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News Flash

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# GSITMS Graduates of Distinction

## News and Views for Alumni

Graduate School of Information Technology and Mathematical Sciences

### Changing Times Demand Tough Thinking and Tight Budgets



It is a tough year for GSITMS with the sharp decline in international students in Australia. The School has been streamlining its course offerings across its campuses and partners as well as reconfiguring many of its processes to become an even more efficient operation. Nevertheless budgets are tight and we are beginning to move in new directions.

In July I visited ten Universities in China, five with Dr **Tie Zhao** and three with Professor **David Gao**. Many of these Universities are keen to develop articulation programs with us. These are generally 2 + 2 programs where the students study the first 2 years of their Bachelors degree at their University in China and then come to Ballarat to study the final 2 years of a GSITMS Bachelors degree.

I was struck by the following things as I travelled across China from Guangzhou and Shenzhen to Xuzhou, Shanghai, Hongzhou and Anhui. Shenzhen is a city of 20 million people, the whole population of Australia, with only one University and one Polytechnic. Employment prospects there in IT are high at the moment but many parents want something more and many consider an overseas qualification for their children. Although many first look to the US and the UK (and Universities from the UK are very actively recruiting in China) there are many students that are attracted to Australia.

The advantages that an articulation program in IT with GSITMS offers are: graduates with dual cultural and dual language education, an appreciation of the Australian lifestyle and an exposure to global IT companies like IBM. In effect they graduate as industry ready and globally capable graduates for the IT sector anywhere in the world.

Despite the tight budget situation there are great opportunities for students to come to Ballarat and obtain the best qualifications to have a global impact in the world.

One final point of optimism - This year has seen solid increases in our domestic enrolments that have continued through to mid-year. The Bachelor of Information Technology (Professional Practice) has been a very successful flagship program. All graduates from this program are guaranteed jobs with IBM. We are working with IBM to enlarge the BIT (Professional Practice) program to have an additional stream that will focus on enterprise computing and large-scale virtualization.

**Professor John Yearwood**

Acting Head of Graduate School

*A bright vision for learning excellence*

## Pro Vice Chancellor (Learning and Quality) briefs GSITMS Staff



Pro Vice-Chancellor, Professor **Todd Walker** recently visited the Graduate School to brief staff on the changes required for UB to respond to the *Education Revolution* that has been embarked upon by the Australian government. Todd Walker's professional achievements lie in the areas of educational and academic leadership.

As an educator, Todd has extensive experience in guiding schools and faculties in curriculum design and renewal; the production and delivery of a variety of learning materials and resources. Todd has extensive experience in quality assurance processes and the maintenance of standards both in professional and tertiary settings. He currently chairs Academic Board at UB.

*Professor Walker said: "I have been encouraged by the warm reception that I have received from the Schools that I have had the opportunity to visit to date and discuss these vital issues. To meet the challenge of the Government's Educational Revolution will require new thinking to deliver a responsive culture throughout UB. I am delighted to be in a position to provide leadership to achieve these challenging goals"*

Professor Walker outlined the fourfold 'change agenda' for educational design and delivery which needs to be addressed by UB:

- 1) Australian Curriculum, Assessment and Reporting Authority (ACARA). It encompasses a complete re-write of the school based curriculum, with a view to design a National Curriculum by 2012. *UB's response to ACARA has been considered by Academic Board. Presently UB's curriculum is being aligned (rolling out across schools) with the pre-requirements for tertiary courses as set out in the VTAC handbook. School-based Program Committees and UB's Curriculum Committee will continue to respond to this opportunity.*
- 2) Bradley/Government Targets. The tertiary sector has been challenged to meet two key targets by 2025, namely 20% (up from 13%) of all students to come from low socio-economic status (SES) backgrounds and that 40% of Australians will hold a bachelor degree qualification (up from 27%). *UB already achieves the desired lower SES target, and will continue to do so as it attracts students from rural settings to Victoria's West and the Western suburbs of Melbourne. It has the real challenge however, to support these students through their transition to Higher Education.*
- 3) Tertiary Education Quality Standards Agency (TEQSA) will become the new National Regulator from 2012 (Including both TAFE/VET and Higher Education by 2014). *UB is both monitoring developments here and enhancing its existing rigorous standards in such areas as Provider, Qualifications, Academic, Research and Information standards.*
- 4) Demand Driven System. From 2012, Universities will no longer have Commonwealth supported places allocated and instead students will be funded for every place they give to students, with over-enrolment and funding becoming the norm in demand driven programs. *UB is keen to pursue the potential of this through such incentives as 'Guaranteed entry' and 'Credit allocation' to articulating TAFE level students.*

UB acknowledges that these reforms present opportunities for renewal, which will in turn change practices and streamline processes, better positioning UB to flexibly respond faster and smarter in the sector.

**In the Renewal and Quality Portfolio these renewal processes are already well under way.**

*Graduates on the move***Desktop support to ‘Chief Information Officer’ in four years isn't at all bad!**

**Ian Coleman** graduated from UB with a B.Comp. in 2000 and started his professional career as an analyst programmer for a global consulting firm called DMR, who were eventually bought by *Fujitsu*. After five years of writing code (among other things) Ian got restless and travelled to England, doing desktop support work, waiting for the day that he'd finally work out what he really wanted to do. Ian is still waiting however for that day to occur.

After 12 months repairing PCs however, at a company in north-west London Ian got the opportunity to manage their IT department and he grabbed it quicker than you can say "does that come with a pay rise?". Happily it did, as well as appropriate training (most notably ITIL). From there it's been one fortunate event after another for Ian. After two years in London he returned home with a suddenly favourable CV and landed a job managing the Service Desk at *Ambulance Victoria*.

A year later, Ian did the same thing with a public hospital in Melbourne. Both environments were 'messy' to start with, so it was fairly easy for Ian to make a 'big impression' by detailed attention. After six months at the hospital Ian was promoted to IT Infrastructure Manager, looking after 21 racks worth of servers, switches, routers, tape libraries, SANs and UPSs. He had been doing that for about 18 months when his supervisor suddenly resigned and Ian was asked to 'fill his shoes'.

That was in March this year (2010). Ian is presently on a steep learning curve and often feels like he's 'drowning', but the encouraging feedback he is

getting from those above and beside him is all positive.

*"There were two main factors that helped my progression. First, always maintain a positive and amicable attitude. Last year I started calling it the 'Obama Principle'. You know the phrase - Yes we can! In a service oriented role, nobody likes hearing 'no'. Second, the exposure I got working for consultancies DMR and Fujitsu was enormous and helpful to my later career.*

*"I have now worked on almost a dozen different projects for a dozen different clients. As well as development and maintenance programming I did some project administration, bid development, worked on system migrations, system upgrades, proofs of concept. I was involved in contract negotiation meetings and project scoping meetings. I contributed to business analyst reviews and wrote functional specifications and technical specifications. I deleted a production database in the middle of one work day! All of these experiences gave me a fantastic overview of how most parts of an IT business fit together and how they rely on each other to perform at their best."*

***"In short, if you keep your eyes open for opportunities, work hard (especially on the jobs you don't like), and always remember that one bad job can ruin a hundred good ones. Throw in a bit of luck and anything could happen!"***

### **Please, may we borrow your story?**

*ITMS Graduates...* would like to tell the story of your career achievements since you completed your ITMS course. Please email your 200-300 words telling your story, plus a digital image to the Editor for publication in a future edition.

Contact the Editor: *ITMS Graduates of Distinction*

**T Eugene Kneebone** [e.kneebone@ballarat.edu.au](mailto:e.kneebone@ballarat.edu.au)

## UB's International Day

### Forum a success

A well attended UB forum (“*Our International Engagement*” - May 2010) was complemented by well credentialed presenters who gave realistic insights into the factors that attract international students and partner Colleges which enhance UB’s international reputation, outreach and budget considerations.

These strategic and straightforward presentations canvassed: the student experience; joint research projects with international institutions; accommodation services; the developing *English Language Centre*; the Partner-Provider model and new Government initiatives.

### Manish Malhotra speaks from his own experience



*The Managing Director of the Australian Technical and Management College (ATMC) Dr Manish Malhotra was a keynote presenter.*

Dr Malhotra drew from his personal experience in the 1990s as an International student from India studying in Melbourne when the support services were less than satisfactory. (staff were “...like diamonds – rarely found”). While successfully completing his study program and for a short time as a lecturer himself, he had to “...take on the prevailing culture”. Dr Malhotra however, formed the strong conviction that more should be (and could be) done to assist International students to settle and be sustained during their time of study in Australian academic institutions.

Dr Malhotra went on to establish some fifteen tertiary study centres in India (via AUPP) for the undergraduate student market. These proved a great success. Dr Malhotra subsequently looked for



Australian partners where Indian students could complete their Bachelor and Master Degrees in Information Technology and Management Studies.

In 2005 ATMC was launched in a Geelong based campus in partnership with UB. Some five years later ATMC has grown towards 600 students in Geelong and Melbourne, establishing Industry benchmarks (highest retention rates, highest *Golden Key* awards, highest numbers of advanced Master candidates and low failure rates).

*“This incredible record earned over such a short period was achieved by strictly adhering to two fundamental principles - Value for Money and Stability.”*

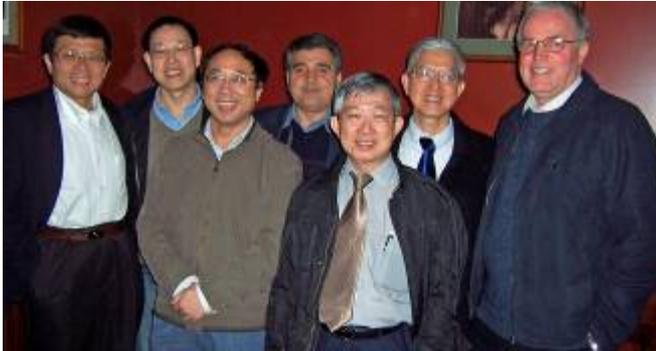
*Value for Money*, builds on the pathway programs already set up in India where cohorts of students seamlessly continue their studies in Australia. *Stability* for International arrivals is evident. This involves a very high level of support from staff and senior student mentors. Accommodation, transportation and part-time work needs are addressed from the outset with a comprehensive orientation experience and ongoing accessibility (lecturer’s may be contacted by students whenever required by mobile phone).

Dr Malhotra indicated that these principles would continue to drive ATMC’s future initiatives which may include dual degrees, job opportunities for graduates with overseas companies and degree ‘packages’ offshore in purpose-built campuses.

Two current ATMC students enthusiastically supported Dr Manhotar’s comments. They testified to the support, encouragement and friendship provided to them during their student experience, even commenting how their parents in India had been impressed by their academic progress, personal confidence and maturity gained over the past years whilst at ATMC. They both intend to pursue Master level studies after some work experience post their completion of their Bachelor Degree this year.

## CIAO Chat about this and that Research Workshop

In May CIAO sponsored a small but 'high powered' workshop on Challenges & Methodologies in complex Systems Optimization and Control. The leading paper – “*Progress on Quadratic Optimization: An Example of International Collaborative Research*” was presented by Professor **Shu-Cherng Fang**.



External participants presented as a *Who's Who* of the discipline and included: Professor **Shu-Cherng Fang**, North Carolina State University; Dr **Andrew Eberhard**, RMIT University; Professor **Yanqun Liu**, RMIT University, Professor **Angus Simpson**, University of Adelaide; Professor **Kok Lay Teo**, Curtin University of Technology; Professor **Sanming Zhou**, University of Melbourne; and Professor **Peng Shi**, Victoria University.

*Apart from the technical discussions the group was able to explore the rich potential for ongoing collaboration.*

This spirit of collaboration was enhanced by the social aspects of the workshop including a dinner held at Ballarat's *Sovereign Hill* attended by guests and UB colleagues headed by Pro Vice-Chancellor (Research) Professor **Frank Stagnitti**.



## The David Gao Story (Part 2)

### *From Stateside to Down-under onto the Global Village*

Professor Gao's came to UB from the College of Engineering, *Virginia Polytechnic Institute and State University*. His focus is on modeling, methods and theories of duality and triality. Application of his research includes general complex systems, nonconvex/nonsmooth discrete and nonconservative problems in database analysis. Other applications include engineering mechanics, global optimization and control, network flows and communications, and energy systems. Apart from his role in organizing the above workshop, David has already completed a busy program of tours and lectures.



He has travelled to China ( *Ji Liang University, Nanjing Normal University, Nanjing Communication Institute of Technology and Shanghai University*) where he delivered lectures, explored future collaborative (2+2 year) two locations programs. He has also visited the US where he discussed consultancy opportunities with the *US Army Research Office*. In the US, scholars are drawing on David's 'Beam Model' (considered by some as an 'improvement' on **Leonhard Euler's** linear model that has prevailed since the 1750's).

In June Professor Gao gave four CIAO lectures (*Introduction to Canonical Duality Theory in Complex Systems*). He also delivered a lecture in real-time to students at the University of Newcastle using the Access Grid provided by partner provider MIT. During July, Professor Gao was again reinforcing UB's International collaboration, with visits to and lectures at the *Ettore Majorana Centre for Scientific culture* (Erice - near Palermo - Sicily, Italy) and in China at Hangzhou University.

This 'marathon' lecture extended for two hours (Chinese colleagues were so impressed that they sought to persuade him to stay). Fortunately for UB Professor Gao graciously declined their offer. Accompanied by A/HOS Professor **John Yearwood**, they pursued the potential of 2+2 programs. Whilst in this region, Professor Gao also delivered a plenary talk at *The International Conference on Optimization, Simulation and Control* held in Ulaanbaatar, Mongolia. David, although an International scholar with a well-earned reputation for innovation and excellence in his field, is also very much about challenging (and encouraging) his CIAO colleagues.

*"...we have to make sure that we have a very strong team to produce the most powerful results as we work our way through difficult mathematical problems with applications in the real world." – Professor Gao.*

### May Graduation

## Perseverance, Ambition, Integrity

Professor **Sidney Morris** received the status of 'Professor Emeritus' at the May graduation and gave the Occasional Address to graduates including PhD recipient **Daniel Morales Silva** and Master of Computing graduate **Subhasis Mukherjee**.



*"This is your day - the public recognition of your years of work and your success. Enjoy it! This is not the end of your education, but the first milestone in your lifelong education. .... I am well aware that it can be hard to get that first appropriate job. You may apply and apply without success and can get disheartened. But let me say, I have been there!"*

*Therefore Perseverance is one of my three topics of this brief speech. The others are Ambition and Integrity illustrated by former colleagues.*

**Alexander Doniphan Wallace** - *"He could have achieved so much more if he had stopped looking backwards, made an honest self-assessment, determined his skills and had an ambition to use his skills."*



## Luke's Lustre

At the May graduation, **Luke Rogers** was presented with the *University Medal* for outstanding scholarship. During his Honours year he produced no less than five refereed papers as an undergraduate. Luke is presently pursuing a PhD and was able to inspire the graduating group with his words as Graduate Speaker.

*"We students celebrate the end of a journey which involved many years hard work, determination in good times and bad. We celebrate the satisfaction of completing a major milestone in our lives that we set ourselves; even though at the time it may have seemed out of reach. So for this I say-well done. To the graduates who have studied at Mt Helen, Melbourne, Adelaide and Sydney; congratulations on completing your degree. I have had the pleasure of sharing my experience at the UB with many of you and in this time I have had the opportunity to meet some of the most creative and inspiring thinkers who I know will go on to achieve great things. I wish you all the best in your endeavours and for a successful transition into the next stage of your lives. I'm sure the next step that you chose will be as successful as this one"*



**Bernhard H. Neumann** - *"He continued to be active and productive and influential for his final 25 years. The key to his continued success was not to look backwards, but to look forwards; and to assess in a very honest way his own skills and to have the **ambition** to achieve the potential that these skills gave him."*

**Karl Heinrich Hofmann** - *"Karl knows very well what his skills and abilities are and he uses them to achieve his potential. Karl (at 77) still focuses on what he can yet achieve. He is also an artist and he continues to do artwork each week. Almost daily he and I talk on skype about our progress on joint research. He is happy because he has evaluated his potential, has an **ambition** to achieve that potential and succeeds!"*

From these three academics I learnt about Integrity. Do what you do with Integrity at all times - so when you do look backwards you are indeed pleased with the view. I have learnt that amazing things can be achieved if you carefully examine your skills and knowledge, and then focus on how you can indeed achieve your potential. Spend the vast majority of your time looking forwards and not backwards.

*Always do what you do with integrity. If at first you don't succeed, do persevere - success might be just around the next corner.*

### Get into Games

## Tractor Safety for “*Virtually*” Everybody

During 2009/10 ‘Games’ student, **Hamish Jansen** (supervised by GSITMS lecturer **Grant Meredith**), produced a series of 3D simulations for a farm safety DVD. The DVD was produced by the Victorian Farm Safety Centre (VFSC) which is housed within the School of Applied Sciences. The VFSC was established in 1998 in response to a growing need for a centralised centre to train and provide regional farmers with farm safety information.

The multimedia DVD, “*Operating Agricultural Tractors*”. is a safety instruction tool designed to reduce the rate of fatalities and injuries on Australian farms. It covers all facets of farm related tractor safety including such topics as: pre-operation checks; safer work procedures; basic tractor handling; attachments and hazard reduction strategies. GSITMS collaborated with VFSC manager **Brett Westblade**.

*This collaboration enabled UB to employ Hamish who is now a 3<sup>rd</sup> year BIT student whose ambition is to be employed by the gaming or multimedia industry.*

VFSC required a series of 3D tractor simulations to be built for inclusion within the DVD. These were based upon common farm orientated tractor accidents that frequently occur. It was dangerous and financially not feasible to create these accidents using real-world tractors and drivers. The simulations were cut into live footage and instructor discussions.

A highly detailed tractor (not brand specific), with the ability to reconfigure its design to suit specific situations, was required. Reconfigurations included rollover protective structures with fixed cabin and open cabin designs.

Simulations included the hierarchy of control, hazards of lifting from the front forks both stationary and on slopes, centre of gravity considerations and possible tractor roll-overs and attachment handling.

The DVD to date has received enthusiastic feedback from farmers and safety operators throughout Australia with it being freely distributed at the VFF conference in late June. The DVD has also attracted international attention.



### Staff profile

#### **Dr Phil’ - consummate research leader** (A tribute by colleague **David Stratton**)



The UB-wide research community is well acquainted with Dr **Philip Smith** as the GSITMS Academic Research Co-ordinator, a role that has brought him into contact with all research students in the School. In this role he has considerably and carefully advised students and the School has been patiently and persistently represented on University committees.

Dr Phil’s most public appearance was at a recent PhD graduation where he described the students’ projects to the audience as each one processed.

Students, at all levels, applauded his recent “*Best Lecturer*” UB award. Dr Phil has a great ability to listen to and enter the world of the fellow researcher be they colleagues or students. In his role as leader of the Virtual Reality and Simulation Laboratory one of his chief concerns is to see the 3D Theater integrating into research projects - each project is therefore one that he must understand well as he works closely with many different researchers.

**JOBS FOR ALL****Charlynn Miller  
Speaks Out on  
Attracting Women  
in IT**

*“The topic of Women in IT is one that has been ‘on my radar’ for several years now. Coming through the ‘ranks’ in this industry, as one of the few females, was a lonely business at times. I participate in several groups, such as Vic ICT for Women and the Australian Computer Society Women’s Committee for Victoria, which have as their purpose increasing the numbers of women employed and their profiles within the IT industry.*

*“For a number of years, there have been initiatives to increase the numbers of women in the IT field. In order to increase these numbers, there is a need for tertiary education to attract more young women to study in this area. In order for this to happen, young girls in primary schools have to be encouraged to consider IT as an option for their future. Efforts in this area are the responsibility of many: schools, teachers, parents, tertiary institutions, outreach programs and the like. Young women who undertake IT studies also need good role models and activities that make them feel valued.*

***One of the best role models is a successful woman in IT - someone encouraged us, perhaps now it is time for female IT professionals to give back.***

*“Under the leadership of Professor **Sidney Morris**, we had record numbers of staff, including the highest percentage of woman in GSITMS history. Since joining the school in 2003, I have witnessed many new female staff coming to work here. As well, the IT Services section of UB has many women working as programmers and multimedia specialists. Many of these women are alumni of our school. We are few, but there are women leaders in IT throughout UB.*

*“Perhaps the time has come for women in IT roles at the UB and around Ballarat generally to become more active in the IT organisations that support women, to consider serving as mentors for young women interested in IT, and to go into the schools in the area and encourage girls to consider IT as a career.”*

(For more information on the groups mentioned above, please see [www.vicictforwomen.com.au](http://www.vicictforwomen.com.au) and [www.acs.org.au/acswomen/#](http://www.acs.org.au/acswomen/#))

**Staff profile****To Peter, it’s not just a game**

Dr Peter Vanplew who heads up the ‘Games’ group at GSITMS was born in Edinburgh but grew up in Adelaide. He was only 20 years old when he was appointed to his first academic teaching position at the University of Tasmania. The theme of Peter’s PhD thesis, *“The automated recognition of sign language, using a virtual reality glove to capture the position and movement of the signer’s hand”* was a ‘sign of things to come’

Peter joined GSITMS in late 2000 after 15 years with the University of Tasmania. Peter was attracted to UB by the opportunity to develop and teach courses in the Games Technology degree, and the chance to embrace a thriving GSITMS research culture.

***“My interest in games development goes back to my high school days. Having exhausted all available games on the school’s BBC Micro computers, I started learning programming in order to create new games. I soon moved on to developing games in Basic on a Microbee. Some 20 years later this has led to teaching games and multimedia subjects at UB”***



What was originally a geography and economics degree (no doubt intending to be a Town Planner under the influence of *Sim City*) became a dual major in geography and computer science after first year.

Aside from Peter’s teaching duties he leads the Data Mining and Informatics Research Group within CIAO, and is also involved with the Internet Commerce Security Laboratory and the Virtual Reality and Simulation Laboratory. Currently Peter supervises two PhD students in topics ranging from improved game audio to detection of online banking fraud, as well as working on research projects on multi-objective learning and automated production of landslide susceptibility maps.

Peter’s non-work interests including spending time with family, where his son has now taken up his ‘slack’ in recreational gaming. Peter also helps out as an assistant coach with the recently formed *Ballarat Pioneer’s* American football team, and still follows Heart of Midlothian in the Scottish Premier League



**Chinese graduate****A journey of personal discovery**

*G'day, everyone. "My name is Chang Liu. I am a Chinese student. I received both my Bachelor Degree (Business) and Master Degree (Business Information Systems) from the UB. I studied at UB for a total of two and half years.*

*"These years at UB proved very important for my whole life. Not only did I get career enhancing knowledge, but also I obtained invaluable life experiences. The life of study overseas is often not easy (and may not be right for every intending International student). However, it was both challenging and meaningful to me. I learnt to be independent and get along with different people from different countries and cultures.*

*In the first place, I am very grateful to all teachers who assisted me in UB. They have proved to be 'all kindness' itself.*

*"With their help and support, I made great progress. Although I had no previous IT background, I passed all my courses. Secondly, I appreciated the accommodation service by UB. During my study in Ballarat, I lived on the Mt Helen campus. This provided me with a high quality accommodation and good study environment. While living on campus, I made many, many different friends from far-away places and I got real opportunities to join in university sponsored activities.*

*"After graduation from UB, I am seeking a secure job in IT area. Perhaps UB itself can offer me further work resources and opportunities in this growing area. Finally, I hope with all my UB student friends that we will cherish our warm memories of our student experience and find a fulfilling future, springing from our UB studies."*

**Student project****GSITMS Promotes the History of Art Timeline Website**

Student Project Team Members: **Sean Andrews, Sam Shrestha, Chengcheng Huang, and Jing Zhao.**



The 'History of Art Timeline' is an educational tool being developed by a group of GSITMS students as a final year project for the School of Education at UB. The main purpose of this project is to develop a website to assist the School of Education and their students with background research information on the history of art that shows a timeline of notable artists and details of their work, including art pictures.

The project involves developing a website with a user friendly and professional interface for displaying a history of art timeline that is viewable through a web browser.

The timeline allows for simple navigation through periods of history, artists, and art concepts. The system also provides secured access for the client and/or other administrators to add artists to the database via a web page and could be automatically included in the main timeline upon the web page generation. This project website is to be stored on UB servers. The group of students presented their project website as a poster presentation at the GSITMS 'Airport Lounge' in June.

**The project was supervised by GSITMS's Dr. Sita Venkatraman and Ms. Sally Firmin, and co-ordinated by Mr. Shamsheer Syed.**

## NewsBreakNewsBreak

**Strike One:** The contract signed between UB's Internet Commerce Security Laboratory (ICSL) and the Australian Federal Police (AFP) as reported in our last Edition is becoming



a key initiative to combat high tech fraudsters and is of crucial importance to the wider community as well as the partners.

It has now been agreed that the AFP *High Tech Crime Operations*, led by **Neil Gaughan**, National Manager, will work with ICSL in the vital areas of computer intrusions, unauthorised modification of data, denial of service attacks, the creation and distribution of malicious software and other fields of cyber crime.

**Strike Two:** The presenter at a June *Ballarat ICT Twilight Forum* was **Ben Reardon** of *Datdviz Australia*. Ben is part of a global group of High Tech volunteers that undertake 'pro-bono' work for the *Honeynet Project* which studies nefarious Internet activity (e.g. website defacements, botnets spam, denial of service attacks, viruses and trojans) with a view to mitigation and education.

**Strike Three:** A well attended Cybercrime and Trustworthy Computer Workshop, hosted by the ICSL was held at the UB's Greenhill Enterprise Centre, 19 and 20 July. The Organising Committee was Professor **Josef Pieprzyk** of Macquarie University and A/Professor **Paul Watters** of UB. As Cybercrime continues to be a growth industry, assisted by a combination of technical factors, such as insecure hardware and software platforms, and psychological factors, such as user error or naivety, the objective of this workshop was to bring together two distinct groups to encourage further collaboration.

### Broad Smiles for National Broadband Network announcement

The Minister for Broadband, Communications and the Digital Economy (Senator **Steven Conway**) and the Victorian-based Finance Minister (**Lindsay Tanner** MP) recently jointly announced that the *National Broadband Network Corporation* (NBN Co) would be based in Melbourne's Digital Harbour

precinct Docklands, (beating strong bids from Sydney and Brisbane). This decision was in a large part due to the number of skilled ICT workers located in Victoria (some 87,000), the country's highest proportion of such professionals.

NBN Co's Chief Executive **Mike Quigley** said "This facility will be the centerpiece of our network and the key interface with our customers, the retail service providers, who will be using our network to provide high-speed services to their businesses and residential customers across Australia."

This is in turn 'good news' for GSITMS and its established partner providers. UB and its partners together graduate hundreds of students equipped for the skills to take up the proposed further 425 new IT opportunities with NBC Co when fully operational next year.

**UB and its partners are well equipped to train more professionals as required to meet the rising IT skill-needs of government, industry and the wider community**

### Honours presentations

#### From Rapid Eye Movements to Thumb Prints

**At the recent mid year Honours Research Skills and Academic Communication student presentations, the chosen topics were rich and varied.**



**Jerome Farrell** spoke of "Sleep Stage Identification Using Echo State Networks" while **David Moloney** reflected on "Detecting K - complexes using non-smoothing optimization" and **Sharon Lavery** presented a more socially important topic "A Study of Virtual Communities and Internet Based Support for the Mental Well-being of Physically and Psychologically Isolated Australians".

'Final' presentations were made by **Troy Neenan** - "The Effect of Visually Induced Head Movements on Player's Rating of Games" and finally **Miroshana Perera** researching the critical issue of "Biometric Identification for Reducing Identity Theft" (by fingerprint data analysis).