Maths add(d)s
See where mathematics and statistics can take you
A guide for students to the job market 2014/15
From the Hon Christopher Pyne MP, Minister for Education:

I commend the Australian Mathematical Sciences Institute for this publication, which is an example of its leadership in mathematical education.

The Australian Mathematical Sciences Institute continues to support mathematical research, enhancing the experience of undergraduate and postgraduate students and mathematically preparing students entering tertiary education.

Ensuring that we have sufficient graduates in science, technology, engineering and mathematics is important for Australia in the development of globally competitive 21st century knowledge economies.

By choosing to study mathematics, or indeed science, technology and engineering, you will have a unique opportunity to contribute to the long-term prosperity of this country. These fields of endeavour are the building blocks for future technology breakthroughs and the new ideas that will improve our lives and Australia’s prosperity. Australian businesses know this and they will increasingly need more and more Australians who are highly skilled in engineering, mathematics, the sciences and technology.

The future possibilities and opportunities are boundless.

Yours sincerely

Christopher Pyne MP
Maths Ad(d)s gathers together job advertisements that have recently appeared online. The common theme of the ads is mathematics and statistics, but the actual jobs vary across a very broad spectrum. They give an overview of possible careers available to prospective university students after graduation—if they include mathematics or statistics in their degrees.

Whether it is finance or tourism, business or government, medicine or marketing, just about every area of employment depends at some point on handling and interpreting data, and on predicting and modelling outcomes—in other words, the kind of expertise offered by people with training in mathematics and statistics. In addition, many employers seek mathematics and statistics graduates because they value their advanced problem-solving and analytical skills.

In Maths Ad(d)s you will discover career opportunities combining mathematics and statistics with health, computing, data analysis, biology and meteorology, just to name a few. You could end up investigating the geometry of liquid crystals, consulting for a sports company, or even being part of the discovery of a medical breakthrough.

While many of the jobs listed here are based in big cities, others offer an opportunity to work in regional centres or a chance to live overseas.

The job advertisements in this 17th edition are completely new and represent only a fraction of the advertised positions found in late months of 2013 and early months of 2014.

Whether you already know your career plans or you just cannot decide what you want to do or be, you can be sure that mathematics adds an extra dimension to your future options!
About the advertisements

- These advertisements are only a sample. By no means should you think that they set the boundaries for what is possible now or in the future.
- We hope that Maths Ad(d)Js has helped you to see that adding mathematics and statistics to your skills brings great reward.
- With flexibility, enthusiasm and a positive attitude when you apply for a position, many opportunities will be open to you.

More job advertisements

Search using keywords such as ‘mathematics’ and ‘statistics’ and see where a degree in mathematics and statistics can take you!

- CareerOne www.careerone.com.au
- My Career mycareer.com.au
- Seek www.seek.com.au

Mathematics & statistics at work

- Career profiles www.mathscareers.org.au
  www.maa.org/careers/profiles.html
- Career resources www.ams.org/careers/
Where to get a mathematical or statistical sciences degree

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


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

Some other useful websites

- Statistical Society of Australia      www.statsci.org/careers.html
- myfuture - career information & exploration service www.myfuture.edu.au/

Partner advertisements

University of Adelaide [14]
CSIRO - Science by Email, Maths & Stats by Email and Double Helix [17]
Macquarie University [18]
AMSI Intern [23]
La Trobe University [26]
Tibra Capital [29]
ARC Centre of Excellence for Climate System Science [29]
Federation University [30]
The Statistical Society of Australia [32]
ACARA [34]
Cambridge University Press [37]
The Australian Mathematical Society [37]
Geoscience Australia [38]
Curtin University [40]
CSIRO [41]
One of your options for making the transition from university to the workforce is to join a graduate program. 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!

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**.

<table>
<thead>
<tr>
<th>Accounting</th>
<th>Ernst &amp; Young, KPMG, PwC</th>
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<tr>
<td>Consulting</td>
<td>Accenture, AECOM, SMS Management &amp; Technology</td>
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<td>Defence</td>
<td>Department of Defence, Altitude @ DSD, DSTO</td>
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<td>Energy</td>
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<td>Finance</td>
<td>ANZ, Bankwest, CBA, GE, HSBC, IMC, Macquarie, NAB, Optiver, Queensland Treasury, Westpac</td>
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<td>Government</td>
<td>Australian Bureau of Statistics (ABS), Australian Electoral Commission (AEC), Australian Prudential Regulation Authority (APRA), Bureau of Meteorology (BoM)</td>
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<tr>
<td>Insurance</td>
<td>IAG, Suncorp</td>
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<tr>
<td>Teaching</td>
<td>Teach for Australia, teach.NSW</td>
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<tr>
<td>Transport</td>
<td>Aurecon, Qantas</td>
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</table>

There are lots more! Visit your university **career centre** or search the web:

- www.gradconnection.com.au
- www.unigrad.com.au

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**Bioinformatics**

**Gene based drug therapies and medical breakthroughs.**

Bioinformatics can lead to amazing discoveries by combining mathematics, statistics, engineering and computer science to manage and study biological information and processes.

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**Junior Bioinformatician**

**East Melbourne**  
**Permanent Full Time**

**Data Analyst / Junior Bioinformatician**  
**12 Months Fixed-Term**

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

We are currently seeking a Junior Bioinformatician to provide general programming and data analysis support to the Bioinformatics Core Facility. This role would suit a recent graduate in Computer Science, Statistics or a related discipline looking to forge a career in bioinformatics or cancer research.

As a strong communicator and team player, the successful candidate will be responsible for developing and coordinating software programs related bioinformatics analyses, as well as providing programming support to multiple cancer research projects.

Excellent programming skills and academic records are essential. Experience with either Next Generation Sequencing or other high-throughput genomics technologies will be highly regarded but not essential. Experience with the Unix is essential.

**Enquiries:**

Pht:

Applications Close:

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

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

Australia’s only public hospital solely dedicated to cancer. Visit us at www.petermac.org.
Medical imaging, plant biology, genetics, ecology...

There are many great opportunities to mix mathematics and statistics with the biological sciences.

Salary range:
Research Fellow, Grade 1: $65,698 - $77,281 per annum.
Salary package including 17% employer superannuation contribution: $76,867 - $90,420 per annum.

Further Information:
Obtain the position description and application requirements by clicking the following link:
498908_Research_Fellow_Grade1_PD.pdf

For position queries, contact

For application queries, contact

To Apply:
1. To obtain the application details, position description and selection criteria for this vacancy, please click on the link above.
2. Follow the specific application process for the position.
3. Applications must be lodged electronically.
All applications will be acknowledged.
Biostatistics
Hot opportunities!

Biostatistics is an exciting area for mathematics and statistics graduates. This ad gives just one example of the many opportunities that mix statistics with the biological sciences in a challenging and rewarding career.

REF14/41 Trainee Biostatistician, Clerk Grade 7/8, Centre for Epidemiology

Trainee Biostatistician

Location: North Sydney
Classification & Grade: Clerk Grade 7/8
Salary Range: $83,962 - $92,540 p.a
Vacancy Type: Temporary Full Time (Up to 3 years)
Vacancy Reference:
Closing Date:

Position Purpose

Trainees will gain experience in biostatistics through supervised full-time work based placements and undertake the Master of Biostatistics at the University of Sydney part-time. Subject to the signing of a Deed of Agreement, the NSW Ministry of Health will pay university and associated fees, and appropriate study leave will be granted. Traineeships will commence in August 2014.

To be successful in this position, you will have successfully completed an honours degree majoring in statistics, or an equivalent qualification, 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).
4. Evidence of your residency status.

You are not required to address selection criteria. Please review Applying for a role in the NSW Public Service for more guidance.

Targeted Questions:
1. Describe your experience of using statistical software packages to manipulate and analyse data sets, including any experience you have of working with health data.
2. Give an example of a project that you have been involved in where you were required to perform a significant amount of data analysis. It might be a project with a large data set, or one where the analysis was complex. Include the project background, your role in the project, how you went about refining the research questions and determining the most appropriate statistical methods, and outline the conclusions from the data analysis in layman’s terms.

Job Notes:
• All applications must be submitted online via 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.

Please Note: New employment legislation will apply from 24th February 2014. From this date, all current and new Public Service non-executive employees will be employed at a classification level and assigned to a role rather than appointed to a position. Employees may be re-assigned to other roles at the same classification over time, in line with organisation priorities and/or personal development plans.

For an information package please click here.

visit www.jobs.nsw.gov.au
The increasing availability, awareness and dependence on commercial data have made the business sector a growth area for mathematics and statistics employment possibilities. These jobs are not always titled “mathematician” or “statistician”, but the fine print makes it clear that’s who they want...

**Analytics Business Analyst | Mathematical Bknd | Global Org.**

- **Highly challenging role**
- **State of the art technologies**
- **Global leader**

Our client is a global leader that is responsible for a cutting edge technology used by some of the world’s leading companies that include the telecommunication, defence, logistics and resources industries.

Current they require a strong Business Analyst that has a strong mathematical background that can take data, statistics, and information and convert that to information relevant to improving business efficiencies.

**To be successful for this role you will have:**

- A strong mathematics background (either a maths related degree, previous career with high level mathematics)
- Strong business acumen
- Strong client facing skills
- Business analysis experience
- Previous experience with large amounts of business intelligence or data that has been used to present business cases that improve processes and/or costs
- Ability to travel from time to time

**Why you want this role**

- You will work for one of the world’s leading technology specialists
- Your role will have a direct and huge impact on the growth of new business for WA
- You will have a fully autonomous role that will offer challenges and job satisfaction
- Opportunities to travel overseas and interstate

This is a role that will be filled quickly. There are not many roles like this in WA. Apply now before you miss out with CV and brief covering letter stating availability and salary expectations.

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**Remuneration Analyst**

**Entry level role for a numerical graduate**

Clear career path with leadership opportunities

Expanding team looking for motivated members to join their team

Aon Hewitt, part of the Aon Corporation, provides consulting services and solutions to clients in the areas of People Risk Solutions, Health & Benefits, Retirement, Compensation, Talent & Organization, Engagement & Performance Analytics and Wealth Management.

Aon Hewitt Reward business is made up of three complimentary areas: reward advisory consulting, reward analytics, and remuneration training and tools.

Each year companies spend over $500 billion on pay and benefits in Australia. Usually, it is an employer’s largest expense. Unfortunately, it is challenging to manage effectively. We help organisations make more effective use of their reward policies and programs. We provide balanced, innovative advice and solutions to all aspects of executive and general employee remuneration.

We have an opportunity for a highly talented, ambitious individual to manage and develop remuneration salary surveys with expert numerical reward clients. This is a great opportunity for a self-driven mathematical inclined and technical individual to join our successful and expanding service as a Remuneration Analyst.

You will be responsible for:

- Interpreting, developing and presenting survey results to internal and external stakeholders
- Ensuring retention of survey participants to maintain robust and credible data
- Serving as the point of contact for select industry groups, including presenting survey results at remuneration forums, managing customer surveys and supporting other internal and external events that align with rewards
- Working with the Reward Advisory team as required to deliver client projects (such as benchmarking, data analysis, market research and job evaluation)
- Supporting the broader team in developing capability and managing specific remuneration service areas (such as job evaluation, remuneration training, survey process improvement, economic indicators, or other areas as assigned)

To be successful in this role you will display:

- Strong analytical/numerical skills with a genuine interest and ability in finding insights in data
- The ability to balance workload and adjust as priorities shift
- Excellent presentation skills
- High attention to detail
- Basic understanding of HR/Remuneration practices
- Initiative to suggest improvements as identified from analysing information
- The ability to work under pressure and to meet deadlines

This is an exciting opportunity for a dedicated person to join the Aon Hewitt business to drive success. You will enjoy working within this fast-paced and dynamic team and in return be rewarded for your hard work.

Aon is an equal opportunity employer and we invite you to be part of an organisation that has a diverse workplace, values continuous learning and supports many charities and environmental initiatives. At Aon, we strive to maintain a balance between work, community and our valued employees.

Aon is the Principal Sponsor of Manchester United.

Risk, Reinsurance, Human Resources

aonhewitt.com.au
Research Recruitment

Survey Programmer - VBA/.NET Developer

The Client

Our client is a leading independent and Australian owned, market research agency. They specialise in customised research mainly within the fields of customer and stakeholder satisfaction. They are looking for someone to join their small friendly team as Survey Programmer and application developer for Market Research Simulation tools.

The Role

This is a small team where a willingness to learn, be involved in all aspects of the business, ‘pitch in’ where necessary, and fit well with the genuine and friendly culture is valued. You will have a strong interest in programming as well as data. You will be responsible for:

- survey programming
- report automation
- streamlining report productions for various tracking projects
- designing interactive simulations which allow end user to analyse various result scenarios of market research analysis.

The Requirements

- Strong numeracy and analytical skills
- Statistical 'common sense'
- Attention to detail
- Excellent communication skills
- Demonstrated ability to format outputted data into MS Excel
- Charting and reporting experience using MS Excel and MS PowerPoint
- Demonstrated experience with VBA and/or Javascript

We would especially love to hear from you if you also have:

- Familiarity with Data Collection research methodologies (online, telephone, face-to-face, etc.)
- Relevant tertiary qualifications – in Computing Science or Statistics
- Experience working with Surveycraft or other research-industry related software
- A working knowledge of SPSS
- Experience with manipulating databases
- CATI or CAPI experience
- Work experience as a market research interviewer/team leader/supervisor

For more information regarding this opportunity, please contact reference number or visit our website quoting www.researchrecruitment.com.au

Research Recruitment Pty Ltd ACN 006 541 392
Post Office Box 610, Mosman NSW 2088, Australia
Telephone 02 9960 7776 Facsimile 02 9969 3373

Computing

Distinguish yourself from the rest.

Combining mathematics and computing is a great way to get a clear edge over a straight computing graduate. As you can see from other ads in this booklet, many jobs require both maths and computing skills.
CCI Graduate Fellow Program 2014

- Apply for CSIRO Computational Informatics Graduate Fellow Program
- Opportunity for talented post-honours students to solve real-world problems and experience a research career with CSIRO
- Access CSIRO’s world-class facilities

The 2014 Graduate Fellow Program is an initiative by CSIRO Computational Informatics which aims to support the computational informatics pipeline in Australia and encourage talented students to try out a career in research.

The program will offer a handful of talented post-honours students the chance to solve real-world problems and experience a research career with CSIRO. Taking an “apprentice approach”, fellows will be mentored by leading research scientists and work on a range of exciting projects with the potential for travel to a conference at the end of the second year.

This year there are 5 fellowship projects on offer, two in Clayton and three in Acton. These are available to graduates who have completed an undergraduate degree (preferably with honours) in the areas of mathematics, statistics, computer science and engineering. The program runs for 2 years during which time fellows are paid a salary as a CSIRO employee.

Location: Clayton, VIC & Acton, ACT
Salary: $63K per annum plus up to 15.4% superannuation
Tenure: 2 year full-time term appointment
Reference:

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 sustainable. It serves governments, industries, business and communities.

About CSIRO Computational Informatics: (CCI) At CSIRO Computational Informatics (CCI), we apply information intensive sciences to answer important questions from medical research to environmental monitoring and industrial processing. CCI provides expertise in systems requiring innovation that integrates digital technologies, mathematical and computational science. Our research-based solutions and services benefit the economic, social and environmental health of organizations and nations. For further information go to our website: www.csiro.au/cpi.

Applications Close:

For selection documentation and details on how to apply visit www.csiro.au/careers
Maths Ad(d)s 2014-2015

More than just crunching numbers.

Working with leading edge companies, mathematicians and statisticians are highly employable in this exciting and growing field. Data scientists are described as part analyst and part artist using their skills in making discoveries and gaining new insights through exploring data.

Junior Data Scientist - Kogan.com

THE COMPANY

Kogan.com is Australia’s largest online retailer. Sitting at the forefront of technology, Kogan.com is dedicated to providing consumers with the latest and best in consumer electronics for the most affordable prices.

THE ROLE

Due to rapid expansion, we are looking for a Junior Data Scientist to join our team.

In the role of Junior Data Scientist, you will be responsible for conducting thorough analyses of Kogan.com data. You will work closely with department heads, the marketing team, the IT team, and executive management to understand business objectives, analyse data and produce reports containing actionable insights.

The role will include tasks such as:

- Mine data from analytics platforms
- Generate and interpret data sets to understand trends and find actionable insights
- Analyse departmental and staff performance
- Perform cohort analyses to determine how groups of customers behave over time
- Report on and communicate findings to the wider business
- Advise as an internal subject matter expert in predictive analytics and machine learning
- Set up new types of reporting and schedule reports to be sent at regular intervals to relevant team members
- Keep a record of tests completed along with their implications for how we should conduct our business

ESSENTIAL SKILLS AND EXPERIENCE

- Ability to use data to find ways to increase sales and improve profitability
- Strong knowledge of Python
- Strong data mining, statistical modelling and analysis skills
- Strong problem solving skills
- An understanding of predictive analytics and big data
- A passion for extracting insights from data
- Excellent verbal and written communication skills
- Ability to deliver projects to a high standard within agreed timeframes

DESIRABLE SKILLS AND EXPERIENCE

- Experience using the R statistical programming language
- A degree in mathematics, data mining, informatics, big data, computer science or similar
- Good understanding of machine learning algorithms

WHAT’S ON OFFER

- Work with a team of technologists who are experts in their respective domains
- A vibrant and inclusive company culture
- A meritocracy where excellent performance is recognised and rewarded
- A spacious and comfortable office within 15 minutes walk of Melbourne’s CBD
- A competitive salary package commensurate with experience

TO APPLY

Please send us your resume along with a detailed cover letter explaining:

- In your first month at Kogan, how you would use data to find ways to increase sales and improve profitability.

Please send your resume and cover letter to:

Australia’s largest online retailer

Kogan.com/au/careers
Senior Data Analyst | Sydney | $110k + super | Analytics

Global organisation
Up to $110k + super
Apply cutting edge analytics to solve business problems

We are currently representing a leading financial service company who are looking to optimise operational processes through the use of data and analytics. Partnering with operation leaders, you will take responsibility for the development of actionable insights to improve operational activity across the claims and underwriting businesses.

Key accountabilities would include;
- Develop predictive analytics to drive, measure and forecast operational performance
- Identify and promote the capture of relevant operations data to support decision making
- Support business leaders by providing actionable insights on operational issues
- Drive the automation of reports
- Engage and influence business leaders on analytics, in order to drive key strategic changes and ultimately the optimisation of operational performance

To be considered, you will need;
- A Bachelor Degree in a numerate discipline i.e. Mathematics, Statistics, Economics, Engineering, IT
- 3-5 years in an analytical role ideally within financial services
- Advanced programming skills in SAS
- Strong knowledge of statistical concepts and models i.e. scorecards, predictive models
- Strong communication skills; an ability to engage and influence senior stakeholders

This is an exciting opportunity to join one of Australia’s best known brands. Please apply online or for more information, contact Bluefin Resources

For more information on this opportunity please contact Bluefin Resources

If this job isn’t quite what you are looking for, please feel free to contact us to discuss other opportunities in the market place.


Data Scientist

It’s a great time to be part of AGL Energy, as we lead the way in generating sustainable power solutions for all Australians. With a heritage of 175 years and listed in the top 50 companies on the ASX, AGL offers a genuinely diverse, safe and supportive work environment, where ‘actions not words’ fosters a culture of achievement and friendship.

Based in our Melbourne office, the role of Data Scientist will identify and address complex business problems by providing analysis, insights and models to business stakeholders, thus supporting and driving high-quality decision making, process improvements and a competitive advantage. This is achieved through direct engagement with business representatives, employing deep expertise in data science with a particular focus on machine learning and statistics applied to produce predictive analytics.

To be successful in this role you will be tertiary qualified in a numerate or quantitative discipline such as mathematics, statistics, computer science, physics, chemistry, engineering, economics, or econometrics. You will also possess:
- Demonstrable excellence in numeracy, including a sound grasp of concepts of probability
- The conceptual ability to see linkages between apparently unrelated matters. Able to develop and deploy new or unusual approaches to problems
- Excellence in effective visual communication of complex concepts and numerical data
- Ability to conduct investigations, selecting and interrogating appropriate information sources, and developing robust inferences and solution designs based upon such investigations
- Demonstrable initiative and ability to work without close supervision
- Proven basic competence with SQL. Very high competence with Microsoft Excel
- Proven basic ability in a high level programming language such as R, SAS, Matlab
- Skills in machine learning and/or statistical design, construction and operation of appropriate models as applicable to business problems
- Proven experience in data preparation and interrogation which could be demonstrated through experience in data formatting, manipulation, merging and transformation for exploratory analysis and modelling

In addition to these key skills and attributes, you will also have a natural intellectual curiosity, will be passionate about data and have created complex models which have helped turn seemingly disparate data into something a lay-person can understand and use to help their business. You will be an excellent communicator with experience in a related corporate or research environment. This is an ideal role for someone wanting to make a real difference in a vibrant industry and Business Analytics Hub.

Sound like the change you have been looking for? If you are a strong team player and an innovative thinker, put your energy into ACTION and apply to AGL Careers now via the online application link.

For a confidential discussion regarding this opportunity please contact

Expect More. Do More!
Economics
Help build a strong economy.
Want a future that is supported by a strong economy? Well those in economics play an important role in this regard by interpreting past and current data to provide guidance for the future. What type of people are good with data? Well, those with mathematics and statistics...

Maths Ad(d)s 2014-2015

Mathematics need to be able to communicate their work to non-specialists. Helping the bank solve problems with mathematics is core to what I do. Frequently changing economic circumstances, such as upturns and downturns in the global economy, necessitate the development of new mathematical models.

Econometrics data analyst - SAS/SPSS

- An excellent company culture
- High and analytical work
- Fast paced environment

Summary of the Position

This is an exciting opportunity for an junior-mid level econometrician to join an established media agency. The company are looking for someone who has strong econometric skills in the sense of developing and maintaining models. 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.

We are looking for some with around 2 years working experience. It is essential you have worked in a media or agency environment.

In addition you must have excellent communication skills and the ability to present findings. The company culture is sociable and a work hard play hard atmosphere, it is dynamic and therefore fits a certain personality.

Summary of your Role

- Data analysis
- Forecasting
- Econometric modelling - linear, multivariate regression etc.
- Structural equation modelling
- Attribution modelling
- Presentation of findings to various internal and external stakeholders
- Develop scenario planning tools
- Use of R/SPSS/EViews for analysis
- Use of SQL and VBA for programming
- Logical regression

Experience Required

- Strong knowledge of SAS, SPSS or R
- Experience working in a media or agency environment is essential
- Programming experience in SQL or VBA is a bonus
- A mathematical background
- Tertiary degree in maths, stats or related degree
- Expert in excel
- MS Office 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 have the required experience and are interested in the position please apply directly or contact

Level 5, 8 Spring Street, Sydney, NSW 2000

Maths Ad(d)s 2014-2015
Maths grads, we need you!

Two key roles of the energy sector revolve around environmental impact issues and cost to the customer. Mathematicians are invaluable, as they can assist in improving the efficiency of energy distribution and consumption. Here is just one example of the importance of mathematics in the energy sector.

Energy Forecasting Analyst

- Opportunity to contribute to the future of Australia’s energy sector
- Collaborate with stakeholders right across industry
- Apply technical skills to real world problems
- Attractive Remuneration plus Performance bonus

We currently have 4 great opportunities for Analysts to join AEMO’s Energy Forecasting team in either one of our Melbourne, Adelaide, Sydney or Brisbane offices (Melbourne and Adelaide locations preferred).

Reporting to the Senior Manager Energy Forecasting, this role will have you focused on:

- Applying your statistical and mathematical modeling skills to develop short and long term energy forecasts
- Developing technical solutions to problems that impact energy demand
- Coordinating the delivery of forecasting projects
- Providing analytical and data management support to energy forecasting activities

If successful, you will be involved in developing sophisticated statistical models, producing reports, developing and maintaining datasets, tools and systems, providing advice to the business on demand statistics, as well as managing relationships with staff, consultants, and internal and external stakeholders.

As the ideal candidate, you will have:

- Approximately 2 years’ experience ideally in the energy industry in a similar role coupled with relevant tertiary qualifications in a numerical discipline such as statistics, mathematics, econometrics, science, engineering, or economics
- Strong programming and data management skills, with experience in statistical or mathematical modelling and database development – experience with R would be highly regarded
- Strong problem solving and analytical skills
- Ability to adapt to a changing fast-paced working environment and to work through technical issues in a timely manner
- Ability to take ownership and drive significant pieces of analytical work
- Effective verbal and written communication skills – with the ability to engage and collaborate with stakeholders and prepare and present high quality reports

The Company

The Australian Energy Market Operator (AEMO) plays an integral role in planning, developing and operating markets that respond to Australia’s gas and electricity needs. We support long-term investment in Australia’s energy networks and collaborate closely with government, communities and other stakeholders. We are building an exceptional organisation to effectively manage Australia’s energy grids and markets, and to deliver value to our stakeholders.

AEMO’s vision is to be pivotal to markets that secure Australia’s energy needs.

Interested?

To apply or for more information on the role, our company and our offer proposition, click the ‘Apply for job’ button below.
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数学s
Not just for commerce graduates. It’s not just commerce graduates who are employed in the finance industry!

The finance sector is a big employer of mathematics graduates because of the advanced quantitative and analytical skills that come from studying maths.

“Finance” is an umbrella term covering banking, the stock market and other forms of investment, insurance, and the regulation of these areas.
"Statistics tell the story"

An exciting opportunity is now available to be part of the 2015 ABS Graduate Development Program (GDP). The Australian Bureau of Statistics (ABS) is changing. Over the next few years we will be transforming how we collect, collate, manage, use, reuse and release statistical information.

To help us make these changes we require graduates who are motivated, innovative and committed. To be part of the team that is moving the ABS forward, we require Information Communication & Technology (ICT) graduates and graduates with a background in mathematics and econometrics to provide specialised support. However we also need graduates from a wide variety of disciplines to work right across our business areas.

About the program:
The nine month GDP program commencing in February 2015 will provide practical on-the-job training through team based work or projects. The GDP involves structured formal training and development activities designed to:

- assist in the transition into the ABS and Australian Public Service
- provide training specific to your subject matter area
- provide work rotations and formal projects (subject to areas placed)
- provide support through a buddy system and encourage other networking opportunities.

What we offer:
- Competitive remuneration package of $59,368 plus superannuation for ICT graduates or $54,130 plus superannuation for all others.
- Relocation assistance for graduates moving to Canberra, where the majority of graduate positions are located.
- Salary advancement on successful completion of the program.
- A flexible workplace supporting a healthy work-life balance.

Eligibility:
- You must be an Australian Citizen before the program commences in January 2015.
- You must have completed at least an Australian recognised undergraduate qualification, before the program commences in 2015.
- Your most recent qualification (at the Bachelor degree level, or higher) must have been completed between 1 Jan 2012 – 31 Jan 2015.
- You must be prepared to undertake a character check and medical assessment prior to commencing your employment.

Interested in being part of the transformation?
If this opportunity appeals to you then find out more by first obtaining an applicant information kit at www.abs.gov.au/careers or contact National Recruitment on

To apply to the 2015 ABS Graduate Development Program, you must submit an application online via our eRecruitment system. Applications will be open from For more information about the application process, please refer to our website. Please quote reference no. in all correspondence.

The ABS encourages and values a diverse workforce. Aboriginal and Torres Strait Islander people and people with disability are encouraged to apply.

One APS Career... Thousands of Opportunities
NEED A MATHS OR SCIENCE FIX? WE HAVE YOU COVERED!

Science by Email is a free weekly e-newsletter with the latest science news, a hands-on activity and quiz
www.csiro.au/sbe

Maths & Stats by Email is a free fortnightly e-newsletter for mathematic diehards
www.csiro.au/mbf

The Helix@CSIRO blog showcases the latest in science and maths news, activities and giveaways
www.csirohelixblog.com

Follow @CSIROhelix on Twitter and stay up to date with the goings-on of the Double Helix team. We share stories, activities, giveaways and general cool stuff www.twitter.com/csirohelix
You’ll be surprised the extent to which mathematics impacts us in everyday life. For example meteorologists use the Lorenz attractor equations as a simplified model to predict and explain atmospheric convection and some other features of weather systems.

Discover the exciting world of mathematics with a Mathematics Major in the Bachelor of Science or Bachelor of Advanced Science at Macquarie University. Our unique training in both abstract mathematical reasoning and problem solving produces graduates that are highly sought after by employers. And our flexible programs can be tailored to suit your individual needs & areas of interest.

For more information on where maths at Macquarie can take you, visit: maths.mq.edu.au/undergrad

\[
\begin{align*}
\frac{dx}{dt} &= \sigma (y - x), \\
\frac{dy}{dt} &= x (\rho - z) - y, \\
\frac{dz}{dt} &= xy - \beta z.
\end{align*}
\]

**Health**

Of critical importance.

Current and future healthcare relies crucially on analysis of numerical data. From cancer research to infectious disease, the work is important and varied, and statistics plays a central role.

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**Senior Health Economics Analyst**

Optum™ is a global leader in health information, health technology and life sciences consulting. The Optum Asia Pacific Life Sciences group based in Lilyfield, Sydney, has an outstanding track record in evidence-based medicine and reimbursement for health technologies across a broad range of therapeutic areas.

We are looking for an experienced and motivated Senior Health Economics Analyst to join the team. In this role, you will be involved in all aspects of research activities, including technical support, planning and performing economic/outcomes evaluations in health care research, and the analysis and reporting of studies.

**Responsibilities will include:**
- Implementing the technical components of health economic studies including proposal development, analysis and interpretation
- Preparation and quality assurance of study deliverables, including models, final reports, manuscripts, posters and presentations
- Perform programming, statistical analysis and/or modeling and prepare required graphs, tables and figures using the appropriate tools
- Assist, mentor and train junior staff, and collaborate with other senior staff
- **Statistical and technical support to clients and other members of the team.**

You will have a post graduate qualification in a related field and training / experience in health economics and/or outcomes research. You will have strong quantitative skills and an ability to communicate strategic ideas clearly, and exceptional interpersonal skills and an ability to communicate in a confident and diplomatic manner.

At Optum we take pride in delivering work of the highest quality. We encourage our staff to take ownership of their work, and recognise and reward staff accordingly. Our aim is to bring scientific rigour to everything we do, whilst recognising the budget and time constraints of our clients. We are committed to providing a friendly and co-operative working environment, and we support the ongoing professional development of our staff.

Please submit applications (including a covering letter, full curriculum vitae and a copy of your academic transcript) to
Laboratory Head-
Bioinformatics

Dr. Tony Papenfuss
Walter & Eliza Hall Institute
of Medical Research

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.
**Winter School**

**John Snadden**

PhD Candidate  
Australian National University

Being able to analyse and predict the behaviour of a geothermal source over time is one of the most critical components to generating geothermal power. And with the growing push for sustainable energy sources, simulations and models are downright indispensable.

John Snadden has been able to develop simulations of how water and heat flow in geothermal reservoirs.

“In the last few decades, the computational resources available to theoretical science have increased dramatically. Unfortunately only a handful of people have the technical expertise in software development and geomechanics, so developing computer models has enabled researchers to perform calculations with far higher precision and efficiency: opening up new areas of inquiry.”

“Maths can model just about anything. 2013 was the International Year of the Mathematics of Planet Earth and I feel privileged to present my progress modelling cleaner energy sources,” John said.

Sharing insights and knowledge between disciplines increases the chance of solving pressing matters. Collaborations between scientists and mathematicians are vital to this process; as are young students with the drive to create multi-disciplinary collaborative ventures.

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**Summer School**

**Kate Atwell**

Bachelor of Mathematical Sciences  
University of Adelaide

We all know how to queue. Lining up for our morning coffee; pressing our touchscreen umpteen times before speaking to a human; queues can be plain and simple, or utterly complex. What we may not know is that a whole branch of mathematics is devoted to studying the intricate nature of waiting.

Kate Atwell does. She recently embarked on an honours project that looks at complicated queues – like calling the bank.

“First an automated voice asks you to press a number, then you may have to give several other responses before finally getting to someone from the bank. My research looks at how you move forward through these options — one phase at a time — until you reach the end of the queue: the real person!” Kate said.

Kate accuses a high school teacher for her love affair with maths. “This teacher had a mathematics degree; and a passion for mathematics that was inspiring, motivating and contagious,” she said.

So the next time you’re in a queue spare a thought for Kate and the high-end mathematics she uses to calculate how you wait, and where your choices take you.
**Vacation Research Scholarship**

**Anthony Clissold**

Bachelor of Science (Mathematics)  
Flinders University

From fantasy sport to making our emergency departments run more efficiently, Anthony Clissold knows first hand the importance of mathematics and statistics.

Anthony took a “Career-Chooser” survey when he was in Year 10; his two most compatible suitors: statisticians or actuaries. These results coupled with enthusiastic passionate mathematics teachers made his pathway to mathematics obvious.

Anthony enjoys the maths and stats that are hidden in nearly every facet of modern existence – especially those in fantasy sports. “I love the idea of setting up teams under mathematical constraints, then buying or selling players depending on their real world performance to turn a profit,” he said.

Throughout the last year of his undergraduate degree Anthony worked as a research assistant. He developed a computerised decision support tool to aide situations where outcomes are partly random and partly under the control of a decision maker primarily to optimise patient flow in emergency departments.

Anthony said, “the nerdy explanation: I use dynamic programming approaches to find optimal solutions to Markov Decision Processes. It is much easier to tell people: ‘I get paid to make graphs!’

“I want to be able to get up, go to work and help somebody with what I do,” Anthony said. “Mathematics allows me to do that, secretly, behind the scenes.”

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**BioInfoSummer**

**Shila Ghazanfar**

Bachelor of Science (Advanced Mathematics)  
University of Sydney

A love for numbers has seen Shila Ghazanfar journey across Australia’s vast landscape to explore the minute workings of the human body.

Born to immigrant Afghani parents, Shila has become the first in her family to complete a university degree. In high school she enjoyed both chemistry and mathematics, but it was at university that she discovered her love of statistics.

“I told Dr Jean Yang — one of my lecturers — that I wanted to work with lots of data and she told me she had more data than you could poke a stick at. So I grabbed the proverbial stick and began my research in statistical bioinformatics.”

Shila said that the most valuable aspect of AMSI’s BioInfoSummer was making lasting connections with other postgraduate students and researchers.

Even though her studies are exceptionally challenging Shila enjoys her research. “I’ve learnt a great deal and formed many friendships and collaborations,” she said.

Shila’s passion for numbers has transformed her into a detective: to derive, uncover and extract meaning from data. The data Shila extracts meaning from, using statistics and mathematics, assists our search for effective cancer treatments.

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“AMSI programs help secure Australia’s reputation at the forefront of scientific research. They allow budding mathematicians to delve deeper into research and get a taste for what’s to come outside of academia.”

“Collaborations across disciplines is where the potential to solve some of the world’s biggest — and, in my case smallest, — problems lies.”
Statistical Performance Analyst

- Challenging role within an exciting environment
- Great development opportunities
- Workers’ Compensation General Insurance Focus

Allianz is one of the world’s largest and most renowned integrated financial services providers. In Australia, Allianz is one of the leading general insurers with more than 3,600 employees and 2 million customers nationally.

An opportunity currently exists for an analyst to join our performance analytics team. In this role, you will deliver reporting that assists the stakeholders of the Workers Compensation Division. As part of a small, collaborative team, you will use statistical, probabilistic, and econometric models to conduct in-depth analysis and identify trends within data. You will also communicate of this information to a variety of stakeholders at all levels within the organisation.

The successful applicant will be responsible for:

- Assisting in organisational activities aimed at the automation of reporting
- Analysing large quantities of complex, raw data to make insightful analysis and insights around profitability, claim trends and behaviour
- Undertake statistical analysis to assist in understanding performance drivers
- Work collaboratively with stakeholders and provide analytical support for planning projects within the Workers Compensation Division
- Design new analysis approaches to address emerging questions

The successful applicant will have:

- Some experience in data analysis and the preparation of data reports
- Tertiary qualification in mathematics, statistics, economics, science or related field
- Demonstrated capability to work with large data files and complex analysis is advantageous
- Strong written and verbal communication skills, with the ability to communicate findings to a variety of stakeholders
- Proven ability to write data manipulation code (SAS and VBA desirable)
- A demonstrated attention to detail and a well-developed habit of self-checking the results as it progresses
- Strong analytical skills and the ability to research the drivers behind the results
- The ability to ask pertinent questions and a desire to develop a deep understanding of the information being generated
- A high level of personal motivation and drive to achieve performance

At Allianz, we value high performance. We recognise the contribution of our employees and reward our staff with a dedicated range of attractive benefits. Whether you are looking for a company that offers a variety of flexible leave options, salary packaging or substantial insurance discounts, Allianz has a range of benefits to suit you.

If your skills and experience match the above-mentioned criteria, please apply online with an up to date CV today.

Challenge | Team | Career | Grow with us

Graduate Actuarial Analyst

The Role

- One of the fastest growing general insurers in Australia
- Industry leading rating & underwriting systems
- A company built on excellence, first class customer service and a burning desire to be the insurer of choice in the markets we serve
- End-to-end business involvement in an Actuarial Department that utilises rich data and industry leading techniques

No other actuarial employer in Australia offers the same end-to-end exposure to insurance operations. You will see the work you do directly add value in the business with a focus on quick turnaround of quality results. You can expect to be dealing with people from right across the organisation from the CEO to Call Centre Advisors.

About us:

Youi was founded by actuaries and bases its operations on actuarial principles. From reinsurance and capital through reserving & claims analysis, pricing and product development, to operational analysis and modelling, the actuarial department is central to Youi’s operations.

The actuarial department has wide and deep industry experience, with team members involved closely in industry debates around matters such as flood insurance, disaster management and capital requirements. The team has considerable experience implementing cutting-edge techniques relating to modelling and data management.

As well as our customers, Youi has a keen interest in developing its staff. Combined with a generous actuarial study allowance and internal underwriting development programs, the YouiLife program provides numerous staff benefits and support.

Based on Queensland’s beautiful Sunshine Coast, enjoy working close to the beach in state-of-the-art facilities.

About You:

- Academic results (Graduating by January 2015) in Maths, Statistics, Actuarial Science or related studies with excellent academic results
- Recent graduates or students who are in their final year of university
- An entrepreneurial bent and a keen eye to identify opportunities for continuous improvement and enhancements of all aspects of the business
- A desire to develop a well-rounded actuarial career in personal lines insurance
- Permanent resident of Australia

But note, if you want to be pigeon-holed doing the same thing all the time, Youi is NOT the company for you! This is a rare opportunity for the right candidate to become involved in a vast range of tasks not typically allocated to a graduate.

Please apply by sending your resume & academic transcript (PDF format) with a cover letter titled – Graduate Actuarial Analyst to the Youi Careers Website.

How do I register my interest?

youi.com.au/careers
Calculating the risks.

How do companies determine insurance rates? Insurance actuaries, that’s how! Progressive insurance related jobs can make rewarding careers. Insurance and actuary professionals are specialists who deal with the financial impact of risk. Mathematicians and statisticians are perfect candidates for these roles conducting analyses using probability and statistics to determine insurance rates such as for cars, homes, health and a number of other areas.

The Travelling Salesman Problem is the classic example of a difficult optimisation problem. VISA Global — one of Australia’s largest privately owned global freight-forwarding companies — was faced with such a problem. With their online sales soaring, the logistics company needed to find more efficient ways to deliver goods to reduce costs and their carbon footprint.

VISA Global engaged AMSI intern Yi Chen, a PhD student at Federation University, to look for innovative approaches to improving the efficiency of their transport fleet. According to Marcus Denny at VISA Global: “The results of Yi’s work were very impressive and provided VISA with a verifiable approach to solving the problem, with potential gains far in advance of what had been hoped at the outset.”

See more projects:
www.AMSIIntern.org.au
Another satisfied customer!

How do companies keep their customers satisfied? How do they know when they are about to lose your business and then entice you all over again? A crystal ball? No, market researchers! Market researchers interpret customer records and spending habits in an effort to provide their company with an edge over the competition. Maths and stats graduates are trained to be numerically savvy and highly skilled in interpreting data.
Advertising Analyst | Media | Sydney

- Multiple roles
- Junior level position
- Chance to develop a media Research Career

The Firm

It's all about innovation and insight, within a fast changing and dynamic environment. This Advertising and media leader offers a fun environment to face your daily challenge and sufficient challenge to engage your brain - both your logical and creative side.

The Job

This job offers you the opportunity to work with a range of research tools and software to respond to research and analysis requests from the business.

It's a 360 degree role - which will see you brainstorming research ideas, taking down briefs - preparing an analysis plan and presenting your findings back to the business.

It's a team role - within an awesome growing team with a positive culture.

The Person

You will be a smart, numerate person that is fun to work with and has exceptional communication skills.

You will have a strong interest in Media/marketing/advertising and get a kick out of analysis.

You should have some kind of background in Research driven insight - ideally in Media.

You need to be a switched on, intelligent person with great common sense that understands what makes other people tick, or at least wants to find out.

Hungry for insight, fun to work with, snappy dresser, good at maths, likes to party, but not too much?

This could be the start of something awesome.

Junior Statistical Analyst | SAS | SQL

- Predictive Model Development
- SQL
- Marketing

A rapidly growing Insights and Analytics team serving in the data department are currently looking for a bright, ambitious, energetic, enthusiastic and optimistic individual.

This is a Junior Statistics Analyst position with fantastic opportunity with long term prospects within the Analytics team.

Experience Required:

- A stats/math or similar degree qualification. Must be capable in SQL and in SAS (Logistic Regression).
- Strong technical skills to do the analytical work.
- Statistical Modelling & SAS Experience
- Attitude is more important: Optimistic, courageous, curious, energetic, ambitious, influential and deliver to conclusion.
- Background in Marketing & Campaign Analytics (Good to have)

Next Steps: To be considered for this role please submit your resume by clicking the ‘Apply Now’ button. Alternatively, please call for a confidential discussion.

Please send CVs in Word format.

Sydney
Melbourne
Brisbane
Canberra

www.greythorn.com.au

Reputation is everything.
STUDENT SATISFACTION

La Trobe has a history of recognised teaching excellence in mathematics and statistics. Results of Australia-wide student satisfaction surveys from the MyUniversity website show La Trobe received remarkable scores of 95% in overall satisfaction and 95% on the good teaching scale.*

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

TOP GRADUATES

La Trobe has a proud record of encouraging women students in mathematics and statistics. La Trobe has a high level of female participation by Australian standards, and women have figured prominently in winning Honours prizes and PhD scholarships.

WORLD-LEADING RESEARCH

La Trobe has a team of world quality researchers, including two ARC Future Fellows and one ARC Dora Professorship, supported by a number of large research grants.

ACCREDITED PROGRAM

La Trobe was the first University in Australia to have its statistics program accredited by the Statistical Society of Australia Inc. Students completing this program obtain Graduate Statistician status upon joining the society.

CONTACT US

Want to know more? Get in touch!

Department of Mathematics and Statistics
W latrobe.edu.au/mathstats
T +61 (0)3 9479 2600
E mathstat@latrobe.edu.au

Disclaimer: The information contained in this publication is indicative only. The University reserves the right, before or after enrolment, to make any changes to the information, including but not limited to discontinuing or varying courses, subjects, staff, assessment, and admission requirements. The University does not give any warranties in relation to the accuracy and completeness of the contents nor does it accept responsibility for any loss or damage occasioned by use of the information contained in this publication. For course information updates, visit latrobe.edu.au/courses.
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.

Does it look like rain?
As everyone knows, the weather is hard to predict! The modelling of ocean currents, weather patterns and climate change is all about mathematics; it is important to a range of industries—from fishing, shipping and farming to air traffic control. It even affects the everyday person day to day in deciding what to wear!
Operations Research

What is it?
Operations research is all about the optimisation of scheduling, manufacturing, pricing and so on. It is a critical part of business and government planning.

Consultant: Simulation Modelling | Operations Research

Do you love the challenge of unravelling complex data and using quantitative analysis techniques to drive business decisions?

TSG is a pioneer and world leader in the detailed analysis, simulation and optimisation of complex supply chains. Founded in 1999, we have played a part in the success of the world’s largest mining operations and have the most experienced practitioners in the field.

At TSG we aim to help our clients make better decisions in industries and operations where managing business variability and dynamics is a core issue. We do this through the use of our rigorous methodology, extensive project experience and team-based engagement model.

Due to our continued success exciting opportunities exist for driven and high achieving Consultants in our Perth office. You will be working with a supportive and experienced team of consulting professionals who share a high level of passion, curiosity and integrity.

The opportunity:
• Development of dynamic simulation models and solutions using a variety of analysis tools and modelling platforms.
• The application of Operations Research techniques in the mining, logistics and transportation sectors.
• A project-based work environment striving to deliver solutions above and beyond our clients’ expectations.

About you:
• A passionate problem solver.
• Thrive in a team based environment.
• Excellent communication skills.
• Ability to deliver to client deadlines and work under pressure.
• Sound programming capability. Object-oriented languages are preferred.
• Understanding of dynamic simulation modelling or other Operations Research techniques. Experience in simulation and optimisation packages will be looked upon favourably.
• Tertiary qualifications in Engineering, Mathematics/Statistics, Science, Computer Science or Operations Research with excellent academic results. Postgraduate qualifications will be looked upon favourably.

TSG provides:
• An inspiring work environment focused on teamwork and delivery.
• Opportunity to work on industry leading and rewarding projects.
• A supportive learning culture, career progression and mentoring opportunities.
• Competitive remuneration including bonuses.

For a confidential enquiry please call
Detailed written applications should be forwarded to

No agencies please.
A competitive team aiming to be number one

On-the-job development opportunities
Tibra Capital is a global Financial Services Company with operations in London, Sydney, Wollongong, Hong Kong and Chicago. Our success is based on creating and leveraging market leading trading, risk management and technology opportunities. We employ the very best people across all our business units and provide them with the right tools and support to do a great job. The end result of this for Tibra is a competitive team aiming to be number one in each market in which we operate.

As part of joining a leading trading firm you’ll get exposure to real world quantitative finance methods. Via on-the-job and structured learning and development opportunities, you’ll also gain exposure to skills and experience which will be held in very high regard in the marketplace.

Advanced numerical & problem-solving skills
To join Tibra Global Services, you must be highly intelligent with advanced numerical and problem-solving skills, an ability to think quickly and the ambition to become a great team player through disciplined and focused self-development.

We offer fantastic company initiatives such as;
• Dynamic, yet relaxed and balanced environment
• Daily breakfast and lunch provided
• Company outings
• The opportunity to grow with in house Learning and Development Opportunities
• Flexible working hours
• Sydney and Austinmer offices to work out of

For more information about Tibra Global Services and any employment opportunities please visit www.tibra.com

Climate Science needs you.
If you have a quantitative background then our Centre of Excellence wants you. Your training in mathematics, statistics, physics, hydrology, oceanography, meteorology or engineering could be key to shaping the future of climate science.

The Australian Research Council Centre of Excellence for Climate System Science is looking for graduate or honours students who want to do research with world-leading climate scientists across five top universities and a suite of outstanding national and international partner organisations, including CSIRO and the Bureau of Meteorology.

Many projects are supervised across universities and by experts from one of our partner organisations.

Generous travel support exists for students to visit our national and international partners.

Outstanding students may receive top-up funding above the rates of Australian government scholarships. Scholarships are also available for honours and exceptional international students.

For further details contact:
Melissa Hart  Email: melissa.hart@unsw.edu.au.
www.climatescience.org.au

An essential guide for students to the job market
You can count on a career in Mathematical Sciences!

The applied focus of FedUni’s mathematical science programs 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
An essential guide for students to the job market

Psychology

Analyse this!
Psychologists observe, evaluate and study behaviours, social interactions and cognitive processes. To make sense of their recorded data and observations, psychologists use mathematics and statistics to interpret and describe their findings.

Behavioural Scientist

Well-respected Australian leader in research & consulting
Generous employee benefits including monthly RDOs!
Initial 12 month contract

This position is initially a 12-month contract, with the possibility that a permanent position may become available in future.

About the company
ARRB Group Ltd, established in 1960, is Australia’s leading national provider of value-added research, consulting, equipment and technical services addressing transport and road safety related issues. We are a diverse organisation with commercial and governmental customers in domestic and international markets.

About the role
We need to recruit a passionate, creative and intelligent Behavioural Scientist to join the Safe Systems team within our Research and Consulting Division. Sound like you?

You will be primarily working to support ARRB’s domestic business in road safety research and consulting, undertaking projects focused on road user behaviour and the safety of road infrastructure.

Duties & responsibilities
• Manage and contribute to research, consultancy and development projects.
• Perform field work and travel domestically when the need arises.
• Ensure your contributions to projects meet agreed requirements for quality, budget and timeliness.
• Communicate effectively by speaking and writing, including the preparation of reports, bids and proposals.

Skills & experience
• Psychology/social science degree (honours preferred) or other relevant degree with a strong quantitative emphasis
• Sound written and oral communication skills
• Familiarity with SPSS or an equivalent statistical package
• Good computer skills with MS Access, Excel or equivalent packages
• Familiarity with other relevant software such as Visual Basic, QUM, ArcView or MapInfo would be an advantage
• The ability to work independently
• Problem solving capabilities
• Be highly organised with good project management skills
• Driver’s licence
• Prior experience in a research or consulting environment would be an advantage

Culture & benefits
Come and work for an organisation that makes a real difference by reducing the world wide road toll and be part of genuinely passionate group of professionals. ARRB Group offers many benefits to employees including monthly accrued days off (RDOs), salary packaging, additional leave days at Christmas and New Year and support for career development and further study. We also have a Barista and free parking on site.

How to apply
To be considered for this position please press the “APPLY” button in this job advertisement.
Aims of the Society

- The Society’s objective is to further the study, application, and good practice of statistical theory and methods in all branches of learning and enterprise
- Membership is open to Australian residents through the Branches that exist in each state (except Tasmania) and in the Australian Capital Territory. Membership-at-large is open to residents outside Australia

Benefits of Membership

- Network with a large group of professionals working, researching, teaching, and studying in statistics
- Participate in SSAI Branch and national activities at member rates
- Receive four issues each of the Australian and New Zealand Journal of Statistics and the online SSAI Newsletter each year
- Participate in SSAI professional development activities by attending or leading them
- Apply for Graduate Statistician or Accredited Statistician status as endorsed by SSAI
- Participate in special interest Section activities
- Gain access to a collective of colleagues for exchanging information and informal mentoring
- Support your profession

Contact the Executive Officer at eo@statsoc.org.au
Explore the SSAI website at www.statsoc.org.au
Research Officer (Quantitative)

Our client, a large organisation in the Sydney CBD, is seeking a Quantitative Research Officer to join their team. Please note that you must be an Australian citizen to apply for this position.

The successful applicant will undertake high-level statistical, data collection and analysis projects and activities and carry out a range of research-related functions for the organisation. These include, but are not limited to, conducting primary and secondary research, analysing quantitative data, providing research support to other areas of the organisation and reviewing and analysing data and reports of other agencies.

To be considered for this position, you must possess a thorough knowledge and practical application of quantitative research and evaluation methodologies, including a high level understanding of, and experience with statistics and quantitative data collection, presentation of statistical information and creation and management of data sets. It is essential that you are able to work in Stata. Additionally, some knowledge of child protection would be advantageous.

This role is offered on a contract basis and an attractive remuneration package is available for the right candidate. For further information, please contact

Word format to reference

To apply, please email your resume in MS quoting reference

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

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Statistics

You are in demand!

Statisticians are very much in demand. There are jobs already listed in just about every category of this booklet. Here are yet more examples.

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Statisticians

- Looking for a dynamic career with a company that encourages and rewards creativity and fresh thinking?
- Do you love turning the complex into something simple and easy to understand?
- Do you want to take on a new challenge in a global organisation?

If you answered yes to these, then we have the role for you...

We currently have a full-time vacancy for a Statistician within our Statistics department at Nielsen Television Audience Measurement, the TV ratings company. We are the official source of television audience measurement for the free to air networks and subscription television channels in Australia.

The role of Statistician supports the delivery of the Establishment Survey (ES) through all stages of the process covering questionnaire design, sampling, tracking CATI follow-up performance results, weighting, and tabulating/reporting trends.

The successful candidate will be expected to:

- Maintain all supporting databases relating to sampling frames and geographic boundaries (such as ABS, Australia Post)
- Coordinate and administer questionnaire design activities
- Track weekly performance results
- Prepare interim and final tabulations and reports, including population projection/weighting
- Support internal panel management initiatives
- Maintain process documentation
- Lead support and backup to the Statistics team members on daily tasks as well as service enhancements and improvements

The competencies and experience required for the position are as follows:

- Advanced knowledge of Microsoft Office Suite, especially Excel
- Fluent in statistical techniques such as sampling and weighting, preferably with a tertiary degree in Statistics
- Sound working knowledge of SAS programming
- An ability to work to tight deadlines
- Multi-tasking skills and dealing/communicating with different departments
- An ability to learn quickly

If you wish to apply, please forward CV and accompanying cover letter by clicking 'Apply Now'.
MATHS: A SKILL FOR LIFE

Australia is known as a world leader in the areas of school curriculum, assessment and reporting. Our Australian Curriculum: Mathematics provides students with essential skills and knowledge in Number and Algebra, Measurement and Geometry, and Statistics and Probability.

Our curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills.

It develops the numeracy capabilities that all students need in their personal, work and civic lives.

Today’s Australian Curriculum: Mathematics equips young people to be confident and creative thinkers – the best foundation for their careers in tomorrow’s world.

Find out more about ACARA and the Australian Curriculum: Mathematics by visiting www.acara.edu.au or www.australiancurriculum.edu.au
Inspire a new generation!

Maths teachers are in demand both here in Australia and overseas. Teaching can be a flexible and secure career with opportunities to influence students positively, to work in urban or rural areas, and to achieve seniority.

Secondary Maths Teacher required in Epsom, Surrey for Easter start

- Up to £150 pay rate

**Secondary Maths Teacher required in South London / Surrey for Easter start**

Are you a Maths specialist? Are you looking for a long term position in a multicultural and diverse school? Do you want to work as a Secondary Teacher in London?

ANZUK Teachers are market leading education solution specialists who place the highest quality teachers into the best schools across London.

ANZUK Teachers are working with an Outstanding all boys Surrey Secondary school to find dynamic and talented maths teacher to teach all levels. The school will adapt the timetable to suit the teachers strengths.

This all boys school is extremely highly regarded in the local area. Exam results and behaviour are excellent and the staff and senior leadership team are extremely friendly and supportive.

You will have to be able to demonstrate:

- A energetic and engaging attitude
- Understanding of the UK Curriculum
- Strong curriculum knowledge
- Be able to control and discipline a classroom
- Have good references

Mathemetic Teachers receive generous remuneration packages. This is a long-term contract and the school are looking for the Secondary Teacher from the Easter to remain in the role for the rest of the academic year.

ANZUK Teachers is committed to a policy of Equal Opportunities. We respect and value cultural and religious diversity and will not discriminate on the basis of age, gender, sexual orientation, race, ethnic origin, religion, culture or disability. Each individual will be assessed on merit alone.

All ANZUK Teaching positions are subject to professional references & police checks.

Contact or at ANZUK Teachers for further information.

Your career with ANZUK Teachers will be supported by your own personal consultant who will ensure that your needs are met.

We look forward to hearing from you!

Science & Maths Teacher

Haileybury is one of Melbourne’s leading independent schools with campuses at Brighton, Berwick and Keysborough and an enrolment of more than 3,500 students. The School is acclaimed for its outstanding academic achievements, small class sizes, broad range of co-curricular activities, and state-of-the-art facilities. From the Early Learning Centre to the Senior School, learning is student-centered and based on the different learning styles of students, and on their gender, age, interests and potential. Further information on Haileybury is available at www.haileybury.vic.edu.au.

Haileybury is seeking a Science & Maths Teacher (potential PPR) at the Brighton campus. This is a full time position.

**General Responsibilities**

Teachers should ensure:

- Their delivery of the curriculum caters for students with varying learning styles and ensures best practice in pedagogy
- They keep up-to-date with modern teaching practices within their subject area
- They use appropriate learning styles
- They use a variety of assessment styles for students to experience success and accurately assess levels of student achievement
- They attend relevant professional development sessions within their subject area.

**Applications close**

For further information and application details, visit www.haileybury.vic.edu.au.
Mathematics Teachers Needed

- Free Service for Teachers
- Outstanding Independent and Catholic Schools
- Positions Across Sydney, Regional NSW, and ACT

Smart Teachers is a custom education recruitment company, specialising in placing Teachers in Independent, Christian, and Catholic schools. We specialise in temporary contract and permanent vacancies in schools across NSW and the ACT.

Due to increasing demand, we are actively seeking expressions of interests from qualified Mathematics teachers seeking a new and engaging position in the independent sector.

Register with Smart Teachers today to be notified instantly current and upcoming vacancies across some of the best schools in the state. Both experienced and newly qualified teachers with excellent practical reports are encouraged to apply.

To express your interest and find out more, email your CV to:

Suitable candidates will be contacted shortly to discuss the registration process.

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.

Mathematics Teacher

Wesley College Melbourne, a Uniting Church school with a rich tradition spanning 147 years, is a diverse, dynamic, co-educational learning community with more than 5000 students aged between 3 and 18 years across 3 main campuses.

Applications are invited from experienced mathematics teachers for a full time ongoing position commencing Term 1, 2014. In this role you will teach at all levels of the secondary mathematics curriculum, working with students from Years 7 to 12.

The successful candidate will have a strong mathematics background and the capacity to teach Specialist mathematics in the VCE and IB mathematics HL. Strong consideration will be given to applicants who have VCE Units 3 and 4 mathematics teaching experience and/or IB mathematics experience.

This is your opportunity to shine in a learning environment that will reward your love of learning and thinking. We provide extensive professional development and individual mentoring, as well as a range of attractive employment benefits.

For further information, please contact:
Please visit www.wesleycollege.net for a position description and to apply online, or post your application to:

Wesley College Melbourne
577 St Kilda Road
Melbourne VIC 3004

Applications close on

For further details on this position please visit the employment page on our website www.wesleycollege.net
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
It’s a green light for maths jobs!
Mathematics graduates have the green light on some of the most interesting careers in traffic and transport. From designing and modelling to implementing new and innovative infrastructure, mathematics is helping to service the future of transport.

Transport Optimisation Analyst

- Circa $80,000 Package
- Multiple career pathways opportunities
- Form part of the national project team

This market leading FMCG company is a leader across multiple categories and is poised to enter into a period of strategic growth. Dedicated to transforming their logistics operation they are now seeking a Transport Route Optimisation Analyst to join their team.

Working as part of a national project team, you will be responsible for evaluating the company's current routes. You will utilise your previous analytical logistics experience and identify opportunities for enhancement. As the business is beginning a journey toward operational excellence, opportunities to be involved in additional optimisation projects across the business are a possibility as well as a permanent role in the new, redefined structure.

To be considered for this opportunity you will ideally be tertiary qualified in logistics management / mathematical science or a relevant field. You will have experience in route optimisation with the ability to analyse and develop meaningful solutions to complex projects and deliver findings with high level communication to key stakeholders across the business.

For more information on this role please email an updated CV to

Email: Please click the ‘Apply Now’ button below.

Benchmark and contribute to salary data with Vertical Talent’s new salary comparison website:

www.procurementsalary.com.au
www.supplychainsalary.com.au

Ryan Ruddick
Geodetic Surveyor, Geoscience Australia

My speciality is using Global Navigation Satellite Systems (such as GPS) combined with traditional survey methods to determine highly accurate positions on the surface of the Earth. These positions are used to generate models of the horizontal and vertical movement of the Australian landmass and contribute to our understanding of the changes in the size and shape of the Earth.

Through my work at Geoscience Australia I have been able to apply mathematics to solve problems, often in remote and challenging environments.
Web Analytics
Ride the wave of a top career!
All those websites on the internet ensure maths and stats graduates of an interesting career ahead in web analytics. Simply, web analytics focuses on understanding the impact of websites on users. Web analysts investigate a number of facets of the user’s browsing behaviour including how users arrived at a website, the length of the visit and how users engaged with the website while they were there.

Campaign Operations Manager
Summary
A leading media agency is looking for an experienced Campaign Operations Manager who has background in ad trafficking and campaign management. This is a fast-paced and data-intensive position. It involves real-time reporting and optimization techniques that leverage multiple data points across many platforms.

The Role
- Analyzing performance metrics for all online ad campaigns
- Identifying trends in data and proactively making changes to increase performance and margins
- Makes changes to campaigns to maximize performance or delivery, based on analyses
- Stay abreast of trends in online advertising, product development, and yield optimization best practices
- Monitor and generate reporting used inter-intra departments

The Person
- This role would be best suited to someone with 4+ years experience in a similar role
- Extremely analytical with strong math skills and attention to detail
- Expertise in Excel
- Familiarity with web analytics and research methods. Ability to translate quantitative numbers into recommended actions
- Experience using multiple ad serving technologies
- RTB experience a bonus

If you have the right experience and skill set then apply now!
For more great roles like this visit our website today http://nuclei.com.au/jobs

If you are interested in this role please click the ‘Apply Now’ button. If you would like any more details on this opportunity or a confidential discussion on your career in general, please don’t hesitate to contact us at

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