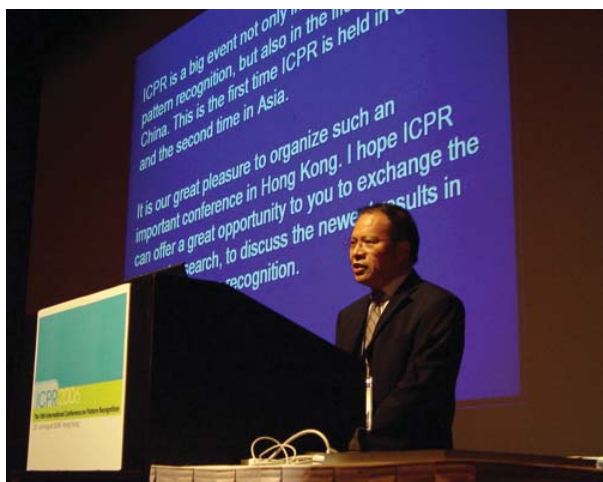




Events and Activities Organized

18th International Conference on Pattern Recognition (ICPR 2006)



Prof. Y.Y. Tang gave the opening address in ICPR 2006

With a record-breaking of 2,200 paper submissions as well as more than 1,100 participants from 55 countries, the 18th International Conference on Pattern Recognition (ICPR 2006) had been successfully held on 20-24 August 2006 in the Hong Kong Convention and Exhibition Centre.

The Conference, which has been held in Asia for only the second time, is a biennial event of the International Association for Pattern Recognition and provides a stimulating environment for academics, researchers and industry representatives to exchange views and hold in-depth discussions on the discipline. (The last Asian venue was in Japan 26 years ago).

From the record-breaking 2,200 papers submitted, more than 1,000 papers had been selected for oral and poster presentations. During the Conference, the K.S. Fu Award and the newly established Jack Aggarwal Award were presented. A book exhibition was also featured.

Professor Yuanyan Tang, Chair Professor of the Computer Science Department, served as the Conference General Co-Chair, while other departmental staff gave strong support for the Conference.

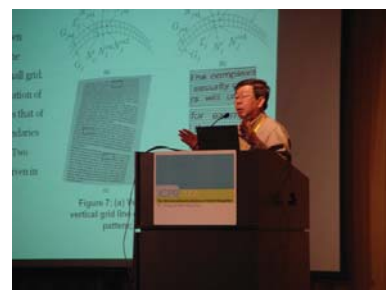
ICPR 2006 focused on five tracks: Computer Vision and Image Analysis; Pattern Recognition and Basic Technologies; Signal, Speech and Image Processing; Systems, Robotics and Applications (with associated theme: Biometrics); and Cognitive Approaches & Soft Computing.

Plenary speeches were featured by Professor Anil Jain from Michigan State University, USA; Professor Dai Ru-wei from the Chinese Academy of Sciences, Beijing; and Professor Lawrence Hall from the University of South Florida, USA. In addition, talks had been given on the five tracks by 10 top researchers from around the world.

For details of the Conference, please visit: <http://www.comp.hkbu.edu.hk/~icpr06>

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Distinguished Lectures by Prof. C.L. Liu



Public Lecture: Chessboards, Hats and Chinese Poetry: Some Rigorous and Not-So-Rigorous Mathematical Results (數裏有詩? 詩裏有數!)



Prof. Liu shared his visions and insights with our faculties

In celebration of the 50th Anniversary of the University and the 45th Anniversary of the Science Faculty, the Computer Science Department has been honoured with the presence of Professor C.L. Liu, former President and currently Honorary Chair Professor of Computer Science, National Tsing Hua University, Taiwan, to deliver two Distinguished Lectures, viz.



Prof. C.L. Liu, sharing his 40 years learning experience

A Specialized Lecture entitled "Great Ideas in Computer Science: A 40 Years Learning Experience" on 14 September 2006; and a Public Lecture on "Chessboards, Hats and Chinese Poetry: Some Rigorous and Not-So-Rigorous Mathematical Results" on 15 September 2006.

During the two-day visit to the Department, Prof. Liu had exchanges with academic colleagues and shared his vision and insights on the development of computer science. The postgraduate students had also been greatly benefited from Prof. Liu's precious experience through his selfless sharing with all of them.

Prof. Liu's presentations can be viewed from: <http://www.comp.hkbu.edu.hk/en/news/>

4th Postgraduate Research Symposium (PG Day)



Mr. Zhili Wu, Winner of the Best Paper Award



Mr. Ka-fung Ng, Winner of the Best Presentation Award

Initiated by the Department in 2005, Postgraduate Research Symposium (PG Day) has been held bi-annually in January and July of each year, for the purpose of enhancing the research atmosphere and sharing the research experience and ideas among postgraduate students.



Prof. Y.W. Leung, Acting Head, giving an opening address

On 3 July 2006, the 4th PG Day was held successfully. The main program consisted of three presentation sessions by MPhil and PhD students, covering a variety of research topics, such as mobile positioning, sensor network, data mining, web intelligence, pattern recognition, etc. All postgraduate students and faculty members had actively participated in this Symposium.

During the Symposium, the Best Paper Award was presented to Mr. Zhili Wu, whose paper entitled "A Semi-supervised SVM for Manifold Learning" proposes a novel objective function that combines the manifold consistency of whole dataset with the hinge loss of class label prediction. Among all the presentations, Mr. Ka-fung Ng won the Best Presentation Award.

Orientation Night for 2006 Freshmen

On 28 September 2006, the freshmen spent a meaningful night for their Orientation – welcome by the Acting Head, Prof. Y.W. Leung, and the two Course Coordinators, Prof. P.C. Yuen (Computer Science) and Dr. William Cheung (Information Systems), exchanges with their mentors (professors), and sharing with their peers.



Our freshmen meeting with the Acting Head

International ICT Pavilion 2006

Like the previous years, the Computer Science Department continues participating actively in the International ICT (Information & Communications Technology) Pavilion 2006, held on 14 - 17 April 2006 at the Hong Kong Convention and Exhibition Centre.

The ICT Pavilion features information technologies and software applications from 530 companies; and is categorized into eight theme zones: "Enterprise Solutions", "E-Logistics & Retail Technologies", "Digital Living", "Home-grown Innovations", "IT Outsourcing", "Linux & Open Source", "Network & Mobility" and "Trade Related Services".



Grants Awarded

Successful Bid for the Quality Education Fund

The Computer Science Department has been successful in bidding \$446,000 from the Quality Education Fund. The project entitled "A Critiquing System for Enhancing Writing Competency Using Automatic Text Analysis", being led by Dr. William Cheung, aims to use advanced information technology – automatic text analysis techniques to enhance critical essay writing ability in English, to lower students' language learning barriers, and to provide effective feedback on student writings. It is expected that students and English Language teachers in the secondary schools will be able to benefit from this project.

Competitive Earmarked Research Grants Awarded in 2006/07

Six of the Computer Science Department staff members have been awarded the Competitive Earmarked Research Grants (CERG) by the Research Grants Council in 2006/07, viz:

1. A Model-based Approach to Distributed Data Mining with Privacy Preservation
[Principal Investigator: Dr. William K.W. Cheung];
2. A Study of RBF Network for Classifying Chinese Herbal Fingerprints
[Principal Investigator: Dr. Yiu-ming Cheung];
3. A Microeconomic Approach for Digital Rights Management in P2P Networks
[Principal Investigator: Dr. Xiaowen Chu];
4. Optimal Bargaining Strategy and Relaxed-criteria Protocol for Grid Resource Allocation
[Principal Investigator: Dr. Ben K.M. Sim];
5. iPDA: Privacy-Preserving Location-based Data Access in Mobile Environments
[Principal Investigator: Dr. Jianliang Xu];
6. A Study of Kernel Function and Its Parameters for Kernel Discriminant Analysis on Face Recognition
[Principal Investigator: Prof. Pong-chi Yuen].

Computer Science as an Evolving Discipline

by Prof. Jiming Liu, Head of Computer Science Department, HKBU

Sharing

Since its inception in the mid-1960s (e.g., when Stanford University, Carnegie Mellon University, and Cornell University founded their Computer Science (CS) departments in 1965), CS has been continuously evolving as a vibrant discipline au courant. In this article, I will make 10 observations on recent CS development, and hope they can serve as references for the CS stakeholders, including academic leaders, faculty members, administrators, staff, students, alumni, and potential employers, to rationally embrace the new challenges and opportunities of developing, as well as investing in, CS.

Prof. Jiming Liu



CS as a growing profession

1. Conventional job market It is commonly believed that after the conventional IT job market undertook a phase of consolidation and outsourcing, some of the familiar job titles gradually disappeared. However, there have been recent indications that the demand for IT professionals is getting stronger (as clearly seen in the Silicon Valley today, as opposed to one or two years ago), and at the same time, the job market has also become more competitive. It is important for graduates to possess certain core skills, such as Web application development, Google engineering, Unix/Linux, embedded systems programming, C++, Java, SQL programming, and Oracle database management. In fact, according to the US Department of Labor's recent projection, computer programmers will remain amongst the highly sought after of employees as far as 2012.

2. Emerging professions People have tended to see IT career prospects as relating to previously popular jobs for CS and IT graduates, such as software engineers, systems analysts, networks administrators, and programmers. This perception will soon change, as new roles are currently being defined. As a matter of fact, CS and IT graduates are now playing a number of emerging roles outside of software houses and IT service departments. They work in the financial industry as data managers, in marketing firms as data mining specialists, and in the bio-informatics industry as product engineers. There is an on-going need to effectively communicate to students the emerging roles and benefits of IT in the tomorrow's society. The students who major in CS need to have high aspirations for the future IT-centric world.

3. Agents of innovation The idea that the IT industry had been experiencing a "gold rush" was somewhat excessively dramatized in the past. In this respect, the mass media (as well as institutions) will no longer over-paint the IT "success stories" with projected revenues and perceived rates of growing wealth, nor to over-expect

short-term "breaking news" from the industry. There is no good reason why the career prospects of our graduates should be determined by the ups and downs of the stock market movements. CS graduates are the agents of tomorrow's innovation; it is more conducive for them to focus on, and aim to develop, the core competence for undertaking socio-technological innovation and development, instead of being driven by some instant illusions.

CS as holistic education

4. Branching-out Looking back from the historical development of the CS curriculum, we have accomplished a lot. However, as CS evolves, its new branches will continue to grow. Today, IT fields are becoming increasingly specialized (industry specific) and diversified (almost all the industries need IT applications). In this regard, there will be natural inter-relationships between undergraduate training and the rapid development of technologies and markets. Some of the leading CS schools and departments have now started to introduce courses and programs in some dynamically evolving, interdisciplinary domains (e.g., Computational Biology and Bio-Informatics, Digital Entertainment, Digital Libraries, Health Informatics, Information Security, Statistical Modeling and Data-Mining, Computational Intelligence, Auctions and Game Theories, Nanocomputing, and Software Production Development) in order to enable their students to develop a broader foundation as well as to keep up-to-date on the recent development in the CS and IT fields that will have a future impact on daily life.

5. Comprehensiveness The CS- or IT-related disciplines may sometimes be perceived as difficult for beginners because most of the technologies in our daily life are seen as being increasingly sophisticated. This misperception is now being addressed through the ways in which we introduce new technologies and/or technology related training or certification programs: CS has always been a discipline that is much richer than the CS

jargons. It is a discipline that offers opportunities for learning analytical/empirical problem solving, systems thinking, and computational rationality and creativity. It deals with open problems that may not always have model answers.

6. Creativity The drill-and-practice of CS skills in today's programs has, to a certain extent, accomplished what is considered fundamental in CS training. However, in the current rapidly changing environment, we need to train our students to be more creative and adaptive in handling the real-world problems. They need to know and practice software design principles and integrated systems thinking in order to become system designers and engineers. As an analogy, an artist could never create a great work of art if he or she knew only about the different types of paint and brushes. Towards this end, a more flexible curriculum with built-in choices, practice, and freedom will be beneficial.

7. Integrated programs University CS programs are now being closely integrated with those of high schools. In this respect, outreach from the CS community to high schools, involving teachers, career counselors, and parents, is becoming essential, where innovative introductory programs or activities have been successfully developed. In these integrated programs, gaming and hands-on experiences are often effective in arousing students' interests in pursuing CS- or IT-related disciplines, however, such experiences should avoid becoming too competitive and exclusive to only a small group of advanced or self-motivated learners.

CS as a unique discipline

8. Rich and distinct nature of CS CS is clearly a science discipline as it subscribes to many fundamental theories and principles of computing. It is an engineering discipline as it involves putting the theories and principles into practical use through engineering. It is a psychological as well as a social discipline as it directly involves man-machine interaction and human knowledge processing, and enriches human experience. It also has a professional dimension as it endorses and follows certain professional practices and social norms. From the perspective of the diversified and specialized nature of real-world CS- or IT-related jobs, students are now being provided with the opportunities of getting exposed to the most relevant problems and challenges that address scientific, engineering, social, and business concerns.



9. Performance indicators At present, CS schools and departments are normally organized and managed as any other departments in an engineering or science faculty, and thus may sometimes lose their unique identity. In this respect, the unique nature and the multi-faceted requirements of the CS discipline are increasingly being recognized, and hence an array of distinct performance indicators or benchmarks for CS schools and departments is being established, which will concern both the faculty (e.g., how to define and measure the impact of CS faculty's contributions in research and teaching in the tenure or promotion reviews) and the students (e.g., how to define and evaluate the knowledge and core competence – technical, communication, management, design, and problem-solving skills – of CS students in a collaborative work environment).

10. New streams, divisions, and departments There has been a clear trend in reorganizing and establishing new CS streams, divisions, and/or departments that will better reflect the nature and relevance of present training and future needs. Besides those dynamically emerging, interdisciplinary areas, as highlighted in Observation 4 above, other examples may include: Enterprise database management, Data Resources Management (covering databases; sensor networks; ubiquitous computing; security and integrity; mobile data management; measurements and preprocessing; streaming; data storage and retrieval; data mining; visualization) and Social Informatics (covering privacy and security; professional practice and ethics; human factors; usability; digital interactivity and connectivity; social networks; information networks; digital communications; collaborative environments; community mining; information sharing; information storage and retrieval; knowledge management).

A CS vision

As we are realizing the recent changes in CS and identifying new ways of developing and investing in our CS programs, it may seem that the focus of this is on how to make our programs more attractive and our graduates more marketable. Of course, at the end of the day, if our programs are highly subscribed and our graduates can be equipped with better qualifications and higher salaries, this would be perfectly all right. However, the ultimate vision for us to achieve remains to make the teaching, research, and practice in our CS schools and departments really become the pillar of future IT innovation and development, and to educate our students to become responsible citizens of the global village, who will be interested in pursuing and sharing, besides technical knowledge, moral issues, social development priorities, and responsibilities, in their striving to make the future IT-centric world a better place to live, work, and play.

Scholarship Awards

Postgraduate Research Scholarship



Congratulations to Mr. Xiaofeng Zhang, PhD student, recipient of the Postgraduate Research Scholarship! Commencing 2005/06, the Department has introduced the Postgraduate Research Scholarship award to recognize postgraduate students who have achieved performance excellence in research.

Mr. Xiaofeng Zhang

Ace Style International Limited Scholarship

Mr. Haotian Wu, PhD student, was awarded the 2005 / 2006 Ace Style International Limited Scholarship.

Mr. Haotian Wu (3rd from left)
at the Scholarship
Presentation Ceremony



General University Scholarship



Our PhD student, Mr. Zhili WU, got the General University Scholarship in 2005/06.

Mr. Zhili Wu

Scholarship Recipients for the MSc in IT Management Course

The following MSc students are the recipients of Distinction Scholarship / Merit Scholarship upon their outstanding academic performance in Semester 2, 2005/06:

Distinction Scholarship:

1. LAM Ming

Merit Scholarship:

1. WONG Wing Kee
2. LEUNG Sui Wing
3. TANG Kwok Cheong



Retirement

Dr. Ernest Lam, Associate Professor, has just retired from the University. During his 17.5 years of service with us, Dr. Lam has made great contributions both to the Department and to the Faculty / University through his dedicated service in different capacities, as Head of Department (1989-2002) and as Associate Dean of the Science Faculty (2002-2006).

Happy retirement, Dr. Lam!



Dr. Ernest Lam



Scholarship Presentation Ceremony on
30 June 2006

The Scholarship Presentation Ceremony was held on 30 June 2006, during which Prof. Y.W. Leung, Acting Head of Computer Science Department, awarded the certificate and prize to each scholarship recipient.

Staff News

New Faces

Prof. Clement H.C. LEUNG, Professor

BSc, McGill; MSc, Oxford; PhD, London

Prof. Leung obtained a BSc from McGill University, a MSc from Oxford University, a PhD from London University, and he has held Established Chairs in London University and Victoria University. His research interests include Visual Information Search, Multimedia and Parallel Databases, and Intelligent Decision Support Systems. His services to the research community include serving as Program Chair, Program Co-Chair, Keynote Speaker, Panel Expert, and on the Program Committee of major International Conferences. In addition to contributing to the Editorship of a number of international journals, he has served as the Chairman of the International Association for Pattern Recognition Technical Committee on Multimedia and Visual Information Systems, as well as on the International Standards (ISO) MPEG-7 Committee. He is a Fellow of the British Computer Society, and a Fellow of the Royal Society of Arts, Manufactures and Commerce. Prof. Leung was born in Hong Kong, and he is glad to return to Hong Kong. In his spare time, he enjoys playing popular and classical piano music.



Dr. Guoping QIU, Visiting Scholar

BSc, UESTC; PhD, UCLAN

Dr. Qiu is a Reader in Visual Information Processing in the School of Computer Science and Information Technology, University of Nottingham, UK. He is currently visiting the Department of Computer Science at the Hong Kong Baptist University, on leave from the University of Nottingham. Dr. Qiu received his BSc degree from the University of Electronic Science and Technology of China, Chengdu, China, in 1984 and his PhD degree from the University of Central Lancashire, Preston, England, in 1993. After obtaining his PhD, Dr. Qiu has worked as a Lecturer at the University of Derby, the University of Leeds and the University of Nottingham. His research interests are in the broad area of visual information processing, including content-based image indexing and retrieval and computational photography.



Dr. Joe C.K. YAU, Lecturer

BMath, Waterloo; MPhil, PhD, HKU

Dr. Yau received his MPhil and PhD from the University of Hong Kong. Before joining the Department, he worked for HKU SPACE as a software engineer, and was also a part-time lecturer. Dr. Yau is interested in researching computer security. His research focus includes copyright protection systems, digital rights management, software protection, information hiding, e-Government, e-Voting, etc. He has published a number of journal papers and conference papers, mostly in the area of computer security and content protection.



Mr. Pinata WINOTO, Assistant Lecturer

BEng, MSc, Jinan; MA, Mississippi

Mr. Winoto received his MSc degree in Computer Science from Guangzhou Jinan University and his MA degree in Economics from the University of Mississippi, USA. Before joining the Hong Kong Baptist University, he was with the Hong Kong Polytechnic University. His current research interests include multiagent systems, automated negotiation and applied AI.



Dr. Haibo HU, Post-doctoral Teaching Fellow

BEng, Shanghai Jiaotong; PhD HKUST

Prior to joining the Baptist University, Dr. Hu received his PhD degree in Computer Science from the Hong Kong University of Science and Technology and then worked as a postdoctoral fellow there. His research interests include spatio-temporal database, mobile computing and sensor networks.



Upcoming Events

December 18 - 22, 2006

The Joint Conference of

1. The 2006 IEEE / WIC / ACM International Conference on Web Intelligence (WI '06)
2. The 2006 IEEE / WIC / ACM International Conference on Intelligent Agent Technology (IAT '06)
3. The Sixth IEEE International Conference on Data Mining (ICDM '06)

at Hong Kong Convention and Exhibition Centre

URL: <http://www.comp.hkbu.edu.hk/iwi06>

December 28 - 30, 2006

IT Winter Camp

at Hong Kong Baptist University

January 11, 2007

5th Postgraduate Research Symposium (PG Day)

at Hong Kong Baptist University

URL: <http://www.comp.hkbu.edu.hk/~pgday>

January 12 - 13, 2007

Croucher Advanced Study Institute: Biometric Data Security and Privacy

at Hong Kong Baptist University

URL: <http://www.comp.hkbu.edu.hk/~asi07>

Invitation for Participation Problem-Solving Contest – Designing Network Storage Systems

All undergraduate and foundation programme students are invited to show their talents and problem-solving skills by participating in this Problem-Solving Contest. Further information can be viewed from: <http://www.comp.hkbu.edu.hk/contest07>.

Job Vacancy

Post-Doctoral Teaching Fellow

For details, please visit our website: http://www.comp.hkbu.edu.hk/en/about/jobs/PD_Teaching_Fellow.doc

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