Computer Science

HKBU
Computer Science Department
計 算 機 科 學 系

N E W S L E T T E R

2004 / 2005 http://www.comp.hkbu.edu.hk/csd_home/newsletters0405

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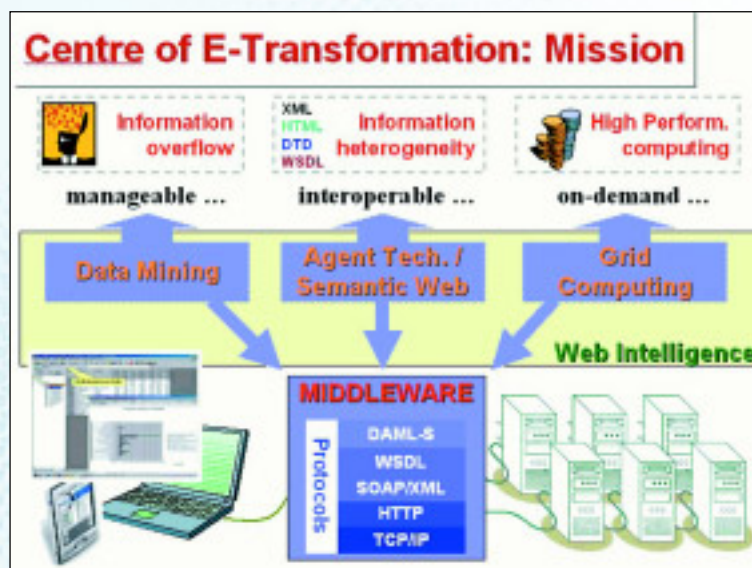香 港 浸 會 大 學
HONG KONG BAPTIST UNIVERSITY

3.8 Million Research Grant Awarded to
Computer Science Department, HKBU

Research Grants Council (RGC) Central Allocation exercise, which is set up to support UGC-funded institutions for group research projects and equipment/library acquisitions, has recently awarded a total of 3.8 million HK Dollars to Computer Science Department ("the Department" hereinafter) of Hong Kong Baptist University (HKBU) as the Principal Investigator to lead a research centre for developing e-Transformation technologies, with the Hong Kong University of Science and Technology (HKUST) and E-Business Technology Institute, The University of Hong Kong (ETI-HKU) as their strategic partners.

This group research grant is a competitive one. All the proposals have to be reviewed by an international panel and the short-listed ones need to go through second-around interviews. In 2003-04, out of 23 newly submitted proposals, ours is one of the five (and also the only IT related proposal) being funded. This granted project, as depicted in the Research Road Map, is to focus on advanced research in the areas of multi-agent systems, data mining, and grid computing, with scalable applications to e-business and e-learning. It has been highly rated by the reviewers regarding its scholarly merit, commercial potential of research results, relevance to Hong Kong and the suitability of the principal investigator. Let us look at one of the reviewers' comments:

"*This is what Hong Kong needs: a research centre with strong people conducting cutting edge research work, which is likely to produce influential scholarly publications as well as practical technology with applications to Hong Kong and China.*"

Research Road Map

Academic Consultation Panel Visit
in March 2004

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A panel of specialists, consisting of local and overseas academics and a local practitioner paid a three-day visit to the Department for evaluation during March 17-19, 2004. The panel was very impressed with the achievements of the Computer Science Department and the commitment of our staff and student-oriented philosophy, which was greatly appreciated by the students. The students, whom the panel met, found the Department caring, supportive, responsive and encouraging. Students enjoyed the close and warm relationship with their mentors. Let us look at the words from Prof. Rick W.K. Wong, Dean of Science Faculty, who summarized this visit as follows:

"The panel members were all very appreciative of our dedication toward providing a quality-teaching programme both at the undergraduate and graduate levels. They were all impressed by our research output and further re-affirmed our conviction that we provide a teaching and research programme of international standard."

And the words from our panel specialists, Prof. Nicholas Cercone and Prof. Lionel Ni:

"The teaching materials reflected the curriculum well, were up-to-date, and, the examination question papers reflected fairly the expectations of the students and material covered in class." and also *"The impressive growth in the number of publications and the size and complexity of the new grants received are indications that the young Department has a bright future ahead."*

Computer Science Professor Named
IEEE Fellow and ICPR Fellow

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Prof. Yuan-yan Tang has recently been elected as a Fellow of the Institute of Electrical and Electronics Engineers (IEEE) and a Fellow of International Association for Pattern Recognition (IAPR) for his great contributions to wavelet analysis, pattern recognition and document analysis. He is the first HKBU scholar to receive these two prestigious honours, which are conferred only to eminent scientists with extraordinary qualifications, experience and contributions in the designated fields.

Prof. Tang has been a leader of a research team working on the topic of wavelet theory and its applications to pattern recognition, image processing and document analysis. Furthermore, he serves as the Chair of the Technical Committee on Machine Learning in the IEEE Systems, Man, and Cybernetics Society. Also, he is the Founder and Editor-in-Chief of the International Journal on Wavelets, Multi-resolution, and Information Processing. Prof. Tang has published more than 250 academic papers internationally and in China, including 21 books/chapters.

4 Four Colleagues Received
Long Service Awards

In the 48th Anniversary Thanksgiving Service held on February 24, 2004, four Computer Science Department colleagues:

(1) Prof. Jiming Liu (10 Years),

(2) Dr. Ernest C.M. Lam (15 Years),

(3) Dr. Hon-wah Tam (10 Years), and

(4) Mr. Wing-siu Chow (10 Years), received the award from the President Professor Ng in recognition of their long service and great contributions to the University.

(From left to right): Prof. Jiming Liu, Dr. Stephen L.C. Chan, Dr. Ernest C.M. Lam and Prof. Ricky W.K. Wong (Dean, Faculty of Science) in the 48th Anniversary Thanksgiving Service

5 Postgraduate
Scholarships Awarded

Two postgraduate students of the Department received scholarships in the academic year 2003/2004:

- **Mr. Xiaolong Jin**
  Recipient of the Ace Style International Limited Scholarship;

- **Mr. Rodney Lap-tak Law**
  Recipient of the University of Shanghai John Yuen Memorial Scholarship.

Scholarship Presentation Ceremony held on April 2, 2004

NEW
Undergraduate Curricula

The University has campaigned for the undergraduate curriculum reform in the past year. The objective is to put more emphasis on all-around development and good transferable skills, including language proficiency, information technology, logical thinking, active learning, creativity, adaptability, cross-cultural perspectives, and so on.

Under the circumstances, the Department has significantly revised the curricula of our undergraduate courses accordingly. The new curricula not only follow the guidelines of IEEE and ACM – the two largest IT societies in the world, but also consider the demand of postgraduate research and the industry. For example, some fundamental subjects such as Design and Analysis of Algorithms, Principle of Programming Languages, and so on, are introduced so that students can gain good foundation for their postgraduate research. Also, Software Development Workshops are introduced so that students can gain hands-on experience on network administration and web application development.

The new curricula will be implemented in the academic year of 2004-05.

Intelligence@Society Competition
in November 2004

To arouse the public's interest of artificial intelligence (AI) technologies and their applications and to facilitate knowledge exchange on AI applications among students from local and mainland universities, the Department is organizing an **Intelligence@Society** competition to enhance the awareness for intelligent innovations that promote the efficiencies and competitiveness of our society. This competition is opened to two main categories of participants. The first category is for secondary school students in Hong Kong, and the second is for post-secondary students from local and mainland universities.

Our honorary guest, Prof. Zadeh, Father of Fuzzy Logic, Director of Berkeley Initiative in Soft Computing, will act as the keynote speaker and judge.

This competition will be held at the Lam Woo International Conference Centre of Hong Kong Baptist University in November 2004, and sponsored by the Association for Computing Machinery (ACM), Hong Kong Chapter, Hong Kong Institution of Engineers (HKIE) Electronics Division, IEEE (Hong Kong) Neural Network Chapter, and Pearson Education Asia Limited. The Organizing Committe for this event consists of: Drs. P.C. Yuen, C.H. Li and William Cheung.

Details can be found in the Website:

http://www.comp.hkbu.edu.hk/~intelligence04

Events and Activities

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8.1

Programming Competition

A scene of programming competition

To enhance the learning of programming outside the traditional mode of classroom based teaching, a number of new approaches have been introduced this year. Among them, small-group tutorials and programming competitions were held with great success. Two programming competitions were held on 25 October, 2003 (Saturday 1:00pm - 6:00pm) and 22 November, 2003 (Saturday 9:00am - 1:00pm). Students are encouraged to voluntarily participate as teams. Thanks to Dr. Chan's sponsorship, which made a 'surprise' dinner gathering possible after the programming competition and to Dr. William Cheung and Dr. C.H. Li for sponsoring the refreshments for the second competition.

Left: Prof. Jiming Liu presented the awards to winning teams

Right: Dr. Stephen L.C. Chan delivered a speech at the first programming competition dinner

8.2

Science and Technology – "Made In HK"

HKBU Computer Science Department supported "Young Scientist Awards 2003" presentation and showcased its projects at the HKIS Annual Conference.

The presentation of three "Young Scientist Awards" winners marked the prime time of the Hong Kong Institution of Science (HKIS) 2003 Annual Conference, held at Science Park on 8 November 2003. This year's theme was "Made In Hong Kong – a showcase of Hong Kong's inventiveness in science and technology". The Department was invited to provide IT technical support to the conference, including a multimedia production for the "Young Scientist Awards" presentation.

"The annual conference presented 'Young Scientist Awards' to three winners out of 68 competitors, over 30% increase over the last year's figure, from the local universities," said by Professor Jiming Liu, Executive Board Member of the HKIS and Head of Computer Science Department, HKBU. "The Organizing Committee of the conference selected 47 local exhibitors to show their state-of-the-art innovation and latest technologies, among which two were from the HKBU Computer Science Department."

HKIS is dedicated to sharing experience and exchanging views between the scientific community and the society at large on topics of scientific and economic relevance to the development of Hong Kong.

The exhibition booth of Computer Science Department, HKBU in HKIS Annual Conference

8.3

Workshops in Mainland China

During the period of 14-18 December 2003, a 9-member delegation from Computer Science Department, led by Prof. Jiming Liu (Head of the Department), visited four Mainland Universities: Nanjing University, Southeast University, Zhejiang University, and Zhejiang University of Technology. In this 4-day workshop, the delegation visited their laboratories and facilities, and exchanged and shared the research and teaching experience with the partner colleagues.

Moreover, the Department has formulated and signed a mutual co-operation agreement with the College of Computer Science and Technology at Zhejiang University, and the School of Computer Science and Technology at Nanjing University, respectively, whereby it opens a new era for the long-term collaborations with the two universities.

The delegation visited the School of Computer Science and Technology, Nanjing University, Nanjing, China

Prof. Jiming Liu (right side) signed and exchanged the mutual cooperation agreement with the Vice Dean (left side) of College of Computer Science and Technology, Zhejiang University, Hangzhou, China

8.4

Winter IT Camp

The Department facilitated the 2003 Youth I.T. Winter Camp, jointly organized by the Faculty of Science, Hong Kong Baptist University and Hong Kong Federation of Education Workers, a 3-day program during the period of 29 - 31 December 2003. The event was over subscribed with 130 primary and secondary students. Most students enjoyed the fun and learning experience, which aimed at strengthening their information technology skills as well as broadening their knowledge in science. 150 parents attended the camp's closing ceremony and indicated that they were supportive of the camp. More details can be found in the Website:

http://www.hkfew.org.hk/itcamp2003/

The participants in 2003 youth IT Winter Camp

8.5

Silver Jubilee and Senior Alumni Coronation

The Department welcomed the first Silver Jubilee Alumni (graduates of 1974 to 1978) and Senior Alumni (graduates of 1960 to 1973) on 27 March 2004. The Civil Engineering alumni visited the Department's teaching laboratory and were interested in the student work.

Silver and Senior Jubilee Alumni visited the Department, and were greeted by Dr. H.W. Tam (2nd from right)

8.6

Participation in the International ICT Expo

The Department joined and showcased its IT projects on "Finger Print" and "Mobile Location Estimate System" at the International Information & Communications Technology Expo organized by the Hong Kong Trade Development Council held on 14-17 April 2004. The Expo was focused mainly on software applications and software-driven technologies.

The exhibition booth in ICT Expo

8.7

Alumni Sharing Night

In order to cultivate and sustain a supportive relationship among our students and alumni, the Department organized an alumni-sharing night on 20 April 2004. Six alumni from various IT fields had been invited to share their experience with the final-year students this year.

More photos can be found at:

http://www.comp.hkbu.edu.hk/gallery_IS_ProjPresentation2004b.php

Alumni sharing night

8.8

Competition of IS Honours Project Poster Presentation and Demonstration

The Department organized a Final-year Honours Project Poster Presentation and Demonstration Competition on April 20, 2004. 41 students joined the competition. The winners were Chun-kit Chui, Pui-tak Wong (Best Poster Presentation Awards), and Yip-ho Cheng (Second Runner-up).

More photos can be found at :

http://www.comp.hkbu.edu.hk/gallery_IS_ProjPresentation2004.php

Prof. Jiming Liu presented awards to the winners in the buffet dinner

A scene of poster demonstration

8.9

ACM Programming Contest

The Department sponsored this year's Collegiate Programming Contest (CPC) and Chinese Checkers Competition (CCC) organized by ACM-Hong Kong Chapter. The contest was held on June 12, 2004 at the Oen Hall Building East Wing. Twenty teams were invited from the eight tertiary institutions in Hong Kong and Macau. The contest pits teams of three programmers competing against the clock. Each team was given six programming problems and required to write programs to solve as many of these problems as possible in the allotted time. After four-hour running, the team from the Hong Kong University of Science and Technology eventually won out. The team answered all six questions using 733 minutes, just 2 minutes ahead of the first runner-up of the competition from The University of Hong Kong.

In each year, each of the ACM administrative regions holds a regional competition, and the winners of the regional competitions will participate in a final competition, usually held in USA, to compete for the final champion. Since 1991, the ACM Hong Kong Chapter has been organizing the local Collegiate Programming Contest in Hong Kong, following the ACM contests in terms of aims, format, and style.

Prof. Jiming Liu gave an opening speech in the 2004 ACM Programming Contest and Chinese Checkers Competition

Participants in the 2004 ACM Programming Contest and Chinese Checkers Competition

Short Courses

Summer Courses 2004

The Department offered four summer courses: IBM DB2, IBM Websphere, Windows 2000 Administration and Introduction to SVG, for our students during the period between May 31 and June 24, 2004. This is the second year the Department offered these courses in response to the popular demend from our students.

Professional Training Course

In order to promote life-long learning and serve the community, the Department has launched a series of IT professional training courses since October 2003. In this summer, the Department has offered a series of courses including CISSP Preparatory Course, and Introduction to XML and Its Applications. More course information can be found at:

http://www.comp.hkbu.edu.hk/~training

9 Farewell
Party

Mr. Yeung Chor Hung has served at HKBU for 36 years and will retire in September 2004. In acknowledge of his long service and great contribution to the Department as well as the University, the Department held a farewell party for him and another long serving colleague, Mr. Peter C.T. Lam, who left the Department earlier.
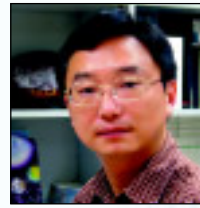
NEW Faculty Members

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Dr. Hou, Ricky

He received his BSc and Ph.D. degrees from the Computer Science Department of Hong Kong Baptist University in 1999 and 2003, respectively. He is currently an Assistant Professor in the same university. His research focuses on multimedia communications and networking. He is a member of IEEE and IEICE.

Dr. Fang Bin

He is an Assistant Professor in the Computer Science Department of Hong Kong Baptist University. He received his B.Eng. in Electrical Engineering from the Xi'an Jiaotong University and M.Sc. degrees in Electrical Engineering from Sichuan University, and his Ph.D. degree in Electrical Engineering from the University of Hong Kong. Before he joined the Department, he was a Postdoctoral Research Fellow under Computer Science Program in Singapore-MIT Alliance, the National University of Singapore. His current research interests include pattern recognition, image processing, handwriting recognition, document analysis, and medical image processing.

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Words of Wisdom

MY SABBATICAL EXPERIENCE AT HKBU

Kwok-Bun Yue,
University of Houston-Clear Lake

My sabbatical leave at the Department of Computer Science at HKBU during the past spring semester started with a nice simple lunch with Prof. Jiming Liu and Dr. William Cheung in January 2004. It was a smooth sail from then on.

Coming from a smaller university, I know first hand on how much extra effort is needed when resources are relatively limited. I am thus very impressed by the level of research productivity of the Department. Chatting with various faculty members here had been delightful and enlightening to me. Our collaboration on XML and computer security was off to a good start.

I am equally impressed by the culture here. The folks are friendly, professional and helpful. Faculty and staff members care about the students and their education. They spend good efforts to improve the quality of courses and curricula. This culture seems to have good effects on students. As an example, I went to the exhibition of the open house organized by the Computer Science Association in my first week here. I was immediately greeted by an eager student who went on to spend 30 minutes with me, patiently touring me around the exhibition and explaining the details of each project to me. We went on to have a nice chat about various topics in CS and IT. A month later, I went to a project presentation. The same student and his team had again made an interesting presentation.

Before I knew it, the time was up and I had to go back to Houston. My stay at HKBU had been very enjoyable and I am already looking forward to future opportunity to come back.

12 Colloquia/Seminars

Date	Speaker	Topic
June 2, 2004	Prof. Zhenya He	Blind Signal Separation and Blind Channel Estimation
May 3, 2004	Prof. Francis C.M. Lau	Towards a Single System Image for High-Performance Java
April 16, 2004	Prof. Ching Y. Suen	Automatic Recognition of Handwriting - The State of the Art
March 8, 2004	Dr. Xiang-Yang Li	Truthful Routing in Selfish Peer-to-Peer Networks
February 16, 2004	Prof. Lionel Ni	Pervasive Computing and New Challenges
February 3, 2004	Prof. Lizhong Peng	New Progresses in Wavelet Theory and Applications
January 20, 2004	Prof. Pawan Lingras	Conventional, Fuzzy, and Interval Set Based Temporal Cluster Migration Matrices

13 IT Industry Forum

Date	Speaker	Topic
March 9, 2004	Mrs. Polly Tong *Human Resources Department IBM Employment Market*	Trend and IBM Hiring Requirements
March 2, 2004	Mr. Sin Chung Kai *Legislative Councillor Information Technology Functional Constituency*	Current IT Issues in Hong Kong : Spamming & Related Laws
February 17, 2004	Kenneth S. Lau *Managing Director Interactive Communication Online Networks Ltd.*	Enterpreneurship: Would it be a HAPPY choice?
February 10, 2004	Mr. Keith Yuen *Consulting Manager Ernst & Young*	Overview of IT Security

14 Upcoming Major Events

Date	Event
November 10, 2004	Intelligence @Society Competition
December 6 – 11, 2004	Croucher Advanced Study Institute (ASI)
March 29, 2005 – April 1, 2005	The IEEE International Conference on e-Technology, e-Commerce, and e-Service
August 20-24, 2006	The 18th International Conference on Pattern Recognition

15 Employment Opportunities

The Department is conducting a recruitment exercise for the posts of Doctoral Research Fellow / Research Associate / Research Assistant for its various research projects:

- Centre for E-Transformation Research (RGC Central Allocation)
- Project "Information Dissemination in a Wireless Computing Environment"
- Project "Graphical Networks for Integrating Supervised and Unsupervised Learning"
- Project "An Investigation to the Factors that Affect the Performance of Latent Semantic Analysis in Composition Writing"
- Project "Discriminant Analysis for Face Recognition"

Details can be found at the Website:

http://www.comp.hkbu.edu.hk/csd_home/announce_job.php

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