The students’ work has been so successful that Dr Fizzell says the University will carefully reconsider how they proceed with the future development of PHERIS, further refinement of their prototype will be one of their options to be considerd in the next few months. The students were also recently awarded the Accenture Prize for this work. Congratulations to Team E!


Dr Darren Williams is a double graduate of the School of IT and is now the Chief Executive Officer of the network security firm Sensory Networks. Sensory Networks produces hardware and software acceleration solutions for network security applications, including multi-gigabit content scanning acceleration technology: “The basic function of our products is to allow our clients to search vast amounts of data very quickly and is mainly applied when searching network traffic for security threats.”

Sensory Networks was one of a handful of Australian start-ups to get funding from venture capitalists in 2002. “We spent a year developing our idea and planning. We got lots of advice by working with some really experienced people. I think we stood out because we had a good plan and a good team who had a combination of industry experience and education. We raised $4 million in our first funding round. Since then we have raised over $US20 million for further development and to develop our sales”.

Starting a business after the IT bubble ‘burst’ presented challenges in terms of raising capital but it also had its advantages: “It was a tough time to be raising money, but once we were up and running it was a great time to be hiring people... we knew lots of talented people looking for work. Now technology is picking up again, which is great for IT generally, but it does make it harder to find and retain good staff.”

Dr Williams has tried to maintain some of the collegial atmosphere of his Honours year at Sensory Networks: “We started hiring people we knew and found as the atmosphere was wonderful. We worked hard too - there were seven students in G7 and we all got first class honours, so we did something right.”

He is optimistic that there are other opportunities for graduates who want to build a start-up business. “There is a lot of funding around - investors are looking for good ideas and good people... and not just internationally – there is funding in Australia to do this.”

Dr Williams reminisces that the best times at university were during his Honours year, working with his fellow students in room G7 in the Madsen Building: “My Honours year was a lot of fun, we had a ping-pong table in our room and a great group of students. The atmosphere was wonderful. We worked hard too - there were seven students in G7 and we all got first class honours, so we did something right.”

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ACM Programming Competition

Congratulations to the University of Sydney teams, who did very well in the recent Sydney Region Competition for the ACM Programming Competition. Our teams took first, second and third prizes in the site, from a strong field of 12 teams, including five from Sydney and seven from UNSW.

The successful teams were: first prize winners Greg Darke, Enoch Lau and Anh Pham; second prize winners Robert Little, Mitchell Quille and Daniel Tse and third prize winners; Tim Dawborn, Jonathan Kummerfeld and Chris Leong. The top site-first year team, in 5th position, were Sam Harding, Gareth Robinson and Benjamin Taylor. The third prize group was the top second year team at our site.

The day was a huge success, significantly due to the efforts of judges; Shu Ning Bian, Edmund Tse and Alexandre Mah; volunteers Anish Bhatta, Catherine Stewart, Christopher James Ackad, Clarence Dang, Felix Gordon, Glen Pink, Hugh Garden, John Jiang, Kelton Temby and Terryn Wu, and, behind the scenes, Josephine Spongberg, David London and particularly Greg Ryan. Thanks to Steven Sommer for helping with training the teams and readying our site, and to Bob Kummerfeld for assisting in training.

Message from Head of School

In reflecting on 2007 I can say it has been a year of great change for the School.

The School officially moved into the Faculty of Engineering and began to implement changes to our curriculum that will take full effect in 2008. Several long serving staff members retired, and others moved on to better things. In November we undertook a future focussed review of our research activities. We have had several successes, some of which are outlined in this newsletter, including ARC Discovery and Linkage grants, ACM Programming Competition, funding from Hewlett Packard, and the establishment of a NICTA node on the fifth floor of the SH1 building.

It is my hope that 2008 will be a year of consolidation after these changes - working with our new curriculum, new staff members, and implementing the recommendations made by the research review panel.

I would like to thank you for your support over the year and encourage you to stay engaged with the School in 2008. Best wishes to you all for the approaching holiday season.

Albert Zomaya
Head of School

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Sensory Networks team of alumni and friends L-R David Taylor, Matt Barry, Darren Williams, Michael Vlaisavljevic, John Begurin, Geoff Langdale, James Gregory, Amanda Fernando, Hai Son Hong & Peter Dubie

ACM Programming Competition Site Champions Encoh Lau, Judy Kay (Coach), Greg Darke and Anh Pham
HP Technology for Teaching Initiative

The University of Sydney was recently awarded a highly competitive technology grant from Hewlett Packard. The grant is worth over $90,000 and will help the School transform the way students are taught on campus.

Tony Bill, Vice President and General Manager, HP Personal Systems Group Australia, said: “Mobility and wireless technology, when combined with exemplary teaching, will take learning beyond the traditional confines of a classroom. Hopefully, this cooperation will help us demonstrate to students that innovative technology can be a powerful enabler for creativity and lateral thinking.”

The University submitted proposals for projects that demonstrated how HP mobile technology can be integrated into the redesign of key courses across the disciplines of mathematics, science and engineering. Outcomes were assessed on how mobile technology could contribute toward the institution’s vision and plans for broader deployment of mobile technology solutions in the learning environment.

School of IT lecturer Dr Josiah Poon, who worked on the University of Sydney’s proposal together with Dr Rafael Calvo from the School of Electrical and Information Engineering, says “Our proposal involved integrating HP Tablet PCs and wireless technology into a reusable framework for the new Professional Engineering unit of study, which will commence in 2008.” The aim is to promote interaction in large classes: “The mobile and wireless technology will encourage dialogue between students and promote small-group learning beyond the classroom. We are very grateful to HP for this funding and we are looking forward to the challenge of implementing the technology next year.”

Submissions were reviewed by a distinguished panel of representatives from the International Society for Technology in Education (ISTE) and mobile technology experts from HP. The University will receive over AU$90,000 worth of technology in the form of HP Tablet PCs, external storage and optical drives, wireless networking cards and printers, as well as a stipend for staff to work on the projects. Congratulations to Dr Poon and Dr Calvo.

Graduations

On behalf of the School I would like to congratulate everyone who graduated on 26 October 2007. Degrees were conferred upon research and coursework Masters students as well as undergraduates from several different degrees. I would like to particularly mention the following people who were admitted to the degree of Doctor of Philosophy:

Dr Ali Al Mazari, Computational Methods for the Analysis of HIV Drug Resistance Dynamics.

Dr Julian Jang-Jaccard, Building Reliable and Robust Service-Based Systems for Automated Business Processes.

Dr Kathryn Merrick, Modelling Motivation for Experience-Based Attention Focus in Reinforcement Learning.

Dr Kaushalya Premadasa, Dynamically Re-Configurable Transport Protocols for Wireless Sensor Networks.

Dr Yu Pan (Ben) Yip, Eye Contact Rectification in Video Conference with Monocular Camera.

Dr Michele Zappavigna, Elicitng Tacit Knowledge with a Grammar-Targeted Interview Method.

“Great work! The occasional address was delivered by Dr Phil Robertson, the Chief Operating Office of NICITA. Thank you to Dr Robertson for taking the time to be part of this special day.

Alber Zomaya

ARC Success

Congratulations to School of IT staff who were recently awarded funding from the ARC.

Australian Research Fellowships

Dr Seok-hee Hong, Algorithmics for Interactive 2.5D Graph Drawing, Funding 2008-2012 totalling $304,322.

A/Prof Judy Kay and A/Prof Bob Kummerfeld, Persuasive Lifelong User Modelling for User Controlled Personalisation and Augmented Cognition, Funding 2008-2012 totalling $349,322.

Discovery Projects

A/Prof M Agastya and A/Prof Sanjay Chawla, Chase and classification in complex and adversarial environments, Funding 2008-2010 totalling $148,000.

Dr Jimin Kim, Innovative visualization of next-generation biomedical images, Funding 2008-2011 totalling $289,972.

ISYS3400 Information Systems Project

ISYS3400 is a capstone project unit of study giving students the opportunity to integrate and apply the knowledge and skills they have acquired throughout their study by working on an IS development project. It allows students to experience, in a realistic way, many aspects of analysing an information systems problem for a business or not-for-profit entity and implementing and evaluating a prototype system solution.

Third year Information Systems students Tian Shou, Lucy Vacsneslos, Jonathon Ang, Jimmy Yu, Nikhil Sreejaguru, and Wendy Duong (Team E) worked under the supervision of Associate Professor Joseph Davis on a project with the Biopreparedness Unit at NSW Department of Health. The team was assigned the task of specifying and developing a public health emergency response information system (PHERIS). The students worked through the project by first interviewing the clients and defining the problem up to presenting a prototype solution and producing a detailed report to the client.

Dr Jan Fizzell, Principal Project Officer of the Biopreparedness Unit was extremely impressed by the quality and extent of the work undertaken by the group: “The report accurately and succinctly captures all of our requirements. The students’ ability to comprehend and synthesise our requirements, which were complex and difficult to express, was a pleasant surprise.”

Dr Fizzell was equally impressed by the prototype the students presented, and reports that with a few exceptions it does everything that the current, interim, commercial solution does, but in a far more operation-centric manner: “What the students have created is far from being a clone of our current system - it is significantly different and a real improvement on it. The document management facilities are much more flexible and the user interface and general design appear to be much better. Their system incorporated several