement monitoring to support risk management.

### Key accountabilities would include;

- Develop a portfolio monitoring tool to assist with analysing portfolio performance
- Data management and manipulation using SAS
- Forecasting change in the portfolio's risk profile
- Automation of reports and various campaigns
- Engaging with key stakeholders such as IT and operations

### To be considered for the role you will need;

- 1-2+ years in a commercial analytics role
- Experience extracting and managing large volumes of data
- 1-2+ years using SAS or SQL is an inherent requirement
- Tertiary qualified in either a Quantitative i.e. Actuarial, **Statistics**, **Mathematics**, Economics
- Strong communication skills

This is an opportunity to join an organisation that places real value on its people, it's customers and its employees alike, through continuous improvement, development, career opportunities and organic growth.

Apply online quoting job reference.

**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.

<http://www.bluefinresources.com.au/privacy-policy>

[www.bluefinresources.com.au](http://www.bluefinresources.com.au)

Huxley | BANKING & FINANCIAL SERVICES

## Senior Analyst, Predictive Modelling

This major domestic bank understands, values and fully supports it's analytical talent and resources and is looking to expand further in their risk solutions division. Due to an excellent performance in 2014 and increased demand from internal stakeholders, the modelling team in Group Marketing is looking to grow again this year. Benefit from working for one of Australia's largest and best known brands, state of the art Sydney CBD offices and continual investment in technologies and career development.

This is an excellent opportunity for a Senior Analyst to join a growing advanced modelling team within marketing at a major domestic bank based in Sydney's CBD. The function of this team is to utilise advanced statistical, data mining and programming techniques to improve the way in the bank predicts consumer behaviour to be used in marketing.

The role offers the following;

\$100-125Kbase+ super + bonus for an initial 12 month fixed term contract

Opportunity to own and deliver analytical solutions 'end to end', seeing, designing and implementing customer retention/acquisition models.

Significant stakeholder engagement with senior management across product, sales and marketing.

Work in an environment where analytics is understood, appreciated and supported with investment.

Exposure to a range of different retail banking products

State of the art offices in Sydney's CBD

Responsibilities of the role

Develop predictive models to improve customer retention/acquisition rates

Find critical insights from large volumes customer data

Engage stakeholders in product, marketing and sales teams to deliver valuable insights and help set strategies

Experience requirements;

Tertiary qualification in relevant numerical subject such as **stats/maths** (or similar)

Building **predictive models** using advanced techniques such as machine learning, Decision Trees, random Forrest.

Minimum 3 years in a data mining and analytical role with exposure to large data sets

Programming experience using HIVE, Python, SQL, PIG or similar

Confident communication style, both written and verbal, and ability to engage with seniors from a variety of backgrounds (Sales, Marketing etc)

Minimum 3 years SAS, R (or similar tools) experience working with large volumes of data.

This is an excellent opportunity to join a growing team within one of Australia's largest financial institutions. 2015 will see increased investment in this area with bank looking to improve the value that they drive from their data.

\*\*\*PLEASE NOTE-ONLY CANDIDATES WITH PERMISSION TO WORK IN AUSTRALIA CAN BE CONSIDERED AT THIS STAGE\*\*\*

[www.huxley.com](http://www.huxley.com)

Embark on an adventure with FedUni and decode the world with mathematics

FedUni offers a range of programs that allow you to factor in your mathematical ambitions:

- Bachelor of Mathematical Science
- Bachelor of Engineering
- Bachelor of Information Technology
- Bachelor of Science

# You can count on a career in Mathematical Sciences!

The applied focus of FedUni's mathematical science program ensures you will be ready for a career in this varied field. While there are the obvious choices of a role in banking, as a stock broker or financial advisor - **did you know** that you may also have a career as a medical statistician and help discover cures for some of the biggest health issues of our time? Or, if protecting our national security gets you interested, how about a career as a defence force or internet security analyst?

Mathematical science qualifications are highly sought after in a large range of industries.

Our programs will provide you with a strong foundation in the basic principles and techniques of mathematics, as well as an understanding of how mathematics is applied in the real world.

Find out more at:  
[www.federation.edu.au/maths](http://www.federation.edu.au/maths)

## Discover Mathematics at FedUni

Learn to succeed

1800 333 864 | [federation.edu.au](http://federation.edu.au)

CRICOS Provider No. 00103D

Federation   
UNIVERSITY • AUSTRALIA

## FORENSICS

### Discover the facts...

Forensic analysts use many scientific techniques to help solve criminal cases. The use of mathematical principles can determine the victim's location from analysing bloodstain patterns; the type of weapon used; or the impact that caused the victim's injury.

#### 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, Perl, 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?

# NORAH FINN

## Vacation Research Scholarship 2015 & AMSI Summer School 2015

Australia is a sporting nation and Norah Finn is a sports fanatic. When she realised sports and the mathematical sciences could mix, she had to get in for a try – Norah spent her summer on the job with our paralympians. She is now applying her statistical skills at RMIT University to breast cancer detection methods.



*“Statistics provides a mathematical way of describing occurrences in life and can act as a predictive tool to maximise quality of life.”*

Over six weeks Norah worked with our wheelchair rugby team and members of the Australian Paralympic Committee to investigate workload training. The research aimed to determine how players perform in competition in comparison to when they train. Statistics provides a mathematical way of describing occurrences in life and can act as a predictive tool to maximise quality of life. “My new research topic is very different to sports statistics! But has always been a path I considered taking. It’s great to have gained training in stats research in both fields.”

Norah also attended AMSI’s 2015 Summer School at the University of Newcastle. She says residential schools offer fantastic opportunities to be immersed in mathematics and statistics. “We bonded like a sports team; made good friends; and were able to teach and learn from each other.”

Norah is one of AMSI’s favourite ambassadors, tackling both a VRS project and Summer School over her 2014/2015 summer.

## STUDENT PROFILE





Statistics  
tell the  
story

# Statistical Careers for Graduates and Professionals at the ABS

The ABS is Australia's official statistical agency, recognised internationally as one of the world's top statistical agencies. Our work impacts on almost everyone in the country, including governments, community bodies, industry, businesses and academic institutions.

Each year, the ABS seeks to employ highly skilled graduates in Canberra and around Australia, 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.

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 provides a range of information to governments, researchers, industry, businesses and the community for informed decision making. This information is also used to understand economic, social, labour and other issues that are relevant to Australian Society, and to assess how our society is changing over time.

Within the ABS, the Methodology and Data Management Division (MDMD) provides the expertise on methods relating to the design, collection, compilation, analysis, dissemination and management of statistical data. MDMD 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.

MDMD is seeking graduates with degrees in: Economics, Econometrics, Information Management, Market Research, Mathematics, Operations Research, Psychology, Social Sciences and Statistics.

Applications for the 2014 ABS Graduate Development Program open on 7 March 2013 and close on 26 April 2013 and must be submitted online via the ABS website at [www.abs.gov.au/careers](http://www.abs.gov.au/careers)

To be eligible for employment with the ABS, you must be an Australian citizen by January 2014.

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.

**For more information, please contact us by:**  
**Phoning: 1800 675 125. Emailing: [recruitment@abs.gov.au](mailto:recruitment@abs.gov.au)**  
**Or visiting our website: [www.abs.gov.au/careers](http://www.abs.gov.au/careers)**

# ■ GAME DESIGN

## *Is this work or play?*

Studying mathematics could blur the line between work and play; opening doors in the real and virtual world! From first person shooter games to simulation games, the use of advanced mathematics is what makes them appear so real. And to make the environment look realistic requires mathematical knowledge: trajectories, sunlight on trees, movement of water and the flocking of birds are all described by mathematics.



Empowering you. Embracing Technology. Entertaining the world.

### Games Designer - Mathematician

With over 60 years industry experience and over 2900 staff globally, Aristocrat has built on its Australian market leadership and reputation to become a premium supplier of ground-breaking technologies and services to the international gaming industry

Aristocrat enjoys a well-earned reputation for outstanding performance and strong brand equity in more than 200 jurisdictions around the world. The diverse product line-up extends from electronic gaming machines to complete gaming solutions, including systems, services and ancillary equipment

Our vision is clear: Aristocrat aims to become the leading provider of gaming solutions. Imagination, focus and creativity play major roles in achieving this vision

We are a business that values the impact talented people can have on both our culture and commercial success. We strive to ensure we provide you with the career growth and development that talented people both seek and deserve.

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We are a business that values the impact talented people can have on both our culture and commercial success. We strive to ensure we provide you with the career growth and development that talented people both seek and deserve.

As our **Games Designer**, you will have the responsibility of creating Gambling Game Concepts and co-ordinating Creative Development

Some of your responsibilities will include:

#### Some of your responsibilities will include:

- Liaising with the Game Design Director and other Game Designers to create and design new game concepts and products.
- Creating game specifications and game mathematics/profile documentation for new game concepts and products.
- Bringing ideas to reality by overseeing the development of new game concepts and products by liaising with Art Directors, Video Graphics Directors, Software Engineers, Sound Engineers, Key Marketing and R & D personnel and the Game Design Director to ensure quality standards are met
- Ensuring knowledge of worldwide gaming product is current and disseminated to other employees
- Mentoring Associate Game Designers and Game Designers.
- Reviewing **maths** packages and games in software.
- Ensuring QA procedures for games are met.

#### Experience & Qualifications:

- Minimum 4+ years game design experience
- Proven track record of developing successful game concepts
- Ability to write programs in C programming language
- Mathematical or Science degree
- Mathematical Degree or Background
- History of worldwide gambling product
- Creative flair
- Advanced excel skills
- Accuracy of checking
- Accuracy of maths and specifications

#### About you:

- Ability to work unsupervised
- Good communication skills
- Good time management skills
- Confident Leadership skills
- Good understanding of **mathematical** fundamentals of slot machines and other games in gaming, demonstrated by being able to calculate the mathematical return of existing games.
- Understand maths for majority of Aristocrat games (all categories ie standard, DSAP, bonusing).
- Ability to contribute to the development of an idea to assist its commercial viability.
- Can contribute to brain storming sessions supporting the ideas of others.
- Ability to generate an idea with assistance.
- Ability to generate commercially viable ideas.
- Understand different game types and categories
- Up to date with the gaming regulation of required game specific markets. Be able to develop and create compliant **mathematics**
- Ability to read and develop game/software specifications.
- Have the knowledge to develop art briefs including the rules, prizes and graphical elements of a game.

#### The Opportunity:

Here is your chance to impact on a global playing field. This is a key role that is highly visible within the organisation. You will work across a global network of talented individuals where you will be given support and autonomy to succeed.



**Train for one  
of the world's  
best jobs.**



## **Bachelor of Science (Mathematics)**

A degree in Mathematics can open the doors to a huge range of career possibilities.

As a graduate, you'll be able to apply your knowledge in a wide range of areas. These include: Mathematician, Actuary, Analyst, Statistician, Teacher, Cost Estimator, Financial Advisor, Teacher or Researcher. You might even end up using the skills you learn to forge a career in another area. With such diverse and in-demand career options, Mathematics plus University of Tasmania can only equal success.

Learn more  
[utas.edu.au/study-science](https://utas.edu.au/study-science)





# HEALTH

## *Of critical importance*

Current and future healthcare relies crucially on the analysis of numerical data. From cancer research to modelling how infectious diseases spread, this work is of vital importance and roles in this sector are varied: statistics is crucial to the future of our health.

## Biostatistician



QIMR Berghofer  
Medical Research Institute

- **Statistical consultancy and research collaboration with clinicians and scientists**
- **Highly autonomous role with opportunity for leadership development**
- **Specialist statistical knowledge and experience to support medical research**



The Unit provides statistical consultancy, collaborates in medical research and develops statistical and research skills for clinicians and scientists at QIMR Berghofer and Metro North HHS. You will be a senior member of a team of five specialist consultants and four project based statisticians.

We are seeking an experienced Biostatistician to join our team. Statistical skills and experience in genetics, epidemiology, laboratory based studies or clinical trials are desirable but other specialist skills will also be encouraged. You will use your expert statistical knowledge to collaborate and consult directly with clinicians and scientists, developing statistical resources and methods to facilitate meeting their research outcomes. You will contribute to training courses for researchers in the methods and practice of statistics, and provide statistical review for manuscripts and grant applications. You will have the opportunity to take a leadership role within the Unit, to lead statistical aspects of projects and to further develop expertise in your specialist area.

To be considered, you must have at least a Bachelor or Masters qualification in biostatistics and knowledge and experience of at least one of the specialist areas of statistical genetics, epidemiology, laboratory based studies or clinical trials. You will have experience in consulting and collaborative research, with peer-reviewed publications, and possess demonstrated knowledge of statistical techniques and procedures applicable to medical and public health research. You must be proficient in computer packages for statistical analyses and data management, and be able to effectively communicate in both written and oral forms to a wide range of clients. Leadership experience and potential will be highly valued. If you are still developing these skills you will also be considered.

**Salary:** Appointments will be offered according to qualifications and experience, within salary range of \$80,886-\$89,806. There are several full time appointments available for up to 3 years. You are encouraged to apply if you are seeking part time roles.

**To apply** Submit an [Online application](#)

**Closing Date** 22 June 2015

**Further information:** Applications should include curriculum vitae, proof of qualifications and the names and contact details of professional referees

QIMR Berghofer is a  
World leading translational  
research Institute

- ✓ Dedicated to researching the world's most debilitating diseases
- ✓ Developing new diagnostics, better treatments and prevention strategies to promote health and well being for all people
- ✓ World-class research, product development and clinical trial facilities
- ✓ Supporting scientists who perform world-class, ethical medical research



# 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 in which mathematics is playing an increasingly critical role. These include: economics and business; engineering; the physical and life sciences; and operations research and big data analytics.

You can access our broad range of courses in pure mathematics, applied mathematics and statistics through UQ's new Bachelor of Mathematics\*, or by undertaking a major in the Bachelor of Science, the Bachelor of Advanced Science (Hons) or the Bachelor of Arts. Students who wish to combine advanced mathematics with economics, commerce, engineering or a science can enrol in a dual program such as the BMath/BComm, BMath/BEcon, BSc/BEng (Hons) or BMath/BSc.

Your UQ maths experience will include classes taught by world-class researchers and winners of national university teaching awards as well as opportunities to participate in industry projects, research-based courses, and an active student society.

**Further information:**

**E:** [science.enquiries@uq.edu.au](mailto:science.enquiries@uq.edu.au)

**T:** (07) 3365 1888

*\* Bachelor of Mathematics to commence in 2016 subject to approval.*

*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.*

**YOUR UQ. YOUR ADVANTAGE.**



GROUP OF EIGHT AUSTRALIA

[uq.edu.au](http://uq.edu.au)



THE UNIVERSITY OF QUEENSLAND AUSTRALIA



# INSURANCE

## Calculating risks

How are your insurance rates determined? Insurance and actuary professionals are specialists who deal with the financial impact of risk. Mathematical scientists are perfect candidates for these analysis roles; they use probability and statistics to determine insurance rates for cars, homes, health and many other areas.



### Actuarial Analyst (Pricing and Analytics)

**RACQ Insurance is a leading general insurance company in Queensland, focusing on RACQ members. As a major player in the Queensland Insurance industry, we have a history of strong growth and performance in the Motor, Home, Boat and CTP insurance lines.**

You are invited to join our Actuarial Services team, within the Actuarial Pricing and Analytics function. Being part of a medium sized insurer you will be more than a number and can have a genuine and direct impact on company results and performance.

The main concern of the role is to assist:

- Reviewing technical premium rates required for short term portfolios
- Enhancing natural peril
- Develop

...morning reports  
...port and peril exposure

Pricing new products and policy options / features

- Developing price optimisation capabilities
- Undertaking ad-hoc policy/claim/customer experience analyses

Whilst all candidates are encouraged to apply, the following traits lend themselves most to performing successfully in this role:

- an actuarial, statistics or other mathematical degree with an excellent academic record
- professional experience in a general insurance and/or predictive modelling context
- base SAS and SAS macro programming skills
- attention to detail
- attention to the bigger picture
- using logic, reasoning and pragmatism to solve problems, especially when no out of the box solution exists
- a knack for being able to explain complex and/or detailed issues in plain, unambiguous, easily understood terms (verbal and written)

You will report to the Manager, Actuarial Pricing and Analytics, joining a team of

three other existing actuarial analysts, all of whom happen to be studying for the actuarial professional exams (at various levels of completion). Should you wish to pursue the actuarial qualification, financial support will be provided. Your day-to-day customers will include:

- actuaries and analysts from the wider actuarial services team, especially from the Insurance Liabilities function
- managers and analysts from the business information (data provision) teams
- accountants and analysts from the finance team
- managers and analysts from the insurance product and claim management teams

**Why wait? Introduce yourself to us today. To apply, please click 'Apply Now'.**

 Motoring
  Insurance
  Travel
  Finance

[racq.com/careers](http://racq.com/careers)  
 24 hours every day



# INSURANCE



## Reserving Actuarial Analyst

### Who we are

Zurich is one of the world's leading insurance groups, and one of the few to operate on a global basis. Our mission is to help our customers understand and protect themselves from risk. With about 60,000 employees serving customers in more than 170 countries, we aspire to become the best global insurer as measured by our shareholders, customers and employees. We help individuals, small and medium sized companies and global corporations around the world understand and protect themselves from risk by offering a wide range of insurance products, solutions and advisory services.

### The opportunity

A key objective of this position is assist with key aspects of the insurance liability valuation, maintain and improve actuarial and financial data, and provide financial information to key finance areas of Zurich to support financial reporting requirements.

### Key challenges will be:

- Ensuring that data is accurate and consistent and issues either managed or escalated on a timely basis
- Providing necessary level of service to internal stakeholders and overseas Zurich Group entities

### Your role

#### Key responsibilities

- Data extraction from SAP, Policy and other relevant systems, and data manipulation and analysis for the purpose of financial reporting and valuations
- Providing finance actuarial information for financial and management reporting
- Supporting production of formal statutory reports
- Supporting liaison with Corporate Centre and Regional management with valuation and reporting matters
- Providing actuarial support to ad-hoc projects

#### Your knowledge & skills

Your ability to work well in a team environment coupled with your excellent written and oral communication skills will see you well suited to this position. You will join a high performing dedicated team; therefore your passion to build on team success is a must. You have a strong academic record, in **mathematics**, actuarial studies or similar discipline. You have recently graduated or may have worked in the financial services sector for around 12-18 months and looking to build your career in the insurance sector. Exposure to SAS programming an advantage. Proficiency with Excel essential.

It is essential you meet the requirements to be admitted as a student member of the Institute of Actuaries of Australia or equivalent.

#### Culture & Benefits

In return for your commitment and hard work Zurich can offer you competitive remuneration, an excellent bonus structure, an annual \$500 lifestyle payment and employee discounts. In addition we provide a strong learning environment with opportunities for career development. Zurich also offers you support to study and complete actuarial exams to qualify as an actuary. Zurich is proud of its corporate and social responsibility and offers permanent employee an annual volunteer day.

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

[www.zurich.com.au](http://www.zurich.com.au)



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# MARKET RESEARCH

## *Another satisfied customer!*

Market researchers gather information about what people think to help businesses price, market, distribute and sell products. These analysts use mathematics everyday. From analysing past data to predict future gains, to evaluating product and consumer data to assist management make important decisions.

Being a market research analyst allows you to consultant or work in-house, giving you the freedom to work across many sectors.

### *Campaign Analysts / Marketing Customer Analytics. Multiples roles*

We have multiple roles available for junior - senior analysts with marketing / campaign analysis to join some of the largest analytics teams in the country. We have positions within: Banking & Finance, Media, FMCG and Consulting.

#### Responsibilities:

You will be using data to drive customer insights and recommendations to support effective marketing campaigns and customer contact initiatives. Data extraction, manipulation, analysis, end to end campaign delivery, ROI and segmentation.

#### Experience Required:

- Multiple roles for Analysts with experience from 2-6 years experience in either database marketing or end to end campaign process; design, implementation and post campaign analysis.
- Either SQL, SAS, Teradata, Unica or visual analytics would be highly regarded - Tableau, Qlikview etc
- You will need experience in database marketing, campaign reporting, execution, pre and post campaign analysis.
- Tertiary qualified in a quantitative discipline (**Statistics, Mathematics, Computer Science, Econometrics, Operational Research, Marketing etc.**)

click on the link below to send through your resume.



## Senior Marketing Analyst

- **ASX Listed Company**
- **Take Data to the Next Level**
- **Exceptional Growth Opportunity**

As a leading financial services provider in the Asia Pacific region, this market innovator provides essential services to consumers and business customers. Their vision is its people and delivering exceptional products and services through their distribution networks to deliver smooth operational efficiency and consistent profitability.

Reporting to the Strategic Marketing Manager, you will be responsible for providing data led insights and analysis regarding markets, competitors, customer and campaigns to support business decisions, measure performance and assist in the development of the marketing plan. Ultimately, you will be responsible for using data to highlight potential opportunities to both acquire and retain customers. Fostering collaborative working relationships with key internal and external stakeholders to ensure the marketing plan drives the business requirements in terms of revenue, volume and profitability targets.

To be successful, you will present as a data expert with sound analytical and marketing knowledge. You will have previous experience in data analysis, data measurement systems and techniques. As a lateral thinker, you will have experience working in a complex, multi-stakeholder environment and present with excellent interpersonal attributes. Tertiary qualifications in **statistics** or **mathematics** are essential and as is SQL | SAS proficiency.

Marketing, Product & Strategy : Sales & Business Development  
Digital : Corporate Affairs : Human Resources : Business Enablement  
[ampersand.com.au](http://ampersand.com.au) | MELBOURNE | SYDNEY | SINGAPORE



# ENHANCE THE DIGITAL FUTURE

Be at the forefront of technology and use your mathematical skills to enhance the digital future with a degree in information technology.

Mathematical skills are applicable to a broad range of roles within the IT industry, which means IT graduates with strong mathematical skills have increased employment opportunities across diverse industry sectors. IT @ Deakin has courses that are driven by industry needs and offer work placement opportunities in all IT programs.

The School of Information Technology at Deakin University offers a range of programs that provide an opportunity to apply mathematical skills and concepts in IT:

- Computer Science
- Data Science
- IT Security
- Games Design and Development

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

[deakin.edu.au/sebe/it-maths](https://deakin.edu.au/sebe/it-maths)

Deakin University CRICOS Provider Code: 00113B



# METEOROLOGY

## Four seasons in one day

Everyone knows the weather is hard to predict. Modelling ocean currents, weather patterns and climate change involves mathematics: lots of it. Relying on weather forecasts is important to a range of industries—from fishing, shipping and farming to air traffic control. It even affects everyday-people, everyday, should you take a broly?

**Australian Government**  
**Bureau of Meteorology**

A new **outlook**  
for **your career**

**Graduate Meteorologist**

The Bureau of Meteorology provides the opportunity to learn, to innovate, to succeed and to build a stimulating and rewarding career.

Applications are now open for our 2016 Graduate program, with opportunities for those with a major in physical science or mathematics, with completion of study in mathematics and physics to second year university level, who have either recently graduated or will be graduating this year.

The Bureau of Meteorology provides the opportunity to grow, to learn, to innovate, to succeed and to build a stimulating and rewarding career.

Applications are now open for our 2016 Graduate program, with opportunities for those with a major in physical science or mathematics, with completion of study in mathematics and physics to second year university level, who have either recently graduated or will be graduating this year.

As a graduate you'll start out as a weather forecaster, as you learn more about this fascinating field of scientific endeavour, you may have the opportunity to specialise in areas like Tropical Meteorology, Services to the Defence Forces, Meteorological and Oceanographic Analysis or Climatology.

Due to our size, diversity and extensive network of offices across Australia, there are excellent opportunities for promotion and to build a successful and rewarding career.

Look forward to a salary of \$53,372 whilst training, an advance in salary when you successfully complete your training, and comprehensive relocation assistance if you need to relocate for training or to transfer to your posting location.

We offer competitive working conditions, support and a great team people who love what they do.

Successful applicants will need to be available to commence the Graduate Meteorology program in Melbourne in January 2016.

### What we offer:

- 9-month accredited graduate diploma in meteorology
- Dynamic and challenging learning environment
- Use of advanced technologies and innovative techniques in weather forecasting
- Clear career pathway with excellent promotional opportunities
- National network of offices and relocation opportunities
- Competitive salaries and conditions of employment
- A generous employer contributed superannuation scheme
- Relocation benefits and assistance for interstate applicants
- Salary advancement upon completion of training

### What we are looking for:

- Graduates with relevant tertiary studies in atmospheric science, physical science or mathematics
- Motivated individuals with a passion for meteorology
- Flexible attitude, a willingness to relocate and undertake shift work
- Australian citizenship or permanent residency

### How to Apply

To find out more about our Graduate Meteorology positions, view the selection criteria and apply online visit the Graduate Meteorology vacancy on our website at [www.bom.gov.au/careers/graduates.shtml](http://www.bom.gov.au/careers/graduates.shtml)

**Closing Date: Thursday 28 May 2015**

[www.bom.gov.au/careers](http://www.bom.gov.au/careers)

# Maths can lead you to a great career

myfuture can help you discover unlimited career potential across a wide range of industries.

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These jobs in maths rank in the top ten for 2015:

- Actuary
- Statistician
- Biomedical Engineer
- Data Scientist
- Computer Systems Analyst

For information, tools and resources to help you on your career journey visit [www.myfuture.edu.au](http://www.myfuture.edu.au)





# MODELLING

## Common threads

Whether you work in engineering, mining, meteorology, finance, advertising, communications or logistics, chances are modelling tools will be used. Mathematicians and statisticians have the skills to describe many situations using mathematical models. These models are used to predict, forecast and simulate just about anything you can think of.

### Data Scientist

- Complex Analytics Projects
- Statistical Modelling Expert
- Global Consulting Group
- \$120k - \$150k + Super

Working across all project streams as part of this leading edge global consultancy, your quantitative analysis, data mining techniques and statistical modelling are in high demand for key client projects.

As a Senior Manager you will be working with a team of professionals and masterminding advanced analytical model designs; developing, configuring and providing input and reviews into the development of data models. You will be integral in the deployment of analytical solutions and integrating analytics into business processes within the client environment.

Degree qualified your demonstrated experience in the development and deployment of analytical solutions and ability to communicate and manage risks are key requirements. Expertise mapping business processes and managing multiple stakeholders, coupled with extensive data modelling and quantitative analysis, will ensure your success. Experience with SAP InfitelInsight will be highly regarded.

Alternatively forward your resume in a word document format by clicking on the Apply button below.



carringtonking.com.au

## Customer Analytics Statistician - Modelling

### Summary of the Position

This is the perfect position for an statistical modeller and insights analyst looking to join a company with a great culture in a fast paced environment. This is a contract position with possibilities for extension or more. You will be working to find insights one day and the next they will be used within the business. 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, regression modelling, time series and more
- Propensity and predictive modelling
- Liaise closely with the marketing 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

### Experience Required

- Minimum of 3 years experience within customer/marketing analytics
- Strong modelling experience especially in predictive and propensity modelling
- Prior work experience with customer analytics and segmentation techniques
- Excellent SAS/R/SQL skills
- 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

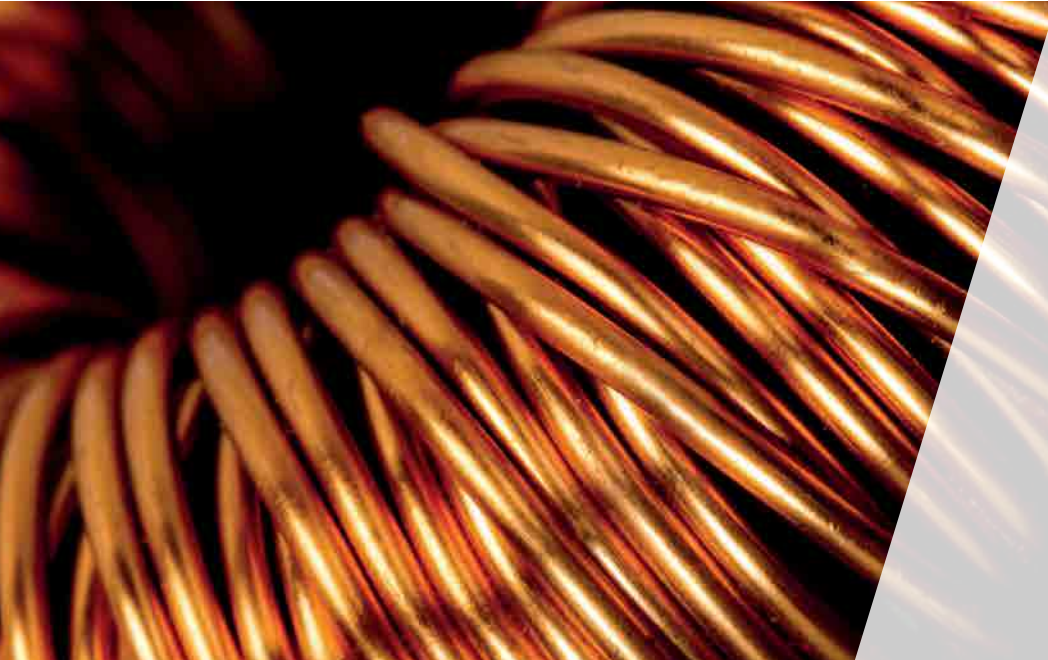
If you are interested in this position and feel you have the required work experience please apply directly

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#### Optional Digital Support With QuizMe More

This digital resource has been designed as an optional companion to the Checkpoints printed study guide, offering a host of additional auto and self-marking questions to help you prepare for their VCE exams. This portable study option provides the flexibility to revise and prepare for end-of-year exams using any laptop or tablet device. From 2016 will be included with the printed books for most titles.

#### Study Break: Take 5, Take a Photo

Encourage your students to upload their photos to Instagram and enter our photo competition to win a digital SLR camera. Visit our website for more information.

# TEACHING & EDUCATION

*Inspire a new generation!*

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.

State education authorities only advertise on their own websites. Please find them listed below.

## Government Education

VIC - [www.education.vic.gov.au/hrweb/careers/pages/advacssch](http://www.education.vic.gov.au/hrweb/careers/pages/advacssch)

NSW - [www.dec.nsw.gov.au/about-us/careers-centre](http://www.dec.nsw.gov.au/about-us/careers-centre)

QLD - [www.education.qld.gov.au/hr/recruitment](http://www.education.qld.gov.au/hr/recruitment)

WA - [www.det.wa.edu.au/careers/detcms/portal](http://www.det.wa.edu.au/careers/detcms/portal)

SA - [www.decd.sa.gov.au](http://www.decd.sa.gov.au)

TAS - [www.education.tas.gov.au/About\\_us/Pages/Employment](http://www.education.tas.gov.au/About_us/Pages/Employment)

ACT - [www.det.act.gov.au/employment](http://www.det.act.gov.au/employment)

## Catholic Education

VIC - [www.ceomelb.catholic.edu.au/professional-pathways/position-vacant](http://www.ceomelb.catholic.edu.au/professional-pathways/position-vacant)

NSW - [www.ceosyd.catholic.edu.au/Employment/Pages/Home](http://www.ceosyd.catholic.edu.au/Employment/Pages/Home)

QLD - [www.bne.catholic.edu.au/bce-employment/Pages/default](http://www.bne.catholic.edu.au/bce-employment/Pages/default)

WA - [www.internet.ceo.wa.edu.au/Employment/Pages/Vacancies](http://www.internet.ceo.wa.edu.au/Employment/Pages/Vacancies)

SA - [www.cesa.catholic.edu.au/working-with-us/positions-vacant](http://www.cesa.catholic.edu.au/working-with-us/positions-vacant)

TAS - [www.catholic.tas.edu.au/employment/positions-vacant](http://www.catholic.tas.edu.au/employment/positions-vacant)

ACT - [www.cg.catholic.edu.au/teachers-staff/employment](http://www.cg.catholic.edu.au/teachers-staff/employment)



## Maths and English Middle School Teacher

The College has a vacancy for a *Teacher of Middle School Maths and English*, from 13 July 2015. This is a full-time, continuing position.

Applicants must be registered to teach in Queensland.

The ideal applicant will have:

1. Demonstrated capacity to teach Mathematics and English Years 7-10;
2. Demonstrated capacity to integrate ICTs into teaching and learning;
3. Willingness to contribute to the College's extensive co-curricular program; and
4. Commitment to the Catholic and Marist ethos of the College.

*Applicants should address the criteria above in their application.*

**Applications close 3pm Monday 18 May 2015.**

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



Leading Experts in Education Recruitment

## Mathematics A and B Teacher Required

- Full Time Permanent
- Maths AB
- Elite Private School Teaching Opportunity

Smart Teachers is Australia's premier teacher and school leadership recruitment company. Celebrating ten years of recruitment for Independent, Catholic and Christian schools, we specialise in contract and permanent positions.

At this time, we seek a passionate and well qualified teacher of Mathematics keen to join one of Brisbane's elite private schools.

You will be an experienced teacher of mathematics capable of delivering engaging and robust lessons to highly academic mathematics A and B students. With an equal commitment to student well-being, you will bring a collaborative, rapport based focus and genuine duty of care. You will enjoy working in close knit teams of friendly, supportive and equally dedicated teachers, support staff and school leaders.

In return for your hard work and commitment you will be rewarded with outstanding terms. In addition to one of the highest remuneration packages, you will benefit from state of the art facilities, high levels of IT and resources, ongoing PD and a supportive teaching and leadership team.

To Apply:

A consultant will contact you with full details on the school, job and application process through Smart Teachers' free service.

## Work in Australia and the UK

**We have great jobs for great teachers. It's as simple as that! Let's get together and start working.**

**It could be the smartest move you'll ever make.**



## TEACHING & EDUCATION

### Mathematics Development Editor - Cambridge University Press

Take on a critical role in developing secondary mathematics resources for a market leading Australian publisher. Cambridge University Press, one of the most respected publishing companies in the world, seeks a development editor to work on mathematics projects and products for the national education market.

#### Objective

The successful candidate will provide support in designing, developing, and delivering mathematics textbooks, ebooks, teacher support, digital resources and other instructional materials for secondary schools throughout Australia, in line with Press standards and organisational requirements.

This position would suit a recent graduate.

#### Key responsibilities

- Assisting Publishers and Commissioning Editors in the development of mathematics resources, both print and digital
- Liaising with authors and consultants throughout the manuscript creation process
- Preparing and developing manuscripts for handover
- Conducting market research in anticipation of new titles and to keep aware of the changing needs of the marketplace
- Maintaining an up-to-date database of information about the market
- Participating in regular publishing and production meetings
- Attend workshops and conferences where required
- Potential responsibility for some new print and digital titles

#### The successful candidate will have:

- Exceptional attention to detail
- An interest in mathematical education
- Very strong mathematical skills to at least senior secondary level
- Strong organisational skills
- The ability to meet deadlines and manage priorities
- Keen analytical and research skills
- Strong communication and interpersonal skills
- A positive outlook and enthusiastic attitude
- Experience with Microsoft Office
- Editing and publishing experience would be an advantage

#### Company Information

Cambridge University Press is one of the most recognised and respected brands in the world. Our mission is to advance learning, knowledge and research worldwide – if this is something you would like to help us with then we want to hear from you.

We are dedicated to changing lives all over the world by giving people the highest quality educational and research materials throughout their life-long learning journey. Help us achieve our mission and you will have a career that is not only hugely satisfying but brings with it great benefits and a stimulating, supportive working environment.

If you are interested in applying for this position please send your CV and cover letter via the appropriate link below. To contact us for more details, email

# smart TEACHERS

Leading Experts in Education Recruitment

## Mathematics Teacher

- Holistic School Environment
- 6 Week Contract
- North Melbourne

Our client is a large Independent school in the Inner Northern suburbs of Melbourne. The school prides itself on providing a strong holistic education with a focus on community, integration and achievement.

#### Teaching Role:

- Full Time Allotment
- Teaching Year 9-11 Mathematics
- 6 Week Contract (22/06/15 – 14/08/15)

#### The School Promotes:

- A strong focus on academic achievement
- The support and development of outstanding teachers
- Student-centred learning
- A focus on extra-curricular involvement

#### Essential Criteria:

- Education qualification and current VIT registration
- Recent experience teaching within a Secondary School setting
- The ability to produce three leading teacher references

click the apply button below.

## Work in Australia and the UK

**We have great jobs for great teachers. It's as simple as that! Let's get together and start working.**

**It could be the smartest move you'll ever make.**

# TEACHING & EDUCATION

## Science/Mathematics Teacher

Passionate Science/**Mathematics** teacher is required for the College's secondary campus in Howard Springs, 25 minutes south of Darwin. Good Shepherd is an IB World School and is experiencing strong growth, now being the biggest school in the Northern Territory.

This is a permanent, full time position. Both experienced educators and graduates are encouraged to apply. The ability to teach across **Mathematics** and Science would be an advantage. A detailed Role Description for the position is available from the College. The successful candidate would start at the commencement of Term 3 (13 July).

Applications must include a CV, introductory letter and contact details for at least three referees.

Please forward your application via email by Monday 25 May to:

Web: [www.goodshepherd.nt.edu.au](http://www.goodshepherd.nt.edu.au)  
Facebook: <https://www.facebook.com/GoodShepherdNT>

## Maths/Science Teacher

### Maths/Science Classroom Teacher

Traralgon College currently has a vacancy for two ongoing **Maths/Science** Classroom Teacher positions.

We are seeking two teachers with expertise in teaching **mathematics** in innovative ways using an inquiry approach.

For further information including a position description and key selection criteria, visit:

or [traralgon.co@edumail.vic.gov.au](mailto:traralgon.co@edumail.vic.gov.au)

Position Numbers : 1018422 & 1018423

Commencement Date : 13th July 2015

The closing date for this position is Friday 5th June 2015.

**Applicants must include a copy of your resume, as well as address all the key selection criteria. Applications that do not address the key selection criteria will not be considered.**

Applications should be submitted via the Recruitment on Line System at the above address or posted to:

CAMBRIDGE

# CAMBRIDGE SENIOR MATHEMATICS

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David Greenwood

Kay Lipson

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# Australian Mathematical Society

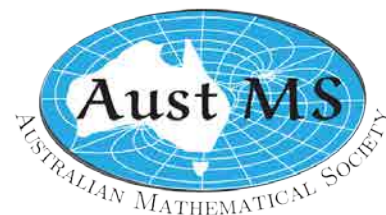
**Promotes** the mathematical sciences and their applications in Australia.

**Represents** mathematics, and the interests of mathematics related professions, to the Australian community and government.

## Careers in mathematics

In today's information-rich environment, the possibilities for mathematically trained graduates are endless.

Find more career opportunities at  
[www.austms.org.au/Careers](http://www.austms.org.au/Careers)



[www.austms.org.au](http://www.austms.org.au)

 follow us on Twitter ([twitter.com/austms](https://twitter.com/austms))


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[www.austms.org.au/apply](http://www.austms.org.au/apply)  
\* Eligible students receive  
a period of free membership



# WEB ANALYTICS

## Surf waves to a top career!

To understand and optimise internet usage (and impact) web analysts measure, collect, analyse and report on data obtained from the web about users. Organisations use this “user data” to better inform them on decisions. User data tracks browsing behaviour including how users arrived at a website, the length of each visit and how the website is engaged while in use.



**Bluefin Resources**  
Data Analytics Recruitment Solutions

### Digital Analyst

Dynamic, fast paced and innovative organisation based in Sydney's CBD  
Digital Analytics, Campaign and Insights  
Exposure to a number of technical tools including SAS, SQL and R

Customer Insights Analyst role with a multinational client based in Sydney's CBD, focused on digital analytics, campaign analytics and insights. This is a dynamic, fast paced and innovative organisation where you will get exposure to a number of technical tools including SAS, SQL and R

**Key Accountabilities Include;**

- Designing control groups and applying test and learn methodology
- Using a variety of data sources to drive insights on customers and recommendation for optimising campaign activity
- Manipulation, extraction and **analysis of data** using tools including SAS, SQL and R
- Pre and post campaign analysis and reporting

**Experience and Background**

- Tertiary qualified in a **relevant** discipline such as Marketing, Computer Science **or Statistics**
- Proven experience in working within an analytics environment
- Commercially focussed, ambitious and passionate about learning and development
- Proven experience in working with programming language such as SAS, SQL, R etc

Please apply on line or for more information,

**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.

<http://www.bluefinresources.com.au/privacy-policy>

[www.bluefinresources.com.au](http://www.bluefinresources.com.au)



## Insight & Analytics Manager - Digital Media

### The Summary

A leading independent agency are looking for an exceptional digital media analytics manager to deliver market leading insights. You will be working with a team of analysts to discover, analyse and present insights from web data. You will then recommend, create and execute site tagging and analysis. The Head of Analytics will support and develop you as you grow.

### The Role

- Conduct analysis and provide insight into the market and client data
- Identify gaps in data capture and collaboratively implement enhancements
- Work with clients to maximise their potential
- Prepare compelling reports and present your findings to stakeholders
- Collaborate with internal and external partners to develop best communication solutions
- Attend and lead analytics team meetings

### The Advantages

- A leading agency, with the potential for rapid growth
- A great opportunity to gain new experiences and insights
- A vibrant and relaxed culture, with a focus more on what you know than how you dress
- A collaborative and supportive team

### The Person

- MUST have 4+ years data analysis experience gained in an agency or a technology provider
- Ideally in possession of a BA in either Statistics, Maths, Computer Science, Web Development, Economics or a Finance discipline
- A working knowledge of Google Analytics, Google Tag Manager, and similar analytics tools
- Significant experience in Excel (VLOOKUP P, Pivot Tables etc)
- Experience communicating findings from data
- A working knowledge of Javascript (with examples)
- Experience with SOL would be a plus
- Prior management experience highly desired though is not essential

This role will suit a Data Analyst looking to take the next step, or an Analytics Manager eager to join a leading, award winning agency!

If you are keen to further develop your digital analytics skills, work on new clients, and progress your career, apply now!

To review other available opportunities please visit [nuclei jobs](#)

If you are interested in this role please click the 'Apply Now' button.

a L2/ 46 Market St, Sydney, NSW 2000  
p +61 8297 3198 m +61 415 770 576  
e [hello@nuclei.com.au](mailto:hello@nuclei.com.au) w [nuclei.com.au](http://nuclei.com.au)

# GRADUATE PROGRAMS

Graduate programs offer a great opportunity for you 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 graduate programs in the final year of your degree. 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!

Graduate programs 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 programs changes from year to year. Here are just some examples of programs that may be available to mathematics and statistics graduates.

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

- [www.gradconnection.com.au](http://www.gradconnection.com.au)
- [www.unigrad.com.au](http://www.unigrad.com.au)

<b>Accounting</b>	Ernst & Young, KPMG, PwC, CPA, Deloitte
<b>Consulting</b>	Accenture, AECOM, Aristocrat, Capgemini, IBM, SMS Management & Technology, Telstra, Woolworths
<b>Defence</b>	Australian Defence Force, Altitude @ DSD, Department of Defence, DSTO, Thales
<b>Environment</b>	AEMO, Aurecon, Aurizon, Chevron, BP, BHP Billiton, Rio Tinto, Unilever, Woodside, WorleyParsons
<b>Finance</b>	ANZ, AMP, ASIC, Bankwest, Bendigo Bank, CBA, GE, HSBC, IMC, Jane Street, Macquarie, NAB, Optiver, Pitch Partners, Queensland Treasury, Reserve Bank of Australia, Sportsbet, Suncorp Group, Westpac Group
<b>Government</b>	Australian Bureau of Statistics (ABS), Australian Electoral Commission (AEC), Australian National Audit Office (ANAO), Australian Prudential Regulation Authority (APRA), Australian Treasury, Bureau of Meteorology (BoM), Department of Education & Training, Department of Human Services, Department of Premier & Cabinet, Department of Science & Innovation, Queensland Government, Victorian State Government
<b>Insurance</b>	GE, IAG, Medibank, QBE Suncorp
<b>Teaching</b>	Teach for Australia, teach.NSW
<b>Transport</b>	Aurecon, Qantas

1. « Get paid to be a researcher »  
**VACATION RESEARCH SCHOLARSHIPS**

2. « Australia's biggest maths & stats event »  
**SUMMER SCHOOL**

(growth)  
**EXP W/ AMSI**



Travel Grants Awarded!!

3. « Sun, sea & maths! Escape to Queensland »  
**WINTER SCHOOL**

4. « Stay ahead in Bioinformatics »  
**BIOINFOSUMMER**

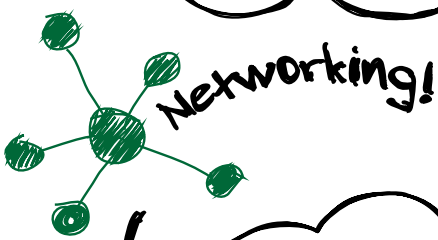


Gender Equality

5. « Take honours subjects online »  
**ACE NETWORK**



NATIONAL EVENTS



Networking!

6. « Start your career »  
**AMSI INTERN**

(SPECIALIST SUBJECTS!)

Success!!



**Market Research**

**BIOSTATISTICS**

*Forensics*

**Game Design**

**Criminology**

**Data Analysis**  
*Business & Consulting*

**TEACHING**  
**Data Science**

**ENERGY**

**Computing**

**HEALTH**

**WEB ANALYTICS**

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