



# Newsletter

Computer Science Association of New Zealand  
<http://www.cs.waikato.ac.nz/csanz>

19 Nov 2013  
Number 23

## NZCSRSC 2014

It gives us great pleasure to invite the post-graduate research community in Computer Science to the 12th NZ Computer Science Research Student Conference (NZCSRSC), to be held at the Uni of Canterbury from 22-24 Apr 2014.

NZCSRSC has established an enviable reputation as the event for post-grad research students to present research and receive feedback from their peers. Papers may be presented at NZCSRSC without affecting their eligibility for other conferences, and many students have successfully used the conference to fine-tune a paper or presentation intended for a specific conference in their field.

The first call-for-papers was issued earlier in Oct. We are encouraging submissions of either full papers (not exceeding 8-pages), or short papers with poster (not exceeding 4-pages), formatted to ACM standards, with details on the conference website at <http://nzcsrsc.ac.nz>. We'll also use Facebook (NZCSRSC) to keep in touch.

Past conferences have seen a very high standard of papers, giving little ground to those seen in full academic conferences. But what if you are a relatively new post-grad student? How can you take part when you probably don't have any results as yet, and may be in the early stages of your research? For this community we intend to increase the non-presentation sessions at this year's conference for new (and not-so-new) researchers, to discuss work with others, and to meet new colleagues working in the same area. We're excited about strengthening the appeal of NZCSRSC across all stages of post-grad research.

We look forward to welcoming you to NZCSRSC in 2014!

**Thomas Young and Caitlin Duncan**, Co-Chairs  
Website: [nzcsrsc.ac.nz](http://nzcsrsc.ac.nz)

## Computer Science in Schools

This year 700 students will attempt the new Year 13 Computer Science external standard, and thousands are learning programming achievement standards in high schools. The site [csanz.ac.nz](http://csanz.ac.nz) has been established to communicate collectively to school students from the CS Depts about the new standards; the main information there, is a brochure that was drafted with input from all CS Depts. Thousands of copies of this are being sent to schools (on request). The rollout of the new standards will be complete at the end of this year, and at the CS4HS event in Dec teachers will be able to consolidate their experience. Any academics who would like to attend one of the CS4HS workshops for teachers are welcome (it would need to be self funded). If you register, identify yourself as a self-funded academic.

To register: <http://cosc.canterbury.ac.nz/cs4hs/>

Tim Bell

## Otago CS

### News

#### Postgraduate Symposium

A Postgraduate Symposium was held in the Dept on 26 Aug. The 2013 publication prize was shared by **Xiangfei Jia** and **Nabeel Khan**. The best talk prize went to **Gonzalo Sanchez-Nido** for his talk on gene co-expression networks.

#### Summer School Courses

The dept will again be offering the popular papers COSC326 'Effective Programming' and COSC360 'Computer Game Design' in the upcoming Summer School.

### Appointment

Following the departure of **Shawn Martin**, **Yawen Chen** was appointed lecturer.

### Visitors

**Xiaoxin Tang** from Shanghai Jiao Tong Uni, working with **Zhiyi Huang**.

**Maria Markosova** from Comenius Uni, Bratislava, Slovakia is visiting the Dept from Sep to Nov. She is working with **Lubica Benuskova** on dynamic models of brain functional networks.

**Eric Vallduvi**, from Universitat Pompeu Fabra, Barcelona, will be here for six months to continue ongoing research on the role of information structure in natural language. He will also be working with **Alistair Knott** on the neural basis of information structure.

### Seminars

**Mariusz Nowostawski**, Dept of Information Science  
*How average are you? Personal Science in Quantified Self*

**Atheer Matroud**, Dept of Computer Science  
*Nested tandem repeat a marker for population genetic studies on Taro*

**Alec Holt**, Dept of Information Science  
*Health Informatics and the management of paracetamol poisoning*

**Brendan McCane**, Dept of Computer Science  
*Touch Tracking with a Particle Filter*

**Jane Webster**, Queen's School of Business, Canada  
*Getting to Green: Navigating the Road to Environmentally Sustainable Information Technologies and Systems*

**Maryam Bagher Oskouei**, Dept of Computer Science  
*Simulation of Segmentation genes of Honeybee embryos*



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**Stephen Cranefield**, Dept of Information Science  
*Agent-oriented programming: getting from promising to mainstream (or even niche)*

**Lech Szymanski**, Dept of Computer Science  
*SELinux 101*

**Christopher Frantz** and **Martin Purvis**, Dept of Information Science  
*Dynamic Institutional Structures*

**Nabeel Khan**, Dept of Computer Science  
*Indoor scene localisation for blind people using vision*

**Steve MacDonell**, Dept of Information Science  
*'Sabbatical' Report...*

**Ben Daniel**, Higher Education Development Centre  
*Unlocking the Value of Big Data in Higher Education*

**Geoff Wyvill**, Dept of Computer Science  
*Lies, Damned Lies and Clinical Studies*

## PhD Thesis

**Kai-Cheung Leung**—*View-Oriented Parallel Programming and its Performance Evaluation on Multicore Architectures*

## MSc Theses

**Aysha Al Hinai**—*Exploiting Social Contact for Efficient Delay Tolerant Network Routing*

**Jeremy Lee-Hand**—*Modelling the effect of actions*

**Tim Neumegen**—*A computational model of reaching to grasp*

Robert Pollock

## Victoria

## News

### Engineering Students Win Australasian Robotics Competition.

A team of Victoria engineering students won the Australasian National Instruments Autonomous Robotics Competition with its robot 'Michelangelo', named after its turtle-like shape.

### PhD Student Awarded ENZCon Best Presentation Prize

ECS PhD student **Jim Murphy** was awarded the Best Presentation prize at the annual Engineering New Zealand Conference (ENZCon) for his talk about Swivel 2, a mechatronic guitar system that he is developing with supervisors **Dale Carnegie** and **Ajay Kapur**.

### Students use technology to clean up the environment

A smartphone app and website which the public could use to report livestock polluting waterways, rubbish dumping and overflows from outfall pipes have been developed by students at the School of Engineering and Computer Science,

supervised by **Winston Seah**. The students have also been testing unmanned flying vehicles equipped with GPS technology to record incidents of pollution in New Zealand rivers, particularly those involving livestock. Both projects are part of River Watch, which began as part of a third-year engineering module in which students apply their project management skills in a group project, and continued as a summer research project supported by the Waterway Action Initiative New Zealand (WaiNZ).

## Scholarships

Victoria Doctoral Scholarships

**Ying Qu**

**Jagadeesh Gunda**

**Atiya Masood**

**Adedotun Akintayo**

**Davoud Mougouei**

**Krishnan Lakshmi**

**Ashan Ali**

**Aisha Amjal**

## Appointments

**Bryan Ng** joined the Faculty of Engineering in Sep as a lecturer in Network Engineering. Bryan's research is on performance analysis of communication networks and modeling networking protocols.

## Awards

### Best Paper Prize

Congratulations to **Muhammad Iqbal** and his supervisors **Will Browne** and **Mengjie Zhang** on a Best Paper award at the International Conference on Evolutionary Computation.

## Seminars

**John Hine**, Victoria Uni of Wellington

*ECS Research and the NZ Science Challenges*

**Eddie Reisch**, Reisch Consulting Ltd

*Experience with NetNZ*

**Syed Saud Naqvi**, Victoria Uni of Wellington

*Learning Feature Selection and Weighting Strategies for Object-Based, Task-Specific Visual Attention*

**James Morris**, Portland State Uni, Oregon

*Nanopackaging: Nanotechnologies in Microelectronics Packaging*

**Mohammad Nekooei**, Victoria Uni of Wellington

*Wireless Sensor Networks for Medical and Healthcare*

**Tim Jones**, Victoria Uni of Wellington

*Formalising a Structural, Gradual, Pluggable System*

**Gurvinder Virk**, Uni of Gävle and KTH Royal

Institute of Technology, Sweden

*Safe Mobility Exoskeletons for the Elderly*



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## Waikato

**Mawarny Bintu Md. Rejab**, Victoria Uni of Wellington  
*Expertise Coordination for agile Software Development Projects*

**Neal Glew**, Intel Labs  
*A Multivalued Language with a Dependent Type System*

**Tae Hong Park**, New York Uni  
*MP3: Music Machine Media*

**Paul Gaynor**, Uni of Canterbury  
*What do you get when you cross an electrical engineer with a biologist and a greenie?*

**Abdul Wahid**, Victoria Uni of Wellington  
*Enhancing Knowledge Discovery by Clustering High Dimensional Multi-View*

**Ciaran Moore**, Victoria Uni of Wellington  
*Near-Field Photolithography: Breaking the Diffraction Limit with Optical Superlenses*

**Garry Greenwood**, Uni of NSW, Canberra  
*Introduction to Evolutionary Game Theory*

**Steven Tingay**, International Centre for Radio Astronomy Research, Curtin Uni  
*Tracking Space Debris with the Murchison Widefield Array: Opportunities and Challenges*  
*Reinventing Astronomy with Radio Telescopes: the Murchison Widefield Array and the Square Kilometre Array*

**Gerard Rowe**, Uni of Auckland  
*Engineering the Transistion, and Beyond ...*

**Hugh Anderson**, National Uni of Singapore  
*Research at NUS: Gait and PAT*

## PhD Theses

**Ben Drayton**—*Algorithms and Design Improvements for Indirect Time of Flight Range Imaging Cameras*

## MSc Theses

**Daniel Atkins**—*Modern Concurrency Techniques: An Exploration*

**Fahni Abdulhamid**—*SpEx: A Tool for Visualising and Navigating Speech Audio*

**Shaw Wei Cheoo**—*The Development of a High Performance Digital RF Transmitter for NMR*

**Daniel Cope**—*A Multi-Touch Explorer Environment for Eclipse*

**Anna Friedlander**—*Dirichlet Methods for Bayesian Source Detection in Radio Astronomy Images*

**Julian Mackay**—*Proofs for Ownership and Immutability in Coq*

**Douglas Thomson**—*Hybrid Control of a Segway Platform Developed in MRDS*

Amanda Holdaway

## News

### Computer Science team off to Russia

A team of Computer Science second-year students **Tom Levy**, **Matthew Law** and **Ryan Smith** has been selected as one of two teams from the South Pacific region to compete in the world finals of the ACM-ICPC (International Collegiate Programming Contest) in Russia in 2014. (The other team is from the Uni of New South Wales.)

**Anthony Blake** was invited to visit Wave Semiconductor to develop FFT code for their new (still secret) high-performance low-power processor.

### FLAX (Flexible Language Acquisition) Workshops

Zhejiang Uni City College (ZUCC) teachers come annually to UoW to participate in a Tertiary Teaching in English Programme. This year the organizers received a particular request for FLAX workshops, which 15 ZUCC teachers attended. FLAX is supported by the UoW Greenstone Digital Library Software.

## Awards

“Logistic Model Trees” by **Niels Landwehr**, **Mark Hall**, and **Eibe Frank** won the (ECML/PKDD) 2013 Test of Time award for the most influential paper published at ECML/PKDD 2013.

**Henry Gouk** was awarded a research scholarship by Wave Semiconductor to explore the design space of the AES encryption standard, as an undergraduate project supervised by **Anthony Blake**.

**Ryan Ko** has become a research advisor for the Cloud Security Alliance, which will help bridge several potential acad-industry collaborations in the APAC region. He also received an Outstanding Leadership Award for organising the IEEE Symposium on Trust and Security in Cloud Computing for three years since 2011 (Changsha, Liverpool and Melbourne).

**Te Taka Keegan** won the Uni of Waikato *Māori/Indigenous Scholar* award for his outstanding contribution to the revitalisation of the Māori language.

**Ian Witten** won the Uni of Waikato *Lifetime Research Achievement* award for his significant contributions in the field of data compression and machine learning.

## Seminars

**Toby Hutchings**, PAN®

*PAN agency: A case study on PAN's approach to a unique social health challenge, STI's*

**Gjoko Muratovski**, AUT University



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*Branding, Society and Popular Culture*  
**Markus Müller**, Environmental Informatics Specialist,  
Landcare Research  
*Web Dev, Mobile, HPC and friends - Environmental  
Informatics at Landcare Research*  
**Hugh Anderson**, School of Computing, National Uni  
Singapore  
*Studies at NUS: Gait and PAT*  
**Johnson Witehira**, PhD, artist, designer and researcher  
*Māori typeface design and Māori typography*  
**Jeff Johnson**, UI Wizards Inc and WiserUsability.com  
*Designing with the Mind in Mind: The Psychological  
Basis for UI Design Rules*  
**Liron Turkenich**, Israeli Graphic and Typeface Designer  
*Avarit & Amharic: Combining Hebrew, Arabic, Latin and  
Ethiopic into a new writing system*  
**Mark S Staveley**, Senior Software Development Engineer,  
Microsoft  
*From Waikato to Microsoft*  
**Nicholas Vandershantz**, PhD student, UoW  
*Children's Knowledge Acquisition using Digital  
Documents*  
**Diane Oyen**, Postdoc researcher, Los Alamos National Labs  
*Interactive Learning of Dependency Networks for  
Scientific Discovery*  
**Stephen Downie**, Graduate School of Library & Information,  
Uni of Illinois  
*Unlocking the Secrets of 3 Billion Pages: Introducing the  
Hathi Trust Research Centre.*

## Visitors

**Jennifer Whisler**, Fullbright Scholar, Peru, Nebraska. Mar-  
Dec.  
**Daniil Myrylenka**, PhD student, Uni of Parma, Italy  
(originally from Belarus) visited from May-Aug. He put  
Wikipedia Miner through its paces.

## PhD Theses

**Andreas Lof**—*Improving the evaluation of network  
anomaly detection using a data fusion approach*  
**Sam Sarjant**—*Policy search based relational  
reinforcement learning using the Cross-Entropy  
method*

## MSc Thesis

**Mohammed Ali Alshahrani**—*Real time vehicle license  
plate recognition on mobile devices*  
**Gregory Clarke**—*Visualising time*  
**Paul Morris**—*Exploration of pervasive games in relation  
to mobile technologies*  
**Sanhong Peng (Casey)**—*A location-based audio book  
reader*

**Grzegorz Śmiałowski**—*Automatic weighing for dry  
stock*  
**Simon Wadsworth**—*Security analysis of the Evolved  
Packet Core of LTE networks*  
**Min-Hsien (Sam) Weng**—*Automatic parallelization of  
data-driven JStar programs*

## Massey

### News

**Hans Guesgen** has been awarded a fellowship at the Munich  
Uni of Applied Sciences, Germany, commencing in Mar 2014  
for one semester. The fellowship programme aims at fostering  
international academic relations with visiting scholars from all  
over the world.

The **Computer Science and Information Technology**  
cluster in Palmerston North met up with the **Information  
Technology** group in Albany in Sep. This was the first time  
that the groups were together despite being officially the same  
entity since Jan this year! We chose Taupo as a convenient  
halfway point, and spent two days discussing points of  
common interest for future papers and degrees.

### Appointments

**Tony Norris**, currently the professor of IT at Albany, is  
retiring at the end of this year. He will be replaced by **Paul  
Watters**, currently at the Uni of Ballarat, who will be joining  
us in Nov. Paul's research interests are in Human Factors in  
Cybercrime.

### PhD Theses

We have had several PhD submissions over the past  
few months, and therefore hope to announce several  
successful oral examinations in time for the next newsletter.

### Seminars

During the course of this year we have been running weekly  
research seminars under the management of **Kuda Dube**.  
While many of these have been internal speakers, we also  
welcome seminars from visitors, so if you are near Palmerston  
North and would like to drop by, please let us know!

*Hans Guesgen*

## Computer Science at Massey Albany Campus

### News

Our Computer Science Unit Chair, **Ken Hawick** is leaving  
Massey Uni to join the Uni of Hull in the UK. With unflinching  
commitment and enthusiasm, he has led the CS unit for 10



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years and founded the Complex Systems and Simulation Group.

## Appointments

**Ian Bond** has been promoted to Associate Professor. Ian's research has led to the discovery of free-floating 'orphan' planets. He has twice received a Marsden funding grant.

## Events and Seminars

**Napoleon Reyes** and **Andre Barczak** organised a Special Session on Embodied and Developmental Robotics for the 1st International Conference on Robot Intelligence Technology and Applications, in Gwangju, South Korea.

## INMS/NZIAS Seminars

**Elena Calude**, Massey Uni  
*Inductive complexity of the P versus NP problem*

**Ian Bond**, Massey Uni  
*Bound and unbound planets in the Galaxy*

**Daniel Playne**, Massey Uni  
*Parallel Computing and Graphical Processing Units*

**Napoleon Reyes**, Massey Uni  
*Instilling Navigation Intelligence into Robots*

**Chris Scogings**, Massey Uni  
*Agent-Based Simulations*

**Andre Barczak**, Massey Uni  
*Challenges in Feature Extraction Methods for Computer Vision*

**Martin Johnson**, Massey Uni  
*Efficient High Dynamic Range Imaging*

*Napoleon Reyes*

## Lincoln

## News

Our Qualifications Reform process continues, with Bachelor reforms almost complete and attention now turning to postgraduate programmes. There are a great many changes including the introduction of a suite of common courses across all undergraduate programmes.

The Dept of Applied Computing has perhaps the most change. From 2014 we will no longer offer the B Software & IT but instead offer a specialist major within each of the three core undergraduate degrees: Agritech in the BSc, IT in the BCom, GIS & Environmental Informatics in the B Environment & Society (BES). This is a huge change and a significant number of our courses have been restructured, merged or deleted. Several new courses will come on stream over the

next three years as the programmes are rolled out. We look forward to accepting our first cohort in Semester 1, 2014.

We will also recruit, replacing **Clare Churcher** whose departure is imminent.

## Scholarships

**Josh Campbell** was awarded a scholarship funded by NZ Agriseeds to work on Seed Analysis by Image Processing.

**Seth Reid** was awarded a departmental scholarship to develop a RaspberryPi based toolkit, also for Seed Analysis by Image Processing. Both scholarships are supervised by **Stuart Charters** and **Keith Unsworth**.

## Appointments

**Stuart Charters** has been appointed Head of Dept.

## Seminars and Events

The Dept hosted a meeting of our Computer Industry Liaison Group in Sep to update local firms on the changes to the Lincoln Computing qualifications. A number of companies working in the land-based and other industries attended and provided excellent feedback. There was particular support for Lincoln increasing work in the Geospatial area (including GIS analysis and customisation) and the new focus on Agritech (including robotic platforms and sensor networks).

## PhD Thesis

**Ellin Elina Abdul Rahim**—*Exploring a Desktop Virtual Reality Application for Education: the Perspectives of Spatial Knowledge Acquisition and Information Integration*

## MS & IT Thesis

**Tina Zitian Li**—*Using Mobile Devices to Access Remote Visualisations*

*Sharon Long*

## Auckland

## News

**Vice-Chancellor's Lecture Series** hosted by the Dept in Oct. *The Internet, Today and the Future*. Speakers:

**Muriel Médard**, Massachusetts Institute of Technology

**Giovanni Russello**, UoA

**Simon Milne**, AUT

**Steve Cotter**, CEO of REANNZ.



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**Gibbons lectures.** The theme was *Picture This! Computer Graphics in New Zealand*. Speakers:

**Geoff Wyvill**, The Uni of Otago  
*A Better Paintbush?*

**John Lewis**, VUW & Weta Digital Research  
*Why Academic Research Matters in Visual Effects*

**Burkhard Wuensche**, UoA  
*Computer Games: Friend or Foe? Opportunities and Research Challenges in Game Technology*

**Gordon Mallinson**, UoA  
*Engineering Computer Graphics*

## Books

**Brian Carpenter's** new book is out: *Network Geeks: How They Built the Internet*

**Cris Calude** and **Alastair Abbott** have contributed two chapters to *Alan Turing, His Work and Impact*, Elsevier, Amsterdam, 2013, 206–209.

**Mark Wilson** (with **Robin Pemantle**, Uni of Pennsylvania) *Analytic Combinatorics in Several Variables*, published by Cambridge Uni Press, June 2013.

## Staff changes

We welcome **Brent Whiteley** and **Alexandr Shirokov** to the research programming team

## Successes

**Jim Goodman** gained the IEEE/ACM Eckert-Mauchly award.

**Gerald Weber** won a Hood Fellowship for **Terry Halpin**.

**Ulrich Speidel's** student **Etuate Cocker** was awarded an ICANN fellowship to present at the ICANN conference.

**Alexei Drummond's** student **Cameron McLean** won the Best Poster prize at the NZCSRSC 2013 conference.

**Paul Denny** gained funds from the International Central Network Fund for support to develop strategic activities with network partners.

**Maletino Leota** (one of our graduates) was featured on the front page of a recent issue of the Western Leader.

**Etuate Cocker** gained an InternetNZ grant attend ICICIS 2013 in Taiwan.

**Andrew Luxton-Reilly** won a CLear (Centre for Learning & Research in Higher Education) Fellowship for 2014.

**Giovanni Russello** received start-up funding from the UniServices board for FireDroid.

**Ian Watson** is an advisor to the redevelopment of the communications gallery of the Russian Polytechnic Science Museum in Moscow.

**Wannes van der Mark** (Research Programmer Team Leader) successfully completed the Leaders in Action programme and **Heather Armstrong** (Dept Manager) completed the Inspiring Leaders programme.

## Events and Seminars

**Prashant Gupta**, UoA

*Capturing the flux in Scientific Knowledge: connecting categories with the process of science*

**Moiz Penkar**, UoA

*Eyes Only: Navigating Hypertext with Gaze*

**J. Butcher**, UoA

*B-series*

**Umesh Kumar**, UoA

*Vehicle detection in night scenes*

**Zijiang Song**, UoA

*Vehicle detection in night scenes*

**Ewan Tempero**, UoA

*Towards a Curated Collection of Code Clones*

**Wannes van der Mark**, **Naderi Habib**, **Arturo Jimenez**, **Andrew Probert**; UoA

*Research Programmers: how to turn your ideas into nice results without having to do all the work*

**Niklas Carlsson**, Linkoping Uni, Sweden

*Popularity Dynamics and Scalable Content Delivery Techniques*

**Xiaofan Chen**, UoA

*Development of robust traceability benchmarks*

**Safurah Abdul Jalil**, UoA

*Design Eye: An Interactive Learning Environment based on the SOLO Taxonomy*

**Brent Whiteley**, UoA

*Tangible Tango: designing and fabricating tangibles with tangibles*

**David Huang**, UoA

*Detecting rare pattern changes and trends in data streams*

**Salvatore Flavio Pileggi**, UoA

*Bringing resources together in the Cloud: Semantic Resources and Social Semantics*

**M. Shaban Jokhio**, UoA

*Mutation based Evaluation of Test cases Semantic Web Services*

**Mozhgan Memari**, UoA

*On the Discovery, Enforcement and Visualization of Partial Referential Integrity in SQL Databases*

**Johannes Dimyadi**, UoA

*Automated Audit of building information models against New Zealand standards*

**Terry Halpin**, INTI International Uni, Malaysia

*Data Modeling for Business People*

**Patrice Delmas**, UoA

*Image Processing for Environmental Science: Water management in Mexico City*

**Matthieu Barnachon**, LIRIS Laboratory, Lyon Uni, France

*Ongoing Human Action Recognition with Motion Capture*

**Andrew Luxton-Reilly**, UoA

*What's new in first year? A progress report on curriculum*



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*and pedagogy for first year courses in courses in  
Computer Science*

**Burkhard Wuensche**, UoA

*High-Definition Texture Reconstruction for 3D Image-  
based Modeling*

**Adeel Ali**, UoA

*Stateful Web Services - Auto Modeling and Composition*

**Michael Wong**, IBM

*C++14: Through the Looking Glass*

**Dave Crocker**, Brandenburg InternetWorking

*Email Evolution: 40 years of changing engines in mid-  
flight*

**Sidney Tsang**, UoA

*Detecting Online Auction Shilling Frauds using  
Supervised Learning*

**Christof Lutteroth**, UoA

*The Auckland Layout Editor: An Improved GUI Layout  
Specification Process*

**Pat Langley**, UoA (inaugural lecture)

*Computational Discovery of Scientific Models: Guiding  
Search with Knowledge and Data*

## Visitors

**Kashif Nisar**, Linkoping Uni, Sweden – visiting **Ulrich  
Spiedel**

**Niklas Carlsson**, ENS-Lyon, FR – visiting **Aniket Mahanti**

**Daiana Mir**, Universidad de la Republica, Uruguay – visiting  
**Alexei Drummond**

**Ng Keng Meng**, Nanyang Technological Uni Singapore –  
visiting **Andre Nies**

**Terence Halpin**, INTI Malaysia – visiting **Gerald Weber**

**Erwan Casanova, Baudouin Boyard & Charles-Olivier  
Dochez**, St Cyr Military Academy, France – visiting  
**Patrice Delmas**

**Rampal Etienne**, Uni of Groningen, The Netherlands, Seelye  
Fellow – visiting **Alexei Drummond**

## PhD Thesis

**Jonathan Rubin**— *On the Construction, Maintenance  
and Analysis of Case-Based Strategies in Computer  
Poker*

Heather Armstrong

# AUT

## News

Australasian Computer Science Week (ACSW) will be held at  
AUT on 20 - 23 Jan 2014.

## Appointments

**Alexander Gavruskin**, from Uni of Novosibirsk in Russia.

**Ji Ruan**, Lecturer in Computer Science, from St. Francis  
Xavier Uni (Canada) and the Uni of New South Wales.

**Jian Yu**, Lecturer in Computing and Information Sciences,  
from Swinburne Uni of Technology and Uni of Adelaide.

**Waseem Ahmad**, Fixed Term Lecturer, previously a post-  
doctoral fellowship at AUT.

**Katharina Parry**, Junior Lecturer in the Dept of Creative  
Technologies in the School of Computing and  
Mathematical Sciences, from Massey Uni.

## Promotions

**Jiling Cao** has been promoted from Associate Professor to a  
personal chair and full professor status.

**Russel Pears** and **Dave Parry** have been promoted from  
Senior Lecturer to Associate Professor.

## Departure

**Stephen MacDonell** departed in July 2013. He joined the  
School of Computing and Mathematical Sciences as a  
Professor in 2010.

## Sabbatical Leave

**Wai Yeap** took up a Senior Fellowship at the Hanse  
Wissenschaftskolleg Institute for advanced Study in  
Germany, Sep to Nov 2012, as part of his sabbatical leave.  
He visited Bremen and gave seminars at the Universities of  
Bremen, Humbolt, Zurich, Osnabruck and Frieburg.

**Jiling Cao** visited the Uni of São Paulo as FAPESP Visiting  
Professor, the Uni of Helsinki and the National Uni of  
Ireland, Galway.

**Mali Senapathi** was on VC Doctoral Research & Study leave  
Semester 2, 2012 at Fordham Uni, New York.

## PhD Theses

**Jacqui Finlay**—*Multi-metric Predication of Software  
Build Outcomes*

**Anuj Bhowmik**—*Blocking Efficiency and Competitive  
Equilibria in Economies with Asymmetric Information*

**Yiwen(Raymond) Huang**—*A Comparative Study of the  
Mobile Internet Deployment Models in New Zealand*

**Boris Bacicv**—*Connectionist methods for data analysis  
and modelling of human motion in sporting activities*

**Nuttapod Nuntalid**—*Evolving Probabilistic Spiking  
Neural Networks for Modelling and Pattern  
Recognition of Spatio-temporal Data on the Case Study  
of Electroencephalography (EEG) Brain Data*



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**HangXia Zhou, Zhou Yongxia, Li Zhengquan, Yang Xiaobing, Shan Liang**, all from the China Jiliang Uni, China  
**Farnon Ellwood**, Uni of Cambridge

*Saide Lo*

**Helena Szczerbicka**, Leibniz Uni of Hanover, Germany  
*Beyond Traditional Reliability and Maintainability Approaches: Using Biologically Inspired Techniques for Maintenance in Ad Hoc Wireless Networks*

**Tim Bell**, Uni of Canterbury  
*Computer Science in High Schools: preparing for better-prepared students*

## Canterbury

### Visitor

**Jeff Johnson**, UI Wizards Inc, San Francisco.  
Currently visiting on an Erskine Fellowship, has been teaching our course titled *Humans and Computers*

## Awards

**Muhammad Asad Arfeen**, a PhD student in our Network Research Group, has been awarded the ITC Student Travel Grant for attending the International Teletraffic Congress, in Shanghai, China. Asad presented a paper on “The Role of the Weibull Distribution in Internet Traffic Modeling”. The paper is co-authored by **K. Pawlikowski, D. McNickle** and **A. Willig**.

**Tanja Mitrovic** has been elected as President of the AI in Education Society. AIED is an interdisciplinary community spanning the fields of computer science, education and psychology.

**Amir Shareghi** (PhD student) was nominated for the best student paper at the ICCE 2013 conference, and also received a Merit Scholarship to attend the conference.

### PhD Theses

**Mashitoh Hashim**—*A New Algorithm and Data Structures for the All Pairs Shortest Path Problem*

**Ruzelan Khalid**—*Component Based Tools for Educational Simulations*

**Amali Weerasinghe**—*A General Model of Adaptive Tutorial Dialogues for Intelligent Tutoring Systems*

### MSc Thesis

**Xiaohan Wang**—*Investigation of Forward Error Correction Coding Schemes for a Broadcast Communication System*

*Gillian Clinton*

## Seminars

**Paul J. Wagner**, Uni of Wisconsin, Eau Claire  
*Developing ad-hoc homogeneous networked laptop instructional environments using heterogeneous systems*

**Stellan Ohlsson**, Uni of Illinois  
*How Intelligent are AI Program? A Quantitative Investigation*

**Maode Ma**, Nanyang Technological Uni  
*QoS Provisioning in LTE/LTE-Advanced 4G Wireless Networks*

**Alistair Moffat**, Uni of Melbourne  
*Search Evaluation Through the Eyes of the User*

**Wendy Lawson**, Uni of Canterbury  
*Geospatial Science at UC: update and discussion*

**Jeff Johnson**, UI Wizards, Inc  
*Designing with the Mind in Mind: The Psychological Basis for UI Design Rules.*

**Dijiang Huang**, Arizona State Uni  
*SDN-based Network Intrusion Detection/Prevention for Cloud Virtual Networking System*

**Ruzelan Khalid**, Uni of Canterbury  
*Component-based Tools for Educational Simulations*

**David Bainbridge**, Uni of Waikato  
*Musical Moments.*

**Ryan Mallon**, Open Kernel Labs  
*Virtualisation on mobile phones*