



20

YEARS OF EXCELLENCE 工中
CUHK ENGINEERING 程大

20th ANNIVERSARY

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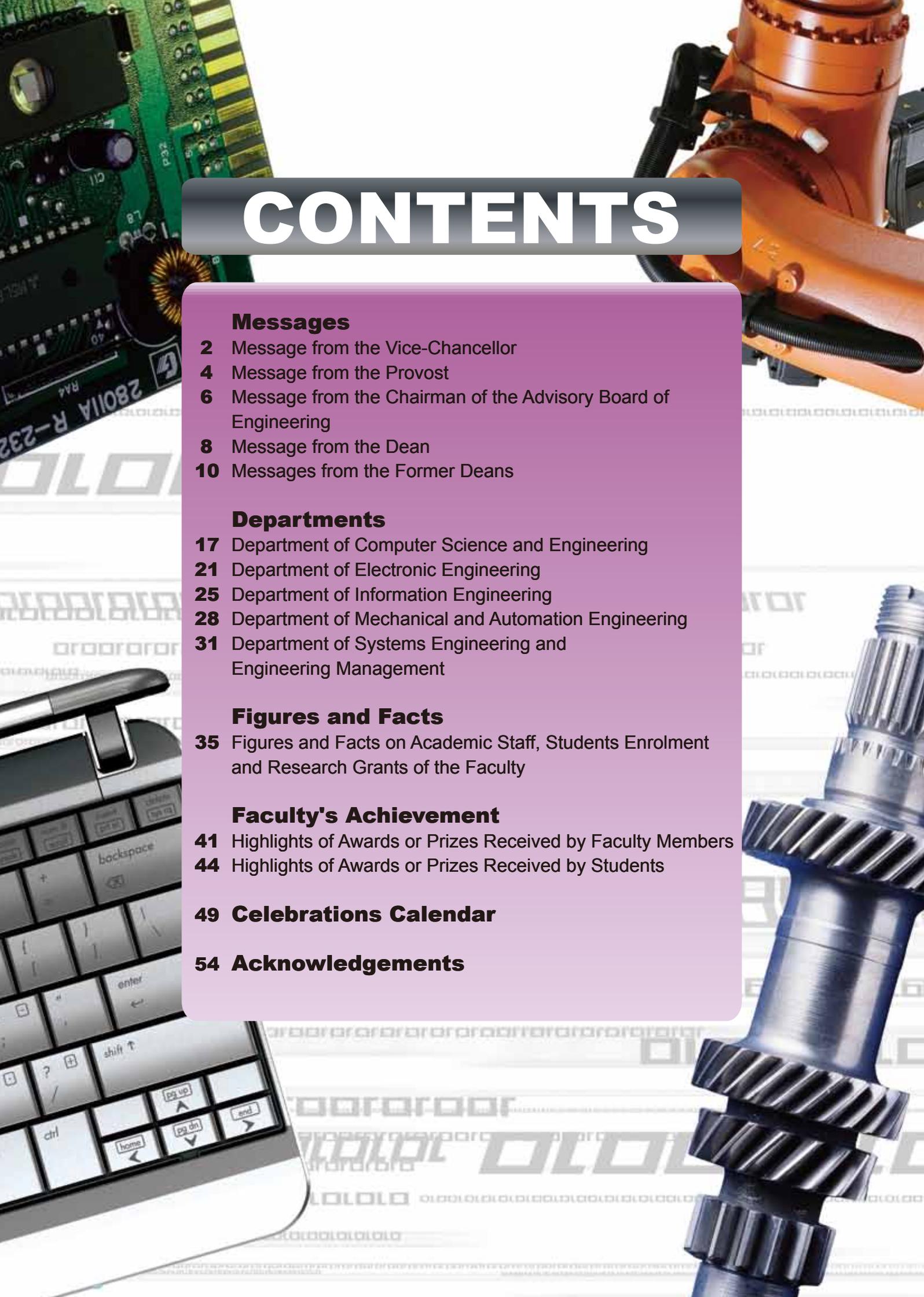
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香港中文大學
The Chinese University of Hong Kong



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Message from the Vice-Chancellor

The mission of The Chinese University of Hong Kong is to serve the needs and enhance the well-being of the citizens of Hong Kong, China as a whole and the wider world community. Through the establishment of engineering programmes some 20 years ago and later the inception of the Engineering Faculty in 1991, the University fulfilled the needs for technological education that it had foreseen in the region. Our mission is indeed exemplified in the academic endeavours of the Faculty of Engineering over the past twenty years.

Ever since its inception, the Engineering Faculty has striven to foster Hong Kong's and the world's technological advancement by training quality engineers and research professionals, carrying out cutting-edge research and promoting technology transfer.

The fruits of the Faculty's efforts are evidenced in various ways, including but not limited to the establishment of key laboratories or institutes with overseas and mainland universities, the prestigious awards that its staff received and the success of its new programmes. Its recently established Institute



of Network Coding has been selected as one of the Areas of Excellence by the University Grants Committee, again testifying to the Faculty's and the University's leading role in the technological development of the region.

Engineering education will get all the more important as novel methods and technologies are much needed to solve new problems that humanity encounters. I am confident that the Faculty of Engineering will continue to excel in providing quality education and creating new technologies to meet all these challenges. We take pride in the Engineering Faculty's achievements and on this happy occasion, let me wish the Faculty continued success in its educational and research endeavour.

Professor Joseph J. Y. Sung, SBS
Vice-Chancellor / President
The Chinese University of Hong Kong

校長題詞

香港中文大學的使命是滿足香港、全中國以至世界各地人民對知識的需要，並為人類的福祉作出貢獻。二十多年前，中文大學看到科技發展的趨勢，預見社會對工程教育的需要，開設工程學科，並於 1991 年成立工程學院。二十年來，工程學院在教學和研究等各方面的努力，都充分體現了大學的使命。

自成立以來，工程學院培訓了無數優秀的工程師及科研專才，又進行了不少尖端研究項目，並致力推動科技轉移，大大促進了香港的科技發展。近年工程學院與內地和海外院校合作成立了多個重點實驗室和研究所，教研

人員又屢獲獎項，並開辦新的工程學課程。學院最近成立的網絡編碼研究所更獲大學教育資助委員會選為卓越學科領域，一再證明中文大學與工程學院在香港科技發展的領導地位。

隨著社會發展，人類需要新科技去解決日新月異的問題，工程教育亦會變得日益重要。我相信面對將來的挑戰，工程學院定能保持一貫的卓越成績，繼續提供優良的教育和研發創新的科技。最後祝願工程學院在未來繼續走在科研的尖端，不斷創出學術及研究佳績。

**香港中文大學校長
沈祖堯教授，SBS**

Message from the Provost

In celebration of the 20th anniversary of the Faculty of Engineering

Engineering, although not amongst the oldest disciplines in the world, has for certain enabled the wildest changes to the world today. Twenty years ago, the Faculty of Engineering at the Chinese University of Hong Kong perpetuated the vision of pioneering the body of knowledge and new industries that would be of importance to Hong Kong and the greater China. I write to extend my warmest congratulations on the Faculty's success in academia, industries, and the community.

During the National 12th Five-Year Plan, the HKSAR Government has developed a long-term industrial development plan, among others, towards a diversified and high value-added economy. Themed the Framework Agreement on Hong Kong and Guangdong Cooperation, HKSAR is poised to direct efforts into developing the economies and the innovation and technology industries. In his 2010-11 Policy Address, HKSAR's Chief Executive reiterated that innovation and technology is one of the six industries where Hong Kong enjoys clear advantages. In 1999, we saw the launch of the Cyberport to help local businesses capitalize on the rapid growth of the Internet. In 2001, we saw the launch of the Hong Kong Science and Technology Parks. Engaging in integrated circuits and electronics, precision engineering, biotechnology, green technology and information and communication industries, the Park is home to more than 300 technology companies, ranging from start-ups, SMEs to multi-national conglomerates.

Hong Kong is becoming more international due to improvements in communication and network technologies. In the process, CUHK is poised to contribute to educational and research activities in mainland. In 2006, CUHK worked with the Chinese Academy of Sciences and the Shenzhen Municipal Government to establish a joint research institute named the Shenzhen Institute of Advanced Technology (SIAT). With the support from the Shenzhen Municipal Government and private donations, CUHK has recently built its own CUHK Shenzhen Research Institute (SZRI). The institute provides a base for our staff to conduct research, development, training, and technology transfers. We take pride in these efforts and in particular the pivotal contributions of the Faculty of Engineering in pursuing excellence in research and in contributing to national strategic initiatives.

The Faculty of Engineering endeavors to be among the best engineering schools through its excellence in teaching and research with and in China. In propelling Hong Kong towards a world-class hub for selected technologies, it has competed against local tertiary institutions and has won major funding of two Areas of Excellence projects, namely, the Institute of Network Coding (2010-2017) and the Information Technology (2000-2005). On the basis of its significant presence in Information Sciences, CUHK has channeled focused investments for projects in academia, industry, and society. Coordinated effort arising from the drive includes the Shun Hing Institute of Advanced Engineering, the Ministry of Education of the People's Republic of China (MoE)-Microsoft Key Laboratory of Human-Centric Computing and Interface Technologies, and the Institute of



Theoretical Computer Science and Communications. Amid the numerous developments, the Faculty has earmarked University fund for capacity building in Information Theory, Theoretical Computer Science, Security, and Bioinformatics. The Faculty is pleased to find its effort rewarded. Between the first and the second decades of the Faculty, GRF grants have increased from HK\$ 110 million to over HK\$ 220 million, whereas ITF grants have risen from HK\$ 120 million to over HK\$ 197 million. Committed to increasing its laboratory spaces and teaching facilities, the Faculty has acquired a new home - the William M.W. Mong Engineering Building in Summer 2004 after its move into the Ho Sin Hang Engineering Building in 1993.

On the education front, the Faculty has worked closely with the University to provide education of the highest quality. To prepare for the transition to a four-year curriculum, the Faculty has devised a new curriculum with increased recognition of enduring values and skills that define undergraduate education today. Students are required to complete nine units of courses in the Faculty Package that aim to prepare them to any of the engineering disciplines and to meet tomorrow's challenges. The new curriculum offers students hands-on experience and fundamental training in engineering design, computer programming, as well as knowledge in ethical, social, environmental issues and issues related to engineering practice. The curriculum is built on a credit-unit system, with flexibility and choices both in the selection of courses and in the sequence and pace of electives. The Faculty is also poised to challenge their post-graduate students to conduct high-impact and cutting-edge research. With the high-quality engineers and researchers it has trained, the Faculty is now highly recognized both in Hong Kong and in Greater China.

The Faculty of Engineering is a brainchild of Professor Charles Kao who chaired the Planning Committee for the Implementation of the Engineering Program in September 1987. I extend my sincerest congratulations to the Faculty of Engineering on delivering high standards and wish it success in the years to come. Dean Wong Ching Ping aspires that the Faculty will become the top three in China, and I like to register my full support by saying that "the sky is the limit." We like challenges and we for certain have the determination to build for the future.

Professor Benjamin W. Wah

Provost

Wei Lun Professor of Computer Science and Engineering
The Chinese University of Hong Kong

常務副校長題詞

慶賀工程學院二十周年院慶

工程學雖然不是人類歷史上最古老的學科，卻為現今世界帶來驚人的改變。二十年前，香港中文大學工程學院秉承大學的願景：以香港及中國的需要為前提，開拓知識領域、帶動新產業的發展。二十年來，工程學院不論在學術界、工業界及社會上都取得輝煌的成就，本人謹此致以衷心的祝賀。

為配合國家的「十二·五」計劃，香港政府制定了不同的策略，當中包括展開長遠的工業發展計劃，以推動香港成為多元化及高增值的經濟體系。《粵港合作框架協議》的簽訂，令香港準備就緒，發展經濟和創新科技產業。二零一零至一一一年施政報告中，特區行政長官再次強調創新科技為六項極具競爭優勢的產業之一。一九九九年數碼港成立，以協助本地企業利用正在迅速發展的互聯網。二零零一年香港科學園成立。科學園是三百所科技公司的發展基地，這些公司從事集成電路及電子、精密工程、生物工程、綠色技術和資訊及通信技術，上至大型跨國集團，下至中小企業及新成立的科技公司。

香港通訊網絡科技發展一日千里，令其國際地位日漸提升。與此同時，中文大學亦致力推進內地教育和科研工作。二零零六年，中大與中國科學院和深圳市政府合作，成立深圳先進技術研究院（先進院）。最近，中大又獲深圳市政府的支持及私人捐助，興建了由中大全資擁有的香港中文大學深圳研究院（研究院）。研究院大樓為中大教職員提供一個進行研究、開發、培訓和技術轉移的重要基地。中文大學推動國內教研不遺餘力，令人感到自豪。工程學院在研究方面力臻完善，又積極推動國家的策略發展計劃，其貢獻更是不可或缺。

中大工程學院與內地合作，發展教學科研，力臻完善，致力成為頂尖工程學府。為使香港在選定的科技領域上成為世界科研樞紐，工程學院更爭取撥款以助研究，結果領先其他大專院校，獲大額資助，發展兩項「卓越學科領域」的研究計劃 — 網絡編碼研究所（二零一零年至一七年）及資訊科技（二零零零至零五年）。因著中

大在信息科學的優勢，校方重點資助學術界、工業界及社會相關的發展項目。為此，大學與校外單位合作成立研究所及實驗室，包括：信興高等工程研究所、中華人民共和國教育部—微軟「利群計算及界面科技」重點實驗室、理論計算機科學與通訊科學研究所。工程學院亦已獲取大學撥款，指定用以發展信息理論、理論計算機科學、信息和網絡保安及生物信息學。工程學院樂見其研究有成，在過去十年，學院獲「創新科技基金」撥款的金額由 1.1 億增加至超過 2.2 億港元，而「優配研究基金」的資助則由 1.2 億上升至 1.97 億港元。為擴大實驗室和擴充教學設備，工學院繼一九九三年遷入何善衡工程學大樓後，蒙民偉工程學大樓於二零零四年夏啟用。

在教育方面，工程學院與大學通力合作，務求達至頂尖的教育水平。為確保能順利過渡至四年學制，工程學院已製定新本科課程，新課程更重視本科教育源遠流長的價值觀和技術。另外，工程學生必須修讀佔九學分的「學院組合」，預備日後選讀各個工程學科，迎接明日的挑戰。「學院組合」除了教授知識和提供基礎培訓外，還給予學生實習機會，涵蓋工程設計學、計算機編程、社會倫理知識、環境課題，以及其他與工程學相關的科目。工程學課程採用學分制，學生可按個人能力，靈活選讀主修和選修科目，控制學習進度。工學院亦鼓勵研究生積極研究，研發尖端科技，造福廣大社群。中大工程學院培養了不少優秀的工程師及科研人才，不論在本港及國內均聲譽卓著。

高銀教授於一九八七年九月出任工程學院的籌劃委員會主席，工程學院可謂高教授的心血結晶。工程學院的教研出色，謹此致以衷心祝賀，並祝願學院更上一層樓。院長汪正平教授期望工學院躋身全國三大工程學府之列，本人深表支持，並欲贈言：「天際無邊，無限可能」。我們勇於挑戰困難，亦能百折不撓，努力締造未來。

**香港中文大學常務副校長
偉倫計算機科學與工程學講座教授
華雲生教授**

Message

from
the Chairman of the
Advisory Board of Engineering



Congratulations to the Faculty of Engineering at the Chinese University of Hong Kong – for its 20th anniversary and also for its success in achieving excellence.

I have been the Chairman of the Faculty Advisory Board of Engineering since 2003. Throughout these eight years, I have witnessed the steady growth of the Faculty into a top engineering school in the region. Building upon the solid foundation laid by Professor Sir Charles Kao and other former deans, the Faculty has gradually established its reputation in the scientific and educational arena as evidenced by the prestigious awards and research grants that its professors received, the soaring quantity and impressive quality of their research outputs and the various competitions its students won.

While the Faculty of Engineering excels in both education and research, as an industrialist from the IT and software product industry, I would

particularly like to highlight the Faculty's outstanding accomplishment in education as it has trained numerous quality graduates over the years for the ever expanding high-tech industry in Hong Kong. Quality engineers and scientists are essential to the growth and success of high-tech industry where innovation is of vital importance. We all know that the youth nowadays are the future of our society. In providing the best training for our youth, the Faculty of Engineering has also been contributing enormously to shaping a better future for our world.

To nurture talents is not an easy job but I believe with the Faculty's vision and perseverance, it can cultivate generations after generations of brilliant engineering scientists.

Dr. C.K. Wong
Chairman of the Advisory Board of Engineering
The Chinese University of Hong Kong



工程學院諮詢委員會主席題詞

恭賀中文大學工程學院成立二十周年，也恭喜學院取得卓越的成就。

我從二零零三年起出任工程學院顧問委員會的主席。這八年間，我看見工程學院不斷進步，至今已成為區內頂尖的工程學府。高錕教授和前任的院長為學院奠定了雄厚的基石，在這基礎上工程學院逐步發展。學院的教授屢獲殊榮，他們的研究成果亦越見豐碩，學生又每每勝出比賽，工程學院在科研和教育方面的聲譽由此可見一斑。

雖然工程學院不論在研究或是教育方面都成績卓著，但身為來自資訊科技界的實業家，我想特別表揚學院在教育方面的成就。因為高科技產業須要不斷創新，所以工程和科研專才對高科技產業的成功及發展尤為重要。在過往工程學院一直培育了不少優秀的畢業生，服務本地日益擴展的高科技產業。眾所周知，年輕人是將來社會的棟樑。因此，在提供優良培訓給年輕人的同時，工程學院為社會的將來亦作出了重大的貢獻。

十年樹木，百年樹人，培育人才不是一件容易的事。但憑著工程學院的信念和毅力，我相信他們定能培育出一代又一代的工程科學精英。

**香港中文大學工程學院諮詢委員會主席
黃仲翹博士**

Message from the Dean

Established twenty years ago, the Faculty of Engineering started with two study programmes and around 50 faculty members. Today it has grown into a comprehensive faculty that offers 7 undergraduate programmes and various postgraduate programmes that attract bright students around the region.

In the course of twenty years, the Faculty has built up its reputation for excellence in education and research and also developed itself into one of the top engineering schools in Hong Kong. Many of our faculty members are among the best in their fields and are internationally recognized. There are 28 IEEE Fellows in our faculty, which is indeed very impressive. Our graduates are holding key positions in both the industry and academia while our students continue to win numerous competitions, scholarships and awards. I am glad to see our outstanding accomplishments and I take pride in being the Dean of this brilliant faculty. My thanks are due to all my predecessors, Professor Sir Charles Kao, Professor George Fan, Professor Omar Wing, Professor P.C. Ching and Professor Peter Yum, for their great leadership, dedication and hard work.

The Faculty aspires to solve social human problems with engineering research results and meet the 21st century grand engineering challenges with the best solutions. In the decades to come, not only will we keep our core competencies in



information communication technologies, mechanical automation, microelectronics and photonics, but we will also develop new focus areas to better serve the society and to extend the influence of the Faculty to the rest of China and the world. Among these new focus areas, we have already started biomedical engineering; are planning ahead for energy engineering, cyber security, financial and service engineering; and will soon be embarking on nanotechnology and advanced packaging and manufacturing. I am confident that with the concerted efforts of our faculty members, we will soon be enjoying the fruits of our success.

Once again, I would like to extend my heartiest thanks and congratulations to every faculty member, staff member and student for their contributions to the Faculty's success. I am sure we will continue to scale new heights of excellence in the years to come.

Professor Wong Ching Ping
Dean, Faculty of Engineering
The Chinese University of Hong Kong

工程學院院長題詞

工程學院於一九九一年成立時，只有兩項本科課程和約五十位教研人員。今天，工程學院已發展成為一所全面的學院，除了提供七項本科課程，還有不同的碩士和博士課程，深受區內傑出學生歡迎。

二十年來，學院不斷努力求進，現今在教學和研究方面都聲譽卓著，並成為香港的頂尖工程學府。學院有 110 位教研人員，大部分都是行內優秀的專家，國際有名，其中更有 28 位獲選為 IEEE 院士，成績斐然。工學院的畢業生不論在業界和學術界均扮演著重要的角色，我們的學生亦屢獲獎項及獎學金等。身為工程學院院長，看見學院二十年來成就卓越，實在感到自豪。學院能有今天的成績，前人厥功至偉，在此我要特別向高錕教授、范季融教授、周昌教授、程伯中教授及任德盛教授致謝，感謝他們過去盡心盡力領導學院。

工程學院致力研究，希望研究成果能解決人類社會的問題，又努力探求良方，以迎接二十一世紀工程學的挑戰。工程學院的專長包括資訊及通訊科技、機械自動化、微電子學及光電子學等，我們在未來不但會繼續發展原有的專長，更會開拓新的重點領域，以進一步服務社會，把學院的貢獻延伸到國內和全世界。在多個重點領域中，我們已經開展了生物醫學工程學，正密切籌劃發展能源工程學、網絡保安、金融及服務工程學，不久亦會開始發展納米科技和先進封裝技術及高科技生產。我相信只要大家共同努力，很快我們便會看見成果。

最後，讓我再一次衷心感謝每一位教師、員工及同學對學院所作的貢獻。你們一點一滴的付出，累積成學院今天的成就。我盼望在未來大家繼續精益求精，令學院的成就更上一層樓。

**香港中文大學工程學院院長
汪正平教授**

Message from

the Administrative Dean for the Engineering Programme, 1989 - 1991



Looking back on the time spent in CUHK, it was a time of learning for me.

The job as a Dean for an Engineering school has many rewarding facts. It is the interaction with the hard working and talented students, the friendly congenial colleagues, the supportive administration and a lovely physical environment of our campus all add up my staying in CUHK as a memorable experience. As for the task of building an outstanding institute of learning there was substantive different views. My belief has been that learning is a life long process; an institute of high education is to create a stimulating, a nurturing and a creative environment where faculty and students can think and grow. I spent most of the time on the infrastructure issues. Clearly such issues cannot be accomplished on the short tenure that I have on the job. I believe we started on the thousand miles journey with the first step. If there is one regret I have, it would be that the journey was cut far too short due to my other commitments.

The job as a Dean has so many aspects that it is very different from a research job. I would use this opportunity to record several memorable events.

The job of building a first rate engineering department in Hong Kong in early 1990's is a daunting task. Engineering cannot be separated with industry. At that time the high tech industry in Hong Kong is still in its infancy. And we are very far from other centres. I reach an early conclusion that we need a network that our teachers and students can be in better contact with the technical community both in Hong Kong and to a larger world. Technology is just moving too fast that we can't be current just reading the normal publications. While in early 1990s the Internet or network is still not pervasive in Hong Kong, its potential is clear for all of us. We formed a task force to select a network for us. It took good part of a year and much negotiation to get a network built. I recall that we encountered many difficulties both from budgetary problems as well as different views from some colleagues. There were debates whether we should trade the network resources for other spending such as for lab equipments which was also lacking. However, the network was built and I think the result is satisfactory.

One aspect of the job was to plan and build an engineering department. I search for a better understanding for the characteristics of the students therefore I decide to take on the job of teaching a large class. While I had experience of giving research seminars, this is actually the first time I teach an undergraduate course on information science. It was a very large class with well over 100 students, as in most of these cases, the level of the students vary from some that my lectures seems superfluous to others that need considerable amount of help. However, what impressed me most was that nearly all students that I had contacted with were strongly motivated. I would like to just give an anecdotic example. I was curious how the students can express themselves and assigned a term paper for the course. I was warned that the amount of work involved to grade the term papers would be great. I told the class that I like to have the paper about 4 pages and would deduct marks if it gets over 5 pages. I was amazed that all students ignored my instruction, the most of the papers that were turned in were well over 40 pages. Of course I did not actually penalize students turning in long papers and just spent several sleepless nights to get the stack of paper graded. Dealing with such motivated students is clearly the highlight of my tenure.

There are so many things one needs to put into place to create a world-class engineering school. In building the school we were trying for the first time to use an outside architect to design the physical building. One of the motivations for this is attempting to create a physical environment different from the standard classroom and office arrangement that there is more public space where students can interact. All these barely got started when I left. Nevertheless, I am very grateful to have the opportunity of serving the school for the brief time. Though when I accepted the job I thought of giving part of me back to Hong Kong which gives me an excellent high school education. Looking back I believe that I have learned and gotten more from experience than I have given. To that I would like to express my thanks and gratitude to my colleagues and students.

Professor George Fan
Administrative Dean for the
Engineering Programme, 1989 – 1991
The Chinese University of Hong Kong

前院長題詞

回望過去，我在中大的日子是我的學習體驗。工程學院院長的工作帶來許多寶貴經驗。我曾與勤奮、資優的學生交往、真誠至善的同事共事，又在完善的行政架構中工作、生機蓬勃的校園環境中生活，這些點滴交織成段段的美好回憶。對於如何發展成為出色的學院，大家看法不同。我認為學習是終身的過程，而高等教育學府則旨在營造具啟發性及富創意的學習環境，讓老師及學生可以思考和成長。我將大部份的時間投放在基礎建設的事宜上，雖然這些工程未能於短暫的任期內完成，我相信我們已向漫長的進程踏出第一步。如果要說遺憾，那就是因為要兌現其他承諾而縮短在中大的工作。

院長一職跟研究工作有很多不同的地方。讓我藉此記錄一些難忘的事情。九十年代初期，在香港建立頂級的工程學系是一項艱鉅的任務。工程學與工業界是不能分割的。但當時香港的高科技業仍處於發展初期，我們又遠離其他研究中心。因此，我們需要一個網絡，使師生更易與香港，甚至更大的國際科技社群聯繫。科技發展愈來愈迅速，要緊貼時代的步伐，不能單靠傳統的書刊。九零年代初互聯網在香港仍未普及時，我們已清楚看到其潛力，並成立了專責小組選擇適合我們的網絡。建立網絡所費需時，又要經過多次協商。記得我們還遇到不少困難，如財政問題和同事意見分歧。當時的爭論在於應否以發展網絡的資源填補其他支出，例如同樣缺乏經費的實驗室開支等。然而，今天回望，我認為網絡建成後的成果是令人鼓舞的。

身為院長，我的其中一項工作是規劃和發展工程學系。為了更了解學生的特質，我決定教授一門很多學生修讀的科目。雖然我擁有研究討論會的演講經驗，但實際上那是我首次教授信息科學的本科課程。該課堂的人數甚多，學生超過一百名。一般而言，像其他大班一樣，學生水平參差，有學生認為課題膚淺，但亦有學生需要額外輔導。不過，最令人印象深刻的，是我所接觸的學生幾乎全部都非常積極。我想分享一個有趣的例子：我了解學生的表達能力而要求學生撰寫論文，同事們得悉後都說我會花上許多時間批閱學生的習作。於是，我將論文長度限於四頁之內，並鄭重聲明超過五頁者將被扣分。我很驚訝所有學生都不理會我的指令，大多數提交遠超四十頁的論文。當然，我沒有真的懲罰他們，而是花了幾個不眠之夜為厚厚疊疊的功課評分。遇上如此積極的學生顯然是我任內難忘的事情。

建立一所世界級的工程學府，需顧及的範疇甚廣。在建設工程大樓方面，我們首次嘗試聘請校外建築師，來負責設計工作。其中一個目的是創造一個有別於典型課室及辦公室的佈局和環境，讓學生有更多的公共空間學習和交流。雖然我離任時，一切才剛開始，但我依然十分感激工程學院讓我有機會服務學院一段短暫的時間。我曾在香港接受優良的高中教育，當我答應擔任院長時，一心打算貢獻香港，回饋社會，但回望過去，我想我學到和得到的，比我付出的更多。為此，我向我的同僚及學生獻上誠摯的感激與謝意。

**工程學院前院長（一九八九至一九九一年）
范季融教授**

Message from the Founding Dean

On the 20th Anniversary of the Founding of the Faculty of Engineering

Twenty is a young age in the annals of academia. Many an engineering school had celebrated its centennial long time ago. Twenty is also a long time, in the progression of technology, as we witness how it has rapidly transformed, faster and faster, the way we live, do business, deliver health care, and do battles. Twenty years ago, we communicated by telephone. Today, we all have a device that enables us to talk to anyone anywhere anytime, to take and send pictures and videos, to access the web, to transact business, or to monitor our blood pressure, all to the credit of technology. And thanks to technology, we are closer today to an understanding of the causes of debilitating and fatal diseases and one day we will help develop cure for them.

Technology is the product of engineering. Engineering is what engineers do.

As the founding dean of the Faculty of Engineering, and now observing from afar, I am proud to say that in a relative short time of twenty years, it has become a distinguished engineering school whose faculty members have contributed to the advancements of technology, for the betterment of humanity here in Hong Kong and China, and world-wide.

As we celebrate the 20th anniversary, let us not forget that the seed of an engineering faculty was planted by Charles K. Kao in 1970, when he established the Electronics Department in the Faculty of Science. When he later served as Vice Chancellor of the Chinese University, from 1987 to 1996, he held the view that the University, as a comprehensive university, must have a strong engineering component, as technology was becoming an important and essential agent of change.

Shortly after, Tien Chi Chen set up the Department of Computer Science in 1973, the first in Hong



Kong, also in the Science Faculty. The Faculty of Engineering was actually started by George Fan, in 1990, with four departments: Electronic Engineering, Computer Science, Information Engineering, and Systems Engineering. As Administrative Dean, he recruited many of the new members of the faculty and oversaw the design of the first engineering building. The Faculty was formally established in 1991, and I served first as Administrative Dean and later elected Dean of the Faculty.

From the beginning, our goal is to become a research-based faculty. Both applied research and fundamental research are emphasized. Applied research is local, and it will help establish a technological base in Hong Kong and South China. Fundamental research is to seek universal truth. It has no territorial boundary. Given the relatively good resources and excellent environment for intellectual pursuit in Hong Kong, we are in an envious position to contribute to the discovery of basic knowledge which is necessary for developing new technologies to serve humankind. We remind ourselves that great universities become great because of their successes in pioneering inquiries into the unknowns.

I am grateful to the Chinese University for the opportunity to lead this effort. I owe much of the success of the Faculty of Engineering to its excellent faculty members and support staff. In my retirement, I think of the Faculty and its people often, many of whom have become my life-long friends. Let me take this opportunity to thank them and to extend my best wishes to all on this happy occasion.

Professor Omar Wing
Dean of Engineering, 1991-1997

創院院長題詞

祝賀工程學院成立二十周年

不少工程學府都擁有百多年歷史，在學術界的歷史長廊裡，二十年只是很短暫的時光。然而在發展日新月異的科技世界，二十年卻是一段很長的時間。科技急速改變我們的生活方式、營商作業、醫療服務，甚至行軍打仗，而且變得越來越快。昔日，我們使用固網電話通信；今天，人人都可以隨時隨地使用無線電話通話、收發信息和影像、連結互聯網、進行交易，甚至檢查血壓，一切全賴科技的進步。科技又幫助我更深入了解惡疾的成因，終有一天我們能治療頑疾。

工程學創造科技，發展科技正是工程師的工作。

身為中文大學工程學院的創院院長，回顧過去，學院的發展令我感到非常自豪。在短短二十年間，工程學院發展出眾，成為著名的工程學府，教研人員促進科技發展，提升人類的生活質素，貢獻香港、中國、以及全世界。

慶祝學院二十周年時，我們不要忘記高錕教授於一九七零年創立電子工程學系，為成立工程學院奠定基礎。其後高錕教授於一九八七至九六年擔任中大校長期間更表示，科技帶來改變，其影響日益重要，中大要成為綜合型大學，必須著力發展工程學。

一九七三年陳天機教授於理學院成立了全港首個計算機科學系。其後，范季融教授於一九九零年開始籌組成立工程學院，當時的學系包括：電子工程學系，計算機科學系，信息工程學系及系統工程學系。范教授擔任行政院長期間，除了擴大學院的教學團隊，亦監督第一期工程大樓的設計工序。工程學院於一九九一年正式成立，本人繼任為行政院長，其後亦獲選為「選任院長」。

從最起初，我們便確立目標，要發展為以研究為主的學院，應用研究和理論研究並重。前者推動本地及華南科技事業的發展，後者探索知識真理，不受地域限制。而香港資源豐富，學術環境優厚，非常利於探求知識，開創基礎學問，進而發展新科技，造福人類。頂尖大學之能成為頂尖，是因為他們能帶領學術研究，開拓未知的領域。

學院如此成功，一班優秀的教職員功不可沒。我非常感激香港中文大學讓我有機會領導工程學院。退休後，我常懷念昔日在這裏的每人每事，不少同事已成為我的畢生摯友。今年是學院的二十周年紀念，我藉此送上最真誠的感謝和祝福。

**工程學院創院院長（一九九一至九七年）
周昌教授**

Message from the Former Dean

On the happy occasion of the 20th anniversary we are celebrating, I wish to extend my warm congratulations to faculty members whose hard work and unfailing devotion have made it possible for the Faculty to achieve many notable successes in education, research and community service in two decades.

The Faculty of Engineering was established by Professor Sir Charles K. Kao, a world renowned distinguished and respectable scientist and engineer. He has demonstrated that he is a man of superlatively high standards and complete integrity. His blessings and vision have always been and will continue to be a driving force for us to uphold the spirit of **KAO: Knowledge; Aspiration; Ownership** in our endeavours, particularly in striving for excellence in teaching, learning and research.

Anniversaries are the best time to reflect and aspire. Engineering is an area that stakeholders rarely target to plant their feet on level ground. Since its inception, our Engineering Faculty has aspired to breakthrough and advancement during the quest for knowledge and in the dedication in research. As cross-disciplinary collaboration and cooperation becomes a trend for our future development, it is time for us to target a bigger stride forward. While we aspire to more successes and achievements, we



also aim at enhancing and enriching human lives, and bringing positive impact to the quality of life. To reach this higher goal, we must first cultivate a heart and soul ownership of and a total devotion to quality education.

As the former Dean of the Faculty who once held the baton passed to me by my predecessors, I feel privileged and greatly honoured today to witness the multi-faceted developments of the Faculty. When we move forward and face future challenges, I urge our colleagues and students to heed and shine the **KAO** spirit in us.

May I offer my best wishes for continued success to our Faculty which is on a journey to scale new heights in pursuit of excellence.

Professor Ching Pak Chung, BBS

Dean of Engineering, 1998-2003

Pro-Vice-Chancellor / Vice-President

Director of Shun Hing Institute of Advanced Engineering

The Chinese University of Hong Kong

前院長題詞

在慶祝工程學院成立二十周年之際，我非常感激工程學院一群默默耕耘的教職員，全賴大家的努力，學院不論在教育，研究及社會服務上都有不俗的成就。

工程學院由高錕教授一手創立。高教授既是科學家，又是工程師，世界知名，舉足輕重，而且受人敬仰。他嚴以律己，誠信待人。「高教授精神」是追求知識、胸懷理想、樂於承擔。他貢獻之廣、理想之高、一直是我們持守「高教授精神」的原動力，使我們在教學、學習、研究方面力臻完善。

院慶是回顧過去和展望將來的好時機。工程師從不甘於現狀。學院成立以來，我們秉承工程師的創新精神，在

研究的道路上努力不懈，開拓知識的新領域，推動科技發展。跨學科的緊密合作是未來發展的路向，我們應該定下更高的目標，與時並進。我們希望有更輝煌的成就，亦力求提高人類的生活質素，使生活更多姿多彩。要達到理想，首要任務是培養對教育的使命感，全心全意提供最好的教育。

身為前任院長，我曾接棒肩負領導學院的重任。如今學院在各方面都有長足的發展，令我感到萬分自豪。同時，我鼓勵大家以「高教授精神」為榜樣，勇敢面對未來挑戰。最後，我衷心祝工程學院同仁百尺竿頭，更進一步。

**工程學院前院長（一九九八至二零零三年）
香港中文大學副校長
香港中文大學信興高等工程研究所所長
程伯中教授，BBS**

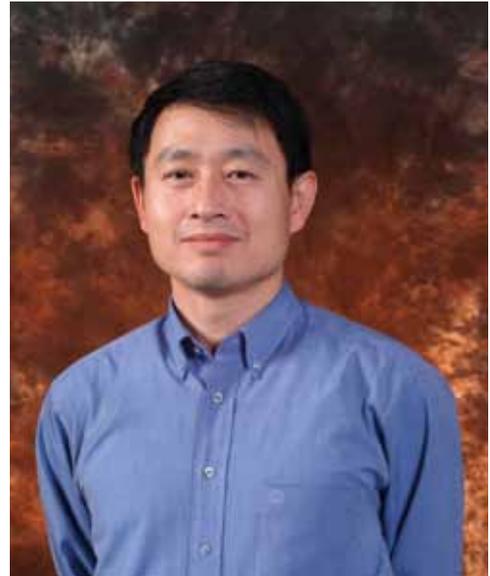


Message from the Former Dean

I have three visions for my beloved Faculty at its 30th anniversary:

1. Departments can attract the best applicants from around the world.
2. Professors can tackle grand engineering challenges.
3. Graduates can excel in any career chosen.

Professor Peter Yum Tak Shing
Dean of Engineering, 2004-2010



前院長題詞

“工程學院”三十周年之期望：

- 一、學科實用兼有趣
- 二、教授能挑戰工程學難題
- 三、畢業生成就驕人

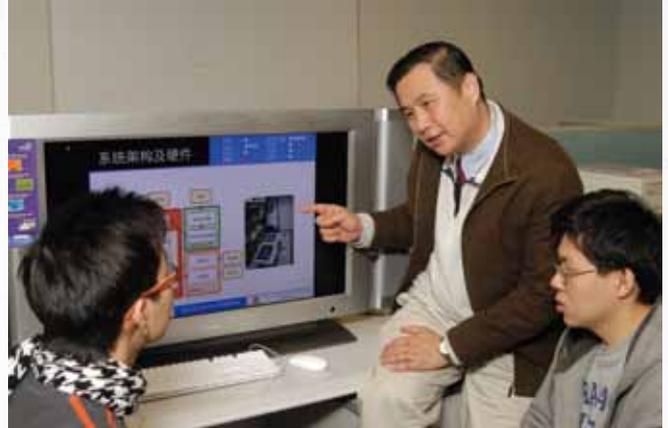
**工程學院前院長（二零零四至一零年）
任德盛教授**

History and Development

The Department of Computer Science and Engineering is the first Computer Science department in Hong Kong. The University has been offering computer courses since 1968. In 1970, the Joint Universities Computer Centre (JUCC) was established and an ICL 1904A computer was installed in the University as a joint facility for the two local universities. In line with the increased demand for trained computer personnel, the Department of Computer Science was established in the Science Faculty in the academic year of 1973/74. A minor programme in Computer Science was then implemented and the response was enthusiastic. From 1971 to 1975 the Department also offered a one-year postgraduate diploma course in System Analysis.

The Department launched its undergraduate major programme in Computer Science leading to the BSc degree in 1978. The Postgraduate Division was established in 1982. In 1983, the Computer Science major programme became the first outside the United Kingdom to be accredited by the British Computer Society (BCS). When the Faculty of Engineering was founded in 1991, the Department joined the new Faculty and started to offer an undergraduate major programme in Computer Engineering leading to the BEng degree. The name of the Department was changed to Department of Computer Science and Engineering in 1995.

Since its founding, the Department has expanded rapidly in enrolment, curriculum, staff, equipment, research and services to the community, in both quality and quantity. Currently, the Department offers programmes leading to BSc, BEng, MSc, MPhil and PhD degrees. The Department has the most advanced computing equipment and cloud infrastructure for both Computer Science and Computer Engineering research. The Department has 30 faculty members, about 320 students in the Computer Science major programme, 100 in the Computer Engineering major programme, 30 in the Computer Science minor programme. The Postgraduate Division has about 100 MSc students and 130 full-time research students carrying out research in a very co-operative and friendly environment. Graduates have distinguished themselves in professional positions and in graduate study and research all over the world.



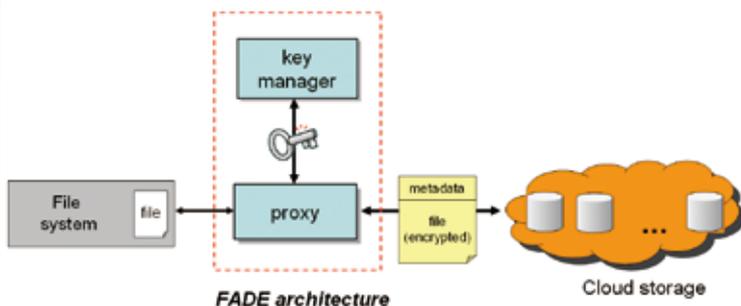
Departments

Department of Computer Science and Engineering

Highlight of Research

On the Robustness and Performance of Cloud Storage Professor Patrick Lee Pak Ching

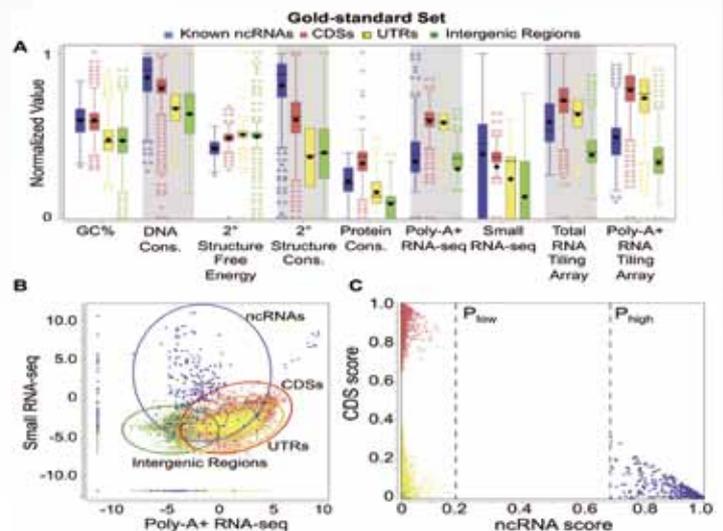
We can now outsource data backup off-site to third-party cloud storage services to reduce data management costs. However, to use cloud storage services reliably and efficiently, one needs to address various technical issues including security, availability, and economic cost overhead. In this project, we aim to build practical, deployable systems that address the robustness and performance issues of today's cloud storage services. One such system is called FADE, a secure overlay cloud storage system that focuses on providing access control on data and protecting deleted data with policy-based file assured deletion. FADE is built upon standard cryptographic techniques, such that it encrypts outsourced data files to guarantee their privacy and integrity. On top of the cryptographic design, FADE assuredly deletes files to make them unrecoverable to anyone, including cloud storage providers, upon revocations of file access policies. As a proof of concept, we build a working prototype of FADE that can work seamlessly atop today's cloud storage services. For details, please refer to <http://ansrlab.cse.cuhk.edu.hk>.



Prediction and Characterization of Non-coding RNAs using Bioinformatics Method Professor Kevin Yip Yuk Lap

We all know that genes are basic functional units at the cell level and heritable units at the genetics level. Traditionally most genes are thought to produce proteins, yet in recent years many genes have been discovered to produce intermediate products called RNAs that are functional by themselves and do not lead to protein production. Very little is known about such "non-coding" RNAs (ncRNAs) and ncRNA types. To explore this new class of fascinating molecular apparatus, this project aims at developing a machine learning framework to predict ncRNAs in the model organism *Caenorhabditis elegans*, using experimental and computational features related to the activity (expression), evolutionary history and structural stability of *C. elegans* genomic sequences. Currently, we have successfully validated a sample of our predictions experimentally, and have characterized our predicted ncRNA candidates using a cohort of datasets and annotations. We are in the stage of applying the methodology to human data, which would hopefully enhance our understanding of our own 3-billion character long DNA sequences.

The following figure is taken from: Lu, Yip et al., Prediction and characterization of non-coding RNAs in *C. elegans* by integrating conservation, secondary structure and high throughput sequencing and array data (Genome Research, 21(2):276-285, 2011)



We integrated computational and experimental features in predicting ncRNAs. The features alone (A) or in pairs (B) cannot separate different classes of genomic elements, but a clear separation was achieved by applying machine learning methods (C).

Computational Manga

Professor Wong Tien Tsin and Professor Heng Pheng Ann

Manga (Japanese style comics) is popular worldwide and itself a significant entertainment industry. The production procedures are nevertheless highly complicated, time-consuming, and labour-intensive. In the past five years, we have started a new research area in the field of computer graphics, computational manga. Our goal is to identify scholarly interesting problem and develop novel and intelligent methodologies to ease and facilitate the manga production process, without too much alteration on the existing production pipeline. Here, we highlight two works that have been published in the most influential graphics conference, ACM SIGGRAPH and drawn the attention of many people from both the industry and academy.

Manga Colorization: Coloured and black/white (b/w) mangas are usually produced separately, leading to inconsistency in styles between the two versions. Colorization is the most time-consuming procedure in manga production. Using the existing techniques to colorize regions without enclosed boundaries will result in leakage, as computers have no idea of the semantics of the manga. Manga colorization can automatically identify similar hand-drawn hatching and printed screening patterns, and fill up similar regions with the desired colors intelligently and quickly.



(a) Input manga



(b) Manga colorization result

Manga Screening: It can mimic the way a manga artist lays screens with different patterns to convert color images into b/w manga, with a much more promising result than the traditional halftone technique. The new technology helps manga artists to substantially reduce their time and manpower spent on preparing the background, so that they can focus more on the design of characters.



(a) Input color photo



(b) Result by existing software



(c) Our result

Departments

Department of Computer Science and Engineering

Distinguished Alumni



Mr. Cambridge Wong

BSc (1982)

CEO, SynerWealth Financial Limited;
Founder/Director, Wealth Bridge
Asia Limited

Dr. Clement Lee Yui Wah

PhD (2000)

Member of Technical Staff,
Alcatel-Lucent, Murray Hill, NJ, USA



Professor David K. Y. Yau

BSc (1989)

Associate Professor of Computer Science,
Purdue University and Distinguished Scientist,
Advanced Digital Sciences Center, Singapore

Dr. Starsky H.Y. Wong

BS (2000)

MPhil (2002)

Research Staff Member,
IBM T.J. Watson Research, USA



Mr. Horace Chan

BSc (1994)

MPhil (1996)

Director, Head of Equity,
Trading IT Asia, Deutsche Bank

Dr. Chen Jiansheng

PhD (2007)

Assistant Professor,
Tsinghua University, China



Dr. Kenneth K.Y. Wong

BEng (1998)

Associate Head (Admissions and
Student Affairs); Associate Professor,
Department of Computer Science,
The University of Hong Kong

Mr. Fu Ka Kuen

BEng (2007)

Software Engineer,
Amazon.com, Cupertino, CA, USA



Dr. Ray Cheung Chak Chung

BEng (1999)

MPhil (2001)

Assistant Professor,
City University of Hong Kong

Mr. Kane Ho

BSc (2008)

Software Developer in Test,
Microsoft Redmond



Departments

Department of Electronic Engineering

History and Development

Established in 1970, the Department of Electronic Engineering has the longest history in the Faculty. Professor Sir Charles Kao, Nobel Laureate in Physics, was the founding chairman. The Department has 24 professors. Over the years, the Department has produced more than 3,000 engineers. Currently, the total undergraduate enrolment is close to 300 and there are approximately 110 full-time graduate students pursuing master and doctoral degrees. In 1975, the Department initiated the first work-study programme in Hong Kong. This provides students an opportunity to spend one year working in industry before returning to the university for their final year of study. As a valuable meeting-point between university and industry, the work-study programme has become very popular among students and local firms. The Department strives to educate students to become global leaders in electronic engineering and instill in them the desire to pursue knowledge and to advance the state of the art in electronic engineering, and it takes particular pride in the accomplishment of its alumni over the past decades.

In addition to providing high quality teaching, the Department has attained international excellence in both fundamental and applied research. The Department's research disciplines include digital signal processing, photonics, biomedical engineering, wireless devices, electronic materials and nanotechnology, and integrated circuit design. Research has flourished in the Department particularly in the last 20 years. The Department is ranked amongst the top 100 in the world and the top in Hong Kong by an independent ranking organization. More than \$200 million competitive research funding has been awarded to the Department in the last twenty years. The Department is expanding its teaching and research to focus on solving important problems of energy (both renewable energy and efficient energy utilization) and reducing the cost of healthcare for the ageing population. With these objectives, a new Biomedical Engineering Programme was started in 2010.



Departments

Department of Electronic Engineering

Undergraduate Programmes

Electronic Engineering

The Department offers a 3-year programme of study that leads to a Bachelor of Engineering (BEng) honours degree, accredited by The Hong Kong Institution of Engineers (HKIE) and by The Institution of Engineering and Technology (IET). It adopts a highly dynamic and adaptive curriculum that covers four major areas of specialization, namely Multimedia and Signal Processing, Integrated Circuits (IC) Technology, Microwave Engineering and Wireless Communications, and Microelectronics and Photonics. The programme emphasizes on integration between hardware and software, and constantly adopts latest technological developments in its curriculum. Students are required to take part in engineering development projects through which they acquire hands-on experience in innovation and market assessment.

Biomedical Engineering

This is a new undergraduate programme launched in 2010 with strong support from the Faculty of Medicine. Today biomedical engineering is pushing the frontiers of science and technology by using electronics, photonics, advanced mechanics and information technology to solve imminent problems in biology and medicine. Our programme aims at educating the next-generation biomedical engineers with an aspiration of serving the society and advancing healthcare at the interface of engineering, science, and medicine.

Master of Philosophy and Doctor of Philosophy

Our articulated MPhil-PhD programme offers students opportunities to engage in in-depth studies and focused research in selected areas of electronic engineering. The key objective is to train high-caliber engineers who are knowledgeable in the latest technologies. The programme intends to foster high-quality and forward-looking research activities that are crucial for the long-term development of our successful knowledge-based society. The Department of Electronic Engineering has 4 research groups: Biomedical Engineering, Multimedia & Signal Processing, Integrated Circuits & Systems, and Solid State Electronics & Photonics.

Master of Science in Electronic Engineering

Continuous Training is essential for electronic engineers to open new doors and to excel at work. The Department's newly updated Master's Degree programme aims specifically to address latest developments in electronic technology. The programme has been running for many years in part-time mode. The new full-time mode is particularly suitable for mainland students. The programme offers many specialized elective courses of which four are newly introduced to cover new technology areas, which photovoltaic and photonic devices, communication networks for the future as well as state-of-the-art power management techniques. At the same time, we continue to offer proven and successful courses in the subjects of IC design and signal processing.

Highlight of Research

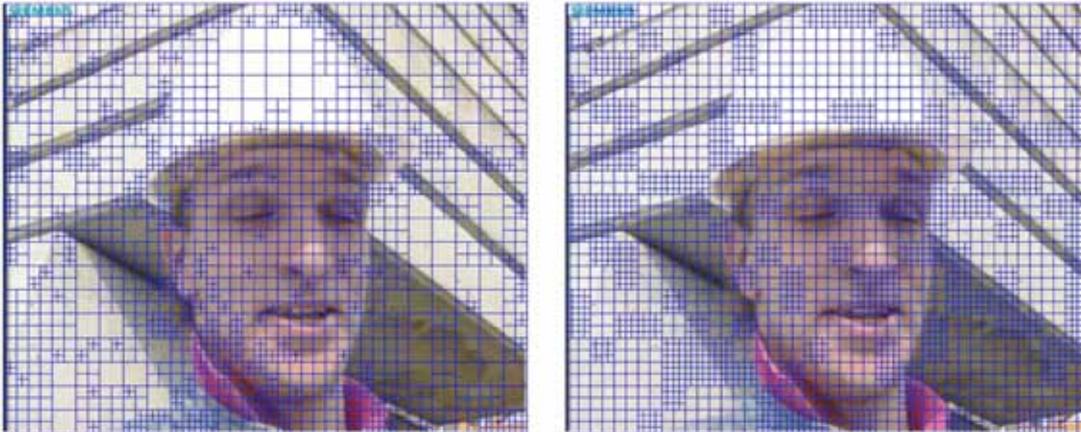
Multimedia & Signal Processing

The Image and Video Processing Laboratory represents CUHK in the AVS work group and our contributions have become a part of the China national video coding standard AVS. We have been working with ASTRI to develop new technologies for Future Multimedia Standards. The DSP and Speech Technology Laboratory is well-known of its pioneer work on Chinese spoken language technologies and a resources hub for Cantonese speech research. The technologies developed in the two laboratories have been licensed to many international companies.

We developed an adaptive block transform scheme which can achieve about 15% further bit reduction on video data compared to existing AVS standard. The left and right figures above show respectively the transform partitions adopted in the proposed adaptive block transform scheme and an existing standard.

Departments

Department of Electronic Engineering



VLSI/ASIC

Advanced compact integrated-circuit (IC) designs are essential to modern electronic devices, from powerful personal computers to power-efficient handheld entertainment units. The group research focuses include advanced digital IC designs with novel synthesis methodology, low-power mixed-signal circuits in analog-to-digital converters (ADC) and power-management systems for system-on-chip (SoC) applications.

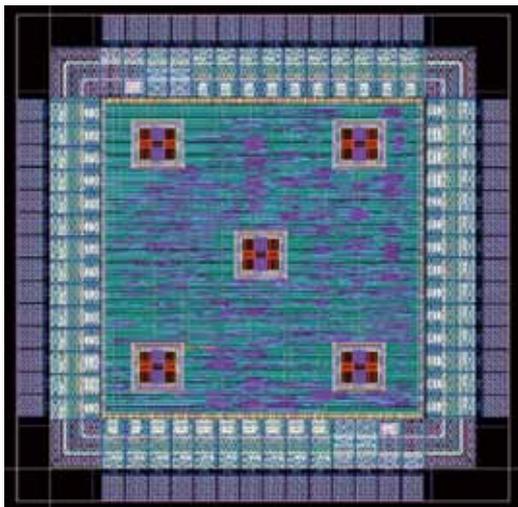


Fig. 1. Programmable fabric generated by the structure Application-Specific Integrated Circuit (ASIC) platform for adaptively LED backlight control on LCD TV.

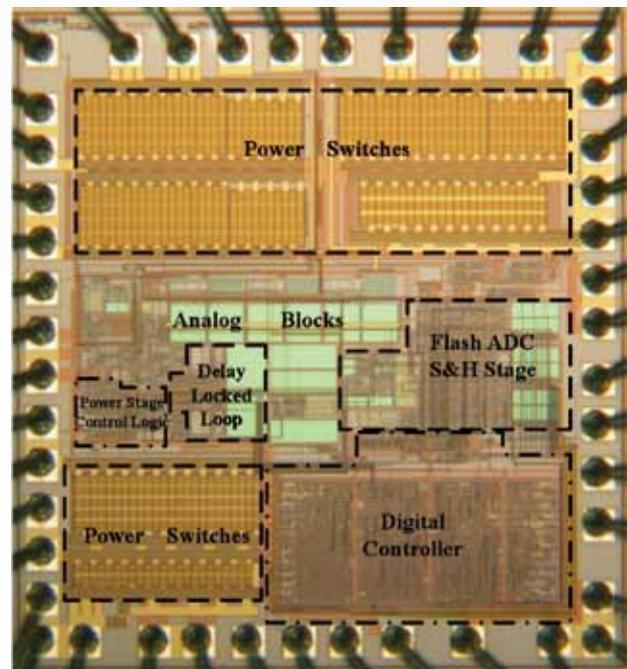
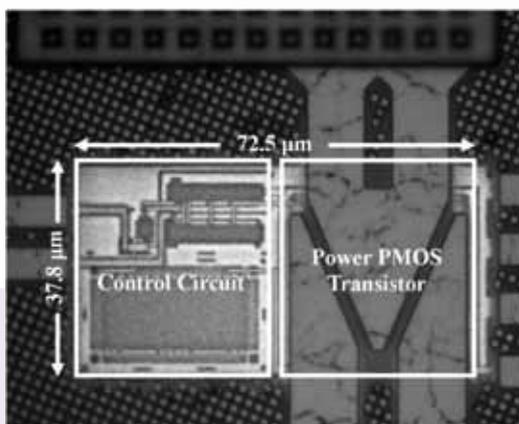


Fig. 3. Chip micrograph of Single-Inductor Triple-Output (SITO) DC-DC converter.

Fig. 2. Chip micrograph of low-power fast-transient Low-Dropout Regulator (LDO).

Departments

Department of Electronic Engineering

Distinguished Alumni



Dr. Cliff Chan Chok Ki
PhD (1984)
Founder and CEO,
TeleEye Holdings Limited

Mr. Lee Wai Kwong
BEng (1977)
CEO,
ASM Pacific Technology Limited



Mr. Stephen Chau
BEng (1985)
Chief Technology Officer,
SmarTone Telecommunications
Holdings Limited

Dr. Samson Tam Wai Ho
BEng (1986)
Member of the Legislative Council
(Information Technology);
Founder and Chairman,
Group Sense (International) Limited



Mr. Franky Fan Kai Leung
BEng (1993)
Executive Chairman and
Chief Executive Officer,
Anwell Precision Technology (HK)
Limited

Ir. Wong Ping Fai
BEng (1982)
Assistant Director-General
(Air Traffic Management),
Civil Aviation Department (CAD),
HKSAR Government



Mr. Lai Yam Ting
BEng (1976)
CEO,
Automated Systems Holdings Limited

Mr. Ricky Wong Wai Kay
BEng (1985)
Co-founder and Chairman,
City Telecom (H.K.) Limited & Hong
Kong Broadband Network Limited



Dr. Lam Cheung Wei
BEng (1987)
Chief EMC Technologist,
Apple

Mr. Cliff Woo Chiu Man
BEng (1980)
Chief Technology Officer and
Alternate Director,
Hutchison Telecommunications
International Limited



Departments

Department of Information Engineering

History and Development

The Department of Information Engineering was established in 1989 with the vision to train a new generation of engineers and leaders well-versed in modern information technology. To date, our graduates have gone on to become successful practicing engineers responsible for the maintenance and running of information systems of large multinational corporations; accomplished researchers contributing to the creation of new information-age devices and systems; entrepreneurs starting new hi-tech companies that bring to the world the next generation of productivity-boosting information technology; and teachers who help train new generations of leaders, thinkers,



and doers. Our research covers areas related to information processing and information delivery, with special emphasis on Internet, cyber security, wireless communications, optical communications, multimedia processing, and multimedia delivery.

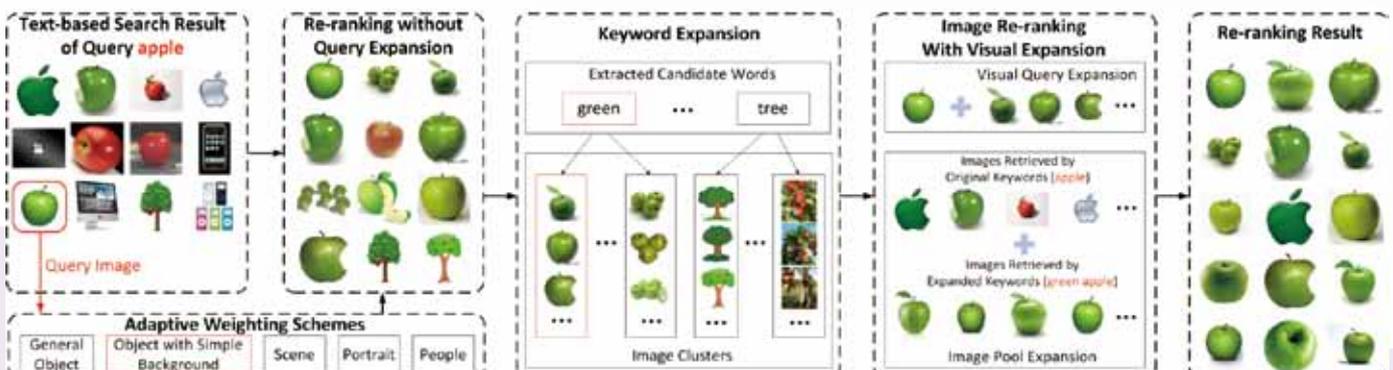
Academic Programmes

Rolled out in 1988, the B.Eng. Information Engineering programme was the first of its kind in Hong Kong. In 2006, the Department created the Double Degree Program in Mathematics and Information Engineering, in collaboration with the Department of Mathematics. In 2007, the Department launched the Double Degree Programs in IE and Integrated BBA, and Inter BBA and IE. In addition, the Department offers a full range of quality postgraduate programmes, including MPhil and PhD programmes by research, and a taught MSc programme.

Highlight of Research

IntentSearch: One-Click Internet Image Search

Most web image search engines (e.g., Google Image Search, Bing Image Search) rely on surrounding text features to identify images. It is difficult to interpret user intention from the query keywords only, and this leads to ambiguous search results. The augmentation of visual-based search can significantly reduce the ambiguity in pure text-based image search. Our image search approach requires the user to click just one query image from an image pool retrieved by text-based search, and this simple action triggers a re-ranking of the search results so that the most relevant images of interest to the user will be presented first. Our one-click intent modeling and interpretation has proved successful in a real commercial application: it is now used in the Microsoft Bing image search engine www.bing.com.



Departments

Department of Information Engineering

Peer-to-Peer based Video Streaming

P2P content distribution has become widely deployed in the Internet during the past 10 years. For file downloading, the most well-known system is BitTorrent. An IE MPhil student, Zhang Xinyan, implemented and demonstrated the first P2P video streaming system. The P2P video streaming system, Coolstreaming, has proven to be capable of delivering life content as well as video-on-demand with high quality of service. Coolstreaming is considered a breakthrough by the research community as well as the business world.



Data Acquisition and Aggregation for Large-scale RFID systems

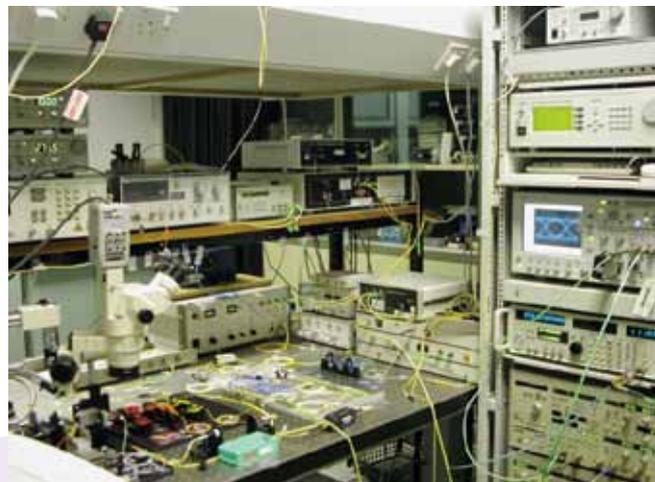
Radio Frequency Identification tags (RFIDs) are used in many diverse applications in increasingly large numbers. To collect information stored in the RFIDs, most existing protocols require the explicit identification of individual tags as the first step. For a large class of applications, such as inventory control and supply-chain management, the explicit identification step not only creates a vast amount of unnecessary intermediate data, but also raises serious privacy concern. We have invented a set of algorithms and protocols that serve as the key building blocks for fast and scalable RFID data acquisition and information aggregation with performance guarantees. The project won an award in the 10th International Asia Pacific ICT Alliance (APICTA) Award competition.

Institute of Network Coding at CUHK

The fundamental concept of Network Coding was introduced in the late 1990s, largely due to IE Professors Bob Li and Raymond Yeung. It is considered one of the most significant breakthroughs in Information Science. In September 2009, the project led by Professors Li and Yeung to establish the Institute of Network Coding (INC) at CUHK was awarded the Area of Excellence funding support by the University Grants Committee. This is a recognition of not only the IE Department but also Hong Kong as the birthplace of this important field of research. INC conducts forefront research on the theory of Network Coding and its various applications in the Internet, wireless communications, information security, data storage, and bioinformatics.

Green Optical Networking Research

Research in optical network was initiated in 1992 under the directives of Professor Sir Charles Kao, Nobel Laureate in Physics in 2009, when he was serving as the Vice-Chancellor. As energy conservation is becoming more and more crucial for the well-being of the world, the optical network group has been studying ways to significantly reduce the energy consumption in access and core networks by optical means. Scalable and fault-protected local access networks, including WDM-based passive optical network (PON), were proposed for next generation green fiber-to-the-home (FTTH) applications. In collaboration with Peking University, optical flow switching was studied for the future ultra-high capacity all-optical, fault-tolerant, green core network.



Departments

Department of Information Engineering

Distinguished Alumni



Dr. Calvin Chen Chung Shue

BEng (1999)
MPhil (2001)
PhD (2005)
Research Engineer,
Alcatel-Lucent Bell Labs., France

Professor Li Xia

PhD (1997)
Dean,
College of Information Engineering,
Shenzhen University



Mr. Ricky Ho Wai Kee

BEng (1997)
Executive Director,
Information Technology,
Goldman Sachs (Asia) L.L.C.

Mr. Aldous Ng Kwok Sing

BEng (1993)
Chairman,
Beijing UNIS VITOVA Information
Technology Company Limited



Mr. Brian Kwan Tak Yan

BEng (2000)
Sales Director,
Centaline Financial Services Limited

Mr. Derek Tse Chi Yin

MPhil (1995)
Manager,
Service Provider Sales,
Cisco Systems (HK) Limited



Mr. Kwok Ming Shan

BEng (1993)
MPhil (1995)
Principal Engineer,
T-Mobile USA Inc., USA

Mr. Richard Wong Kwong Lam

BEng (1992)
Director,
Innopac Business Solutions
Company Limited



Dr. Leung Kin Kwong

BEng (1997)
MPhil (2000)
PhD (2003)
Principal Scientist,
Cluster Technology Limited

Professor Lawrence Yeung Kwan

BEng (1992)
PhD (1995)
Professor, Electrical and Electronic
Engineering Department,
The University of Hong Kong



20

YEARS OF EXCELLENCE 工中
CUHK ENGINEERING 程大



Departments

Department of Mechanical and Automation Engineering

History and Development

The Department of Mechanical and Automation Engineering was established in 1994 with 5 professors in the areas of control, CAD/CAM, robotics, and computer vision. Over the years, it has grown to 15 faculty members, covering the areas of MEMS and NANO systems, smart materials, manufacturing, design and optimization, and energy as well. The Department was renamed to Automation and Computer-Aided Engineering for the period between 2000 and 2006. The Department reverted its name back to Mechanical and Automation Engineering from October 2006 onwards, with the offering of the current MAE curriculum from 2007-08 since.

The MAE Programme emphasizes the impact of modern automation technologies on current and future developments in the field of mechanical engineering. It is a cross-disciplinary programme, covering the core building blocks of today's engineering systems such as mechanics, electronics, control and computing. It is also an integrative programme, instilling the know-how to select and tailor technologies to effectively achieve the target performance. The programme is also forward looking. We train traditional mechanical engineers as well as leaders with the visions and insight to look ahead to a world of ever increasing utilization of automated and interactive products and devices.

The Department is currently offering programmes leading to BEng, MSc, MPhil and PhD degrees. Since 2007, students have been able to choose a double degree option that combines MAE and Integrated BBA undergraduate programmes. Two minor programmes in MAE and Energy Technology are also being offered.



Highlight of Research

Nonlinear Output Regulation Problem and Internal Model Design Professor Huang Jie

The output regulation problem arises from the mathematical formulation of many practical control problems. Some of the examples include: vibration suppression of high speed train, landing of aircraft on carriers under severe weather condition, attitude control of spacecraft, and coordination and manipulation of robots. Professor Huang is one of the pioneers on the research of the nonlinear output regulation problem, and has made fundamental contributions to this problem. His ongoing work over decades has been recognized on the world scientific stage by numerous awards such as his election to IEEE Fellow in 2004, Croucher Senior Fellow in 2006, IFAC Fellow in 2010, culminating in his receiving the State Natural Science Award (Class II) as the leading investigator in 2010.



Treebot Professor Xu Yangsheng

The objective of the development of Treebot is to assist or replace human being in performing forestry tasks on trees. Treebot is composed of a pair of tree grippers that permits Treebot to attach on a wide variety of trees with a wide range of gripping curvature. A novel continuum maneuvering structure has also been incorporated to provide Treebot with its high maneuverability and adaptability. The robot needs only 5 actuators for its manipulation. The Treebot weighs 600 gm, but carries a payload capability of 1.75 kg, which is nearly three times of its own weight.



Departments

Department of Mechanical and Automation Engineering

Distinguished Alumni



Dr. Alan Lam Hiu Fung

BEng (1999)
MPhil (2001)
PhD (2004)
Chief Technical Officer (CTO),
Sengital Limited

Professor Wong Pak Kin

BEng (1999)
Assistant Professor,
Department of Aerospace and
Mechanical Engineering,
The University of Arizona, USA



Dr. Dai Ruoli

MPhil (2004)
PhD (2007)
Chief Technology Officer,
Miteno Intelligence Tech, China

Professor Wang Hesheng

MPhil (2004)
PhD (2007)
Associate Professor, Department of Automation,
School of Electronic,
Information and Electrical Engineering,
Shanghai Jiao Tong University, China



Dr. Liang Jian

PhD (2006)
Senior Associate,
New Energy, Group Operations,
CLP Holdings Limited

Professor Fung Wai Keung

PhD (2001)
Assistant Professor,
Department of Electrical and
Computer Engineering,
University of Manitoba, Canada



Ms. Schmidt Ramona Carmen

BEng (2007)
Marketing Manager,
Wholesale Banking, Standard
Chartered Bank (Hong Kong) Limited

Dr. Chen Zhiyong

MPhil (2002)
PhD (2005)
Senior Lecturer,
School of Electrical Engineering and Computer Science
Faculty of Engineering and Built Environment,
The University of Newcastle, Australia



Professor Liu Lu

PhD (2008)
Assistant Professor,
Department of Information Physics
and Computing,
The University of Tokyo, Japan

Dr. Wong Tak Sing

BEng (2003)
Postdoctoral Fellow, Wyss
Institute for Biologically Inspired
Engineering
Harvard University, USA



Department of Systems Engineering and Engineering Management

Departments

History and Development

The Department of Systems Engineering and Engineering Management (SEEM) was established in the year 1991 (in the name of Systems Engineering) as the first of its kind in tertiary institutions in Hong Kong. In the same year, the department, Computer Science, Electronic Engineering and Information Engineering were brought together to form the Faculty of Engineering. SEEM has been growing steadily under the vigorous leadership of the Faculty in the past twenty years.

SEEM offers world-class educational and research programmes focused on information systems, operations research, optimization and quantitative decision making technologies, and their applications in engineering management, financial engineering and logistics and supply chain management. SEEM carries a **MISSION** to create and disseminate knowledge and technologies fundamental for the globalized economy - to derive and develop intelligence from information, to design and engineer systems, and to analyze and optimize financial and operational decisions.

SEEM has an active, energetic and dynamic team of faculty researchers of high caliber and considerable strengths, including 11 Professors, 2 Associate Professors, 5 Assistant Professors, a Research Assistant Professor and one Senior Instructor. Most of them are recognized world-class researchers and have achieved international stature in their respective specializations while the junior members uphold the great responsibilities of the sustainability of SEEM's philosophy in teaching and research.



Departments

Department of Systems Engineering and Engineering Management

Highlight of Research

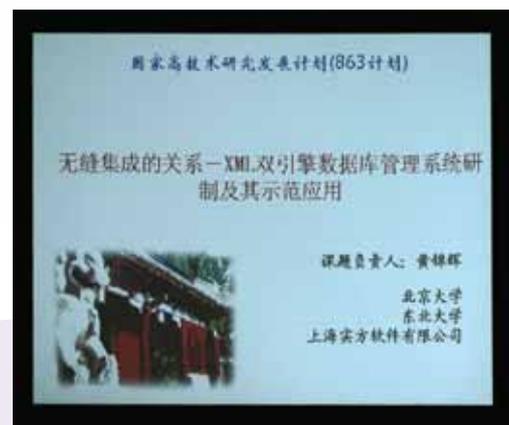
Members have been pursuing with vigor the highest standard of excellence in the SEEM strategic research areas, while their research interests span wide spectra from some classical challenges to certain of today's most exciting engineering and management subjects. Members' research outputs have both advanced the knowledge of their respective fields and benefited the practice of local and regional industries. The increasing number of publications in the top-tier journals and prestigious conferences and the outstanding Research Indexes achieved in 1999 and 2006 Research Assessment Exercise (RAE) of the Research Grant Council (RGC) are robust evidences of the uplifting of the impact of SEEM in the professional world. More than \$77 million competitive research funding has been awarded in the last twenty years. In 2006, the area of "Optimization and Operations Research" has been recognized by CUHK as one of its Areas of Strength (Scheme B) with an allocation of \$6M (\$1M per annum for 6 years). SEEM has been planning to further utilizing its unique strength in both operations research and information systems to explore cross-disciplinary research fields so as to increase the scale of its capability in developing decision making tools for engineering management at a system level. Some selected projects are highlighted below.

Artificial Intelligence Crime Analysis and Management System (AICAMS) was collaborated by SEEM and the Hong Kong Police Force (HKPF) initiated in May 1997 with a focus on applying knowledge engineering, AI, and map-based technologies for crime analysis and management, aiming to understand, develop and implement an advanced Information Technology System to combat the crime problems in HK and to understand the critical elements in the transfer of core technology from research to production, and the contribution of knowledge in the academic arena. The AICAMS approach was based on evolutionary knowledge engineering with active users' participation and feedback. Prototypes for problem solving were quickly developed to fulfill the user needs, with further research goals to be defined and tackled for system enhancements. AICAMS was supported by the CUHK Mainline Research Grant and Strategic Grant, an RGC Earmarked Grant and an allocation from HKPF. Professor K.P. Lam (PI) and his research team collaborated with the Information Technology Bureau of HKPF established the first three pilot sites at North Point, Sau Mau Ping, and Shatin police stations in line with a major station renovation programme in early 1999. They have also advised Unisys (China/HK) on the subsequent implementation for other police

stations since June 1999, till the project completion in early 2000 in implementing two components of the AICAMS project, FIT (Facial Identikit Tool) and FIK (Formation Information Kiosk), for over 50 police stations in HK. The rollout work of FIT and FIK was noted in the Hong Kong Yearbook 1999, under public order (information technology), p. 301.



The National 863 project "A Seamlessly Integrated Relational and XML Twin Database Management System" has been approved by Ministry of Science and Technology (MOST) in February 2009 of 3.53M RMB for 2 years. Professor Wong Kam Fai, in the capacity of Adjunct Professor at Peking University leads the entire project with research teams in Peking University, Northeastern University, Shanghai Shifang Software Company and CUHK. Professor Wong was allocated 40% of the total funding to support his research on Mainland. He also received additional supports of HK\$0.8M from CUHK Scheme D 973/863 Matching Funding Scheme and another HK\$0.8M matching from SEEM. The long term research collaboration of CUHK and Peking University in the area of high confidence technologies was recognized by the Ministry of Education (MoE) for establishing the Key Laboratory of High Confidence Software Technologies (Sub-Laboratory, CUHK) in December 2010. CUHK has allocated a concurrent HK\$150K funding support for the sub-laboratory's operation.



Departments

“RFID Traceability for Risk Management in Hospital” has been awarded the amount of HK\$11.508M in September 2009 by Innovation Technology Commission (ITC) and Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies (LSCM). The project is led by Professor Yan Houmin in collaborating with GS1 Hong Kong (a non-profit, industry led, global supply chain management standards-promoting organization) and Prince of Wales Hospital (PWH). This multi-disciplinary research team composes of Professor Fok Tai Fai (Dean of Medicine, CUHK), Professor Wu Ke Li (EE), Professor Lee Shui Shan, (Professor of Infectious Diseases, Stanley Ho Centre for Emerging Infectious Diseases, and Department of Microbiology), Professor Lau Wing Cheong (IE), Mr. K.K. Suen (GS1 Hong Kong), Professor Jeffery Yu (SEEM), Professor Cheng Hong (SEEM), and Dr. Dorbin Ng Tobun (SEEM). This project aims to enable risk management in hospital by developing low-cost sensor-integrated active radio frequency identification (RFID) technologies to track people movement, together with alerting and visualization systems to analyze the captured data. This research leverages active RFID tracking technologies to enhance the mechanism to prevent and control hospital-acquired infections and the preparedness for infectious disease outbreaks. The projected enhancement comes in three aspects: interaction traceability, real time tracking, and continuous monitoring. By automatically tracking and tracing all people inside a hospital using active RFID technologies, the traceability information will be able to provide a history of human interactivities, which is vital but currently unavailable data set to prove any medical hypothesis of how an infectious disease being spread in a hospital. A proven hypothesis will then become a resource to devise prevention and response plan for future outbreak.

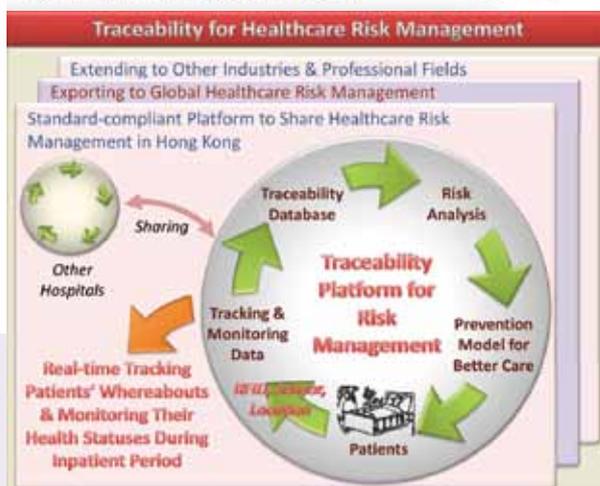


Now, the hospital knows ...

1. Patient A has fallen in Washroom
2. Patient B has heart problem in Bed #2
3. Wheelchair C is unoccupied inside Bed #1

Symbols:

- Active RFID Reader
- Active RFID Tag
- Radio Signal



Academic Programmes

SEEM is a nontraditional engineering programme, emphasizing an integration of engineering and management. The SEEM philosophy is to offer its students a well-rounded education so that they acquire both in-depth mastery of cutting-edge technical skills and a broad perspective on systems and management principles. The undergraduate programme is currently organized around three focal areas: Business Information Systems; Financial Engineering; and Logistics and Supply Chain Management. At the graduate level, SEEM offers research-based programmes leading to Master of Philosophy (MPhil) and Doctor of Philosophy (PhD). SEEM also offers three Master of Science (MSc) programmes (taught base). The MSc in SEEM launched in 1996. In 1998, the Faculty started to offer the M.Sc. in E-Commerce (Technologies) (operated by SEEM). It was renamed to MSc in E-Commerce and Logistics Technologies in 2006 and is now affiliated to SEEM since 2008. SEEM also offers an Executive MSc programme in Logistics and Supply Chain Management jointly with Tsinghua Graduate School at Shenzhen starting in 2004.

All teaching programmes in SEEM have maintained their selectivity and consistently attracted high-quality students. Scholarships have been offered to the very best students. There were over 2,500 students graduated from SEEM in the past two decades. Our graduates are competitive globally, possessing vision and entrepreneurial spirit, and equipped with the necessary knowledge and skills to be leaders in their fields. Training in systems engineering enables employability in various functional divisions and in all industries and government agencies, exposure to both technical and non-technical aspects of complicated systems and interdisciplinary problems, and career paths close to senior management. Words from alumni/students, for example, “A wide range of studies to tackle different types of jobs”, “We are exposed to a wide-range of skills and trainings” and “Applicable to daily life”, reveal that our education mission is on the right track.

『十年樹木百年樹人』 - It takes 10 years to grow a tree, while a sound education programme may require 10 times as long before it takes root. SEEM is young and energetic. SEEM is always well-prepared for future challenges including keeping our distinctive features visible and attractive in the broad-based admission after transforming into 334 curriculum in 2012 and exploring new research initiatives such as developing research in healthcare and service industry.

Departments

Department of Systems Engineering and Engineering Management

Distinguished Alumni



Professor Jason Choi Tsan Ming

BEng (1997)
MPhil (1999)
PhD (2002)
Associate Professor,
The Hong Kong Polytechnic University

Dr. Ren Yongjie

PhD (2001)
CEO,
Beijing BaseSoft Information
Technologies Inc., Beijing, China



Professor Jin Hanqing

PhD (2004)
Lecturer,
Mathematical Institute,
University of Oxford

Professor Song Dawei

PhD (2000)
Professor of Computing,
The Robert Gordon University, UK



Dr. Terrence Mak Sui Tung

BEng (2003)
MPhil (2005)
Lecturer, School of Electrical, Electronic
and Computer Engineering, Institute of
Neuroscience, Newcastle University

Dr. Jacky Wong Chi Fat

BEng (2000)
MPhil (2002)
PhD (2007)
Project Engineer,
FedEx Express



Mr. Benson Ng Hin Kwong

BEng (1996)
MPhil (1998)
Associate Director,
Ernst & Young

Mr. Alex Xu Chenyun

BEng (2008)
Senior Associate, Deals Advisory
PricewaterhouseCoopers



Professor Ada Ng Suk Fung

PhD (2002)
Lecturer in Logistics and Supply
Chain Management,
Institute of Transport and Logistics
Studies, University of Sydney

Dr. Xu Kui

PhD (2008)
Senior Research Engineer,
Robert Bosch LLC, (Research and
Technology Center, North America)

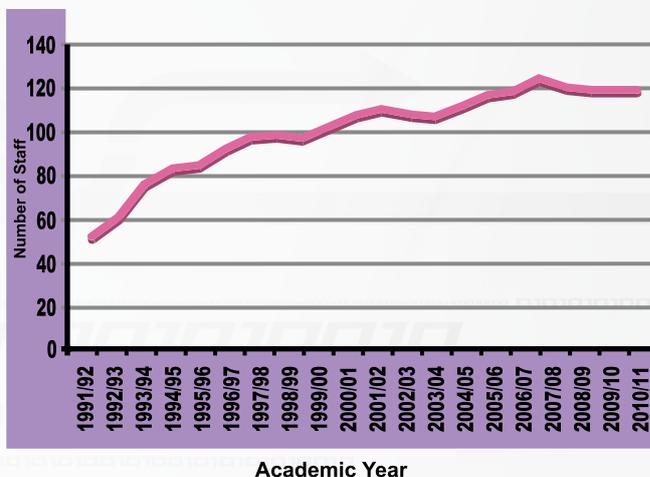


Figures and Facts

Figures and Facts on Academic Staff, Students Enrolment and Research Grants of the Faculty

Academic Staff

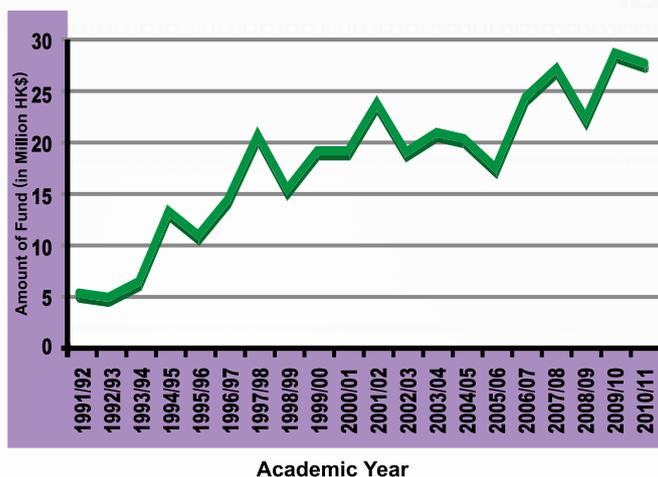
The number of academic of staff in the Faculty has increased steadily with the expansion of the Faculty in the past twenty years. Many of them have come from prestigious and leading universities around the world and have substantial teaching and industrial experience.



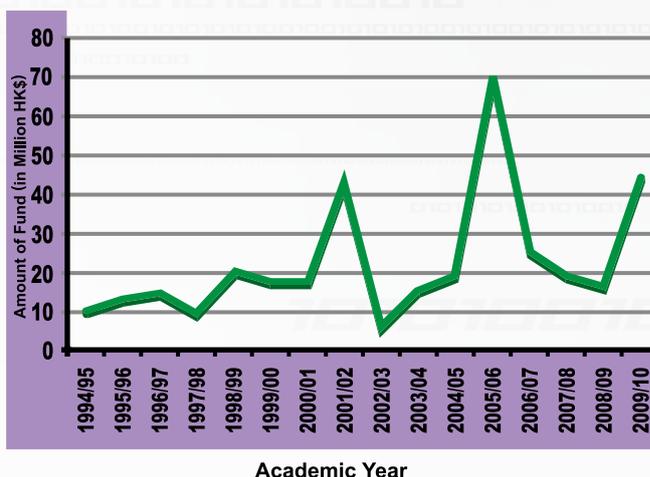
Research Grants Received

The faculty members have always been active in applying for competitive research grants. The following is a summary of the competitive Earmarked Research Grant and the Innovation and Technology Fund received by the Faculty from 1991 to 2011.

RGC General Research Fund Received



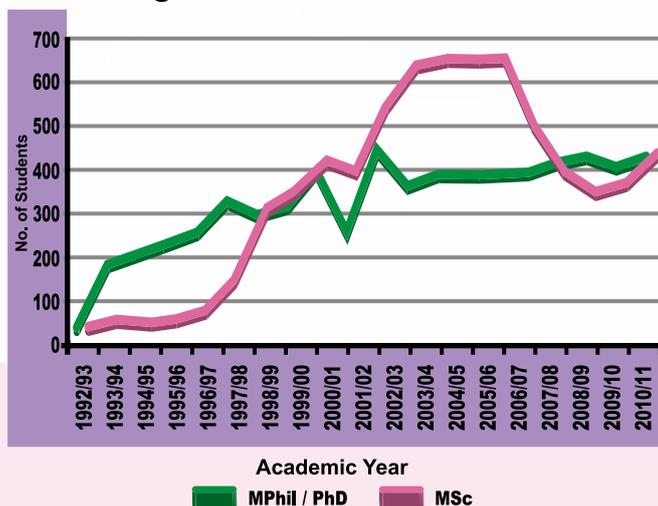
Innovation and Technology Fund Received



Student Enrolment

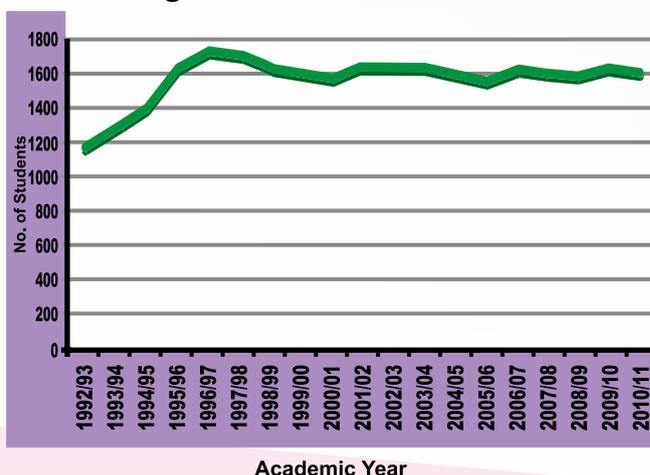
The number of postgraduate student enrolment of the Faculty from 1992/93 to 2010/11 academic year:

Postgraduate Student Enrolment



The number of undergraduate student enrolment of the Faculty from 1992/93 to 2010/11 academic year:

Undergraduate Student Enrolment



Faculty's Achievement



Nobel Laureate

Professor Sir Charles K. Kao,

the founder of Engineering Faculty of CUHK, has been awarded the 2009 Nobel Prize in Physics by the Royal Swedish Academy of Sciences for his "groundbreaking achievements concerning the transmission of light in fibers for optical communication" in 2009.



Turing Award Winner

Professor Andrew Yao Chi Chih,

the Distinguished Professor-at-Large (CSE), was awarded the A.M. Turing Award in 2000 for his contributions to the theory of computation, including the complexity-based theory of pseudorandom number generation, cryptography, and communication complexity. He is the first Asian laureate of the Turing Award since its establishment.



Member of the US National Academy of Engineering

Professor Wong Ching Ping

Dean of Engineering

was elected as the Member of the US National Academy of Engineering in 2000.



Member of Chinese Academy of Engineering

Professor Xu Yangsheng

was elected as the Member of the Chinese Academy of Engineering (Division of Information and Electronic Engineering) in 2007.



Croucher Senior Research Fellowship

Professor Raymond Yeung Wai Ho

was awarded the Croucher Senior Research Fellowship in 2000-2001.



Professor Zhou Xunyu

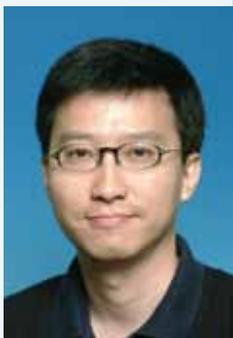
was awarded the Croucher Senior Research Fellowship in 2005-2006.



Professor Huang Jie

was awarded the Croucher Senior Research Fellowship in 2006-2007.

Croucher Senior Research Fellowship



Professor Michael Lyu Rung Tsong

was awarded the Croucher Senior Research Fellowship in 2008-2009.

Professor John Lui Chi Shing

was awarded the Croucher Senior Research Fellowship in 2010-2011.



ASME Fellowship



Professor Michael Wang Yu

was elected as the Fellow of the American Society of Mechanical Engineers (ASME) in 2005.

Professor Liao Wei Hsin

was elected as the Fellow of the American Society of Mechanical Engineers (ASME) for his significant contributions in smart structures and vibration technologies in 2009.

Professor Du Ruxu

was elected as the Fellow of the American Society of Mechanical Engineers (ASME) for his significant contributions in innovative machines and new methods for condition monitoring and fault diagnosis in 2009.



ACM Fellowship

Professor Andrew Yao Chi Chih,

the Distinguished Professor-at-Large (CSE) was awarded the Fellow of Association for Computing Machinery (ACM) for his significant research contributions in Computational Complexity, Analysis of Algorithms, Data Structures, Communication Complexity, and Cryptographic Protocols in 1995.

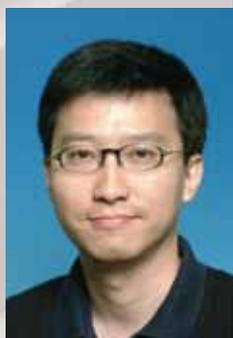
Professor Benjamin Wah Wan Sang

Provost of CUHK and Wei Lun Professor of Computer Science and Engineering

was elected as the Fellow of Association for Computing Machinery (ACM) for his leadership in the computer science community and contributions to system optimization in 2004.

Professor John Lui Chi Shing

was elected as the Fellow of Association for Computing Machinery (ACM) for his contributions to Stochastic Analysis of Parallel Storage and Communication Systems in 2009.



IFAC Fellowship

Professor Huang Jie

was elected as the Fellow of the International Federation of Automatic Control (IFAC) for his contributions in teaching and research on nonlinear control theory and design, and its applications to flight control and guidance, electro-mechanical systems, and neural systems.



IEEE Fellowship

In the past ten years, our incumbent professors were elected fellows of the prestigious Institute of Electrical and Electronics Engineers (IEEE) every year. With three more professors elected IEEE fellows in 2011, this brings the total number of IEEE fellows in the Faculty to 28, the highest among all local institutions.



Professor Sir Charles K. Kao

(Life Fellow)

Joined CUHK in 1987 / Awarded in 1979

For contributions to the practical use of optical waveguides for communications.



Professor Chen Tien Chi

Joined CUHK in 1979 / Awarded in 1977

For contributions to computer organization and multicomputer systems.



Professor Benjamin Wah Wan Sang

Provost of CUHK and Wei Lun Professor of Computer Science and Engineering

Joined CUHK in 1998 / Awarded in 1991

For contributions to the field of parallel processing.



Professor Victor Wei Keh Wei

Joined CUHK in 1994 / Awarded in 1995

For contributions to coding theory and its applications.



Professor Omar Wing

(Life Fellow)

Joined CUHK in 1974 / Awarded in 1973

For contributions to circuit theory and engineering education.



Professor Wong Chak Kuen

(Life Fellow)

Joined CUHK in 1995 / Awarded in 1985

For contributions to the theory of mass storage systems and to the analysis and design of computer algorithms.



Professor Wong Ching Ping

Dean of Engineering

Joined CUHK in 2010 / Awarded in 1992

For the development and applications of silicone polymers used in the packaging of electronics.



Professor Ngan King Ng

Joined CUHK in 2003 / Awarded in 2000

For contributions to the theory and applications of visual signal processing and communications.

IEEE Fellowship



Professor Xu Lei

Joined CUHK in 1993 / Awarded in 2001
For contributions to learning in neural networks.



Professor Wong Wing Shing

Joined CUHK in 1992 / Awarded in 2002
For contributions to estimation theory of nonlinear systems and application of system theory to communication and information processing problems.



Professor Xu Yangsheng

Joined CUHK in 1997 / Awarded in 2003
For contributions to the design and control of space robots and dynamically stabilized systems.



Professor Raymond Yeung Wai Ho

Joined CUHK in 1991 / Awarded in 2003
For contributions to network coding theory.



Professor Michael Lyu Rung Tsong

Joined CUHK in 1997 / Awarded in 2004
For contributions to software reliability engineering and software fault tolerance.



Professor Huang Jie

Joined CUHK in 1995 / Awarded in 2005
For contributions to nonlinear control theory and applications.



Professor Tony Lee Tong

Joined CUHK in 1993 / Awarded in 2005
For contributions to high-speed scalable packet switching technology for broadband telecommunications networks.



Professor Zhou Xunyu

Joined CUHK in 1993 / Awarded in 2005
For contributions to the theory and applications of stochastic control.



Professor Robert Li Shuo Yen

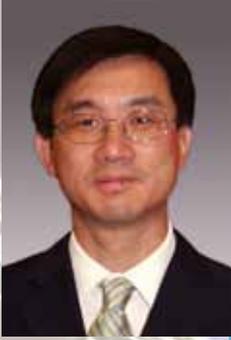
Joined CUHK in 1989 / Awarded in 2007
For contributions to network coding and switching theories.



Professor Wang Jun

Joined CUHK in 1995 / Awarded in 2007
For contributions to recurrent neural networks for optimization and engineering applications.

IEEE Fellowship



Professor Michael Wang Yu

Joined CUHK in 1999 / Awarded in 2007

For contributions to frictional contact and impact modeling, and robotic workholding and fixturing for manufacturing automation.



Professor Zhang Yuan Ting

Joined CUHK in 1994 / Awarded in 2007

For contributions to the field of wearable devices and signal processing algorithms for mobile healthcare.



Professor Chiu Dah Ming

Joined CUHK in 2002 / Awarded in 2008

For contributions to distributed resource allocation algorithms in computer networks.



Professor Max Meng Qing Hu

Joined CUHK in 2001 / Awarded in 2008

For contributions to medical robotics.



Professor Liu Yun Hui

Joined CUHK in 1995 / Awarded in 2009

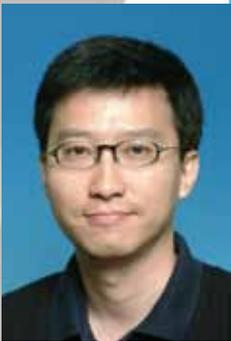
For contributions to robotic multi-fingered grasping and adaptive visual servo systems.



Professor Sean Tang Xiaoou

Joined CUHK in 1998 / Awarded in 2009

For contributions to pattern recognition and video processing.



Professor John Lui Chi Shing

Joined CUHK in 1993 / Awarded in 2010

For contributions to performance modeling and analysis of storage communication systems and peer-to-peer networks.



Professor Ching Pak Chung, BBS

Joined CUHK in 1984 / Awarded in 2011

For leadership in engineering education and accreditation.



Professor Li Wen Jung

Joined CUHK in 1997 / Awarded in 2011

For contributions in low-power integrated nanotube sensors and devices.



Professor Wu Ke Li

Joined CUHK in 1999 / Awarded in 2011

For contributions to non-planar microwave filters and embedded radio frequency passive circuits.

Highlights of Awards or Prizes Received by Faculty Members

2000

- Professor **Chan Ho Leung** (IE) was awarded the Croucher Foundation Fellowship for 2000-2001.
- Professor **Ching Pak Chung**, BBS (EE) was awarded the IEEE Third Millennium Medal in 2000.
- Professor **Tony Lee Tong** (IE) received the National Natural Science Award from China for his contribution to ATM network research in 2000.
- Professor **Leung Kwong Sak** (CSE) was awarded the Fellow of the Hong Kong Computer Society in 2000.
- Professor **Liu Yun Hui** (MAE) was ranked the Third Place of an Outstanding Paper of the IEEE First Electro-Information Technology Conference, Chicago, June 8-11, 2000 with his paper "Real-time Haptic Feedback in Internet-based Telerobotic Operation".
- Professor **David Wu Yu Liang** (CSE) received an Honorable Mention Award with one paper in the IEEE/ACM International Conference on VLSI Design in Calcutta in 2000.
- Professor **Zhang Shuzhong** (SEEM) was listed Number 8 of Top 40 Dutch Economists in 2000.
- Professor **Liao Wei Hsin** (MAE) and his students **Alan Lam Hiu Fung** and **Lai Chun Yu** were awarded the Gold Award in the Best Automobile Project of the Year 2000 Competition organized by the Institute of the Motor Industry Hong Kong in 2000 with the project "Automobile Suspension Systems with MR Fluid Dampers".

2001

- Professor **Michael Wang Yu** (MAE) received the "Overseas Young Investigator Collaboration Award" in the Natural Science Foundation of China (NSFC) in 2001.
- Professor **Wong Po Choi** (IE) was awarded the Medal of Honor by the Chief Executive of the HKSAR for his contribution to the promotion of IT in education in 2001.
- Professor **Xu Lei** (CSE) was elected to be a Governor on the Board of Governors, International Neural Networks Society in 2001; was elected Member of European Academy of Sciences, Fellow of International Association of Pattern Recognition and Governor on the Board of Governors of the International Neural Networks Society in 2001-2002.
- Professor **Zhou Xunyu** (SEEM) won the 2001 Operations Research Meritorious Service Award, INFORMS in 2001.
- Professor **Michael Wang Yu** (MAE) and Professor D. Pelinescu (non-CUHK) received the Kayamori and Best Paper Award of 2001 IEEE International Conference on Robotics and Automation (ICRA 2001) in Korea in 2001.

2002

- Professor **Lee Tan** (EE) developed the CUTalk (Cantonese TTS Engine) was elected by the Hong Kong Blind Union as one of the ten most outstanding events for the visually impaired in 2002.
- Professor **Li Wen Jung** (MAE) was selected as a Distinguished Overseas Scholar by the Chinese Academy of Sciences in 2002.
- Professor **Xu Yangsheng** (MAE) was listed as one of four finalists for the World Discover Awards for technological innovation in robotics (robotics category) in 2002.

2003

- Professor **Tsang Hon Ki** (EE) obtained a Bookham's Inventor Award for his patent submission on Wavelength Measurement (patent owned by the Bookham Technology) in 2003.
- Professor **Wong Kam Fai** (SEEM) won the 2003 World Summit Award in "Asia Best Practice in e-Content", for WiseNews, a bi-lingual news information processing system, based on the IPOC technology. This Award was supported by the United Nation in 2003.
- Professor **Yang Yang** (IE) was awarded the 2003 Young Scientist

Award in Physical/Mathematical Science presented by the Hong Kong Institution of Science in 2003.

- The team of Professor **Du Ruxu**, Dr. **Jin Zhen Lin**, Dr. **Guo Wei Zhong** and **He Kai** (MAE) won the Best Paper Award at the 17th Chinese National Conference on Mechanics and Design in 2003.
- Professor **Huang Jie** and **Chen Zhiyong** (MAE) were listed on the Final List of the Best Paper Award of 2003 Chinese Control Conference in 2003.
- Professor **Xu Yangsheng** and **Ou Yongsheng** (MAE) received the Best Paper Award in 2003 IEEE Conference on Intelligent Automation for their paper "Dependency Analysis of Input Selection for Learning Human Control Strategy" in 2003.
- Professors **David Yao Dawei**, **Zhang Shuzhong** and **Zhou Xunyu** (SEEM) co-authored the paper "Stochastic Linear-Quadratic Control via Semidefinite Programming", SIAM Journal on Control and Optimization 40, 801-823, 2001, was awarded the SIAM Outstanding Paper Prizes 2003.

2004

- Professor **Cai Xiaoqiang** (SEEM) received the National Outstanding Young Scientist Award (Cat. B: HK & Macau) from National Natural Science Foundation of China in 2004.
- Professor **Du Ruxu** (MAE) received the CLP (China Light and Power Holdings) Renewable Energy Award (HK\$250,000) in 2004.
- Professor **Charlie Wang Chang Ling** (MAE) was listed on the Final List of the 2004 Hong Kong Young Scientist Award (Hong Kong Institution of Science).
- Professor **Michael Wang Yu** (MAE) received the Science and Technology Development Award (Second Class), The Ministry of Education, China in 2004.
- Professor **Victor Wei Keh Wei** (IE) received ISI Highly Cited: Top 250 Most Cited Computer Scientists in last 20 years, by SCI-JCR (Science Citation Index – Journal Citation Report) in 2004.
- Professor **Yan Houmin** (SEEM) won the Wickham-Skinner Best Paper Award for his paper "Coordination of a Supply Chain with Risk-Averse Agents" (co-authored with Xianghua Gan and Suresh P Sethi) at the MOMS Cancun meeting in 2004.
- Professor **Yue On Ching** (IE) and his former colleagues at Bell Labs obtained a US patent for improving the VoIP service quality. It was named one of 2003's top five patented new technologies by the prominent magazine MIT Technology Review in 2004.
- Professor **Huang Jie** and **Chen Zhiyong** (MAE) received the Best Paper Award at the Eighth International Conference on Control, Automation, Robotics and Vision (ICRACV 2004), Kunming, China (2004).
- Professor **Li Wen Jung** and **King Lai Wai Chiu** (MAE) won the Best Conference Paper Award at the 2004 International Conference on Intelligent Mechatronics and Automation for their work on "Automated Assembly of MEMS Mirrors" in 2004.

- Professor **Xu Yangsheng**, Dr. **Ge Ming** and Professor **Du Ruxu** (MAE) were selected as the Finalist of the ICRA Best Conference Paper Award, IEEE 2004 International Conference on Robotics and Automation, New Orleans, LA, USA (2004) for their paper "A Real-Time Monitoring and Diagnosis System in Manufacturing Automation".

2005

- Professor **Huang Jie** (MAE) received the Distinguished Lecturer of IEEE Control Systems Society (2005-2008) in 2005.
- Professor **Ng Chi Kong** (SEEM) won the 2003 CUHK Young Scholars Dissertation Awards in 2005.
- Professor **Sean Tang Xiaouu** (IE) was nominated as the Associated Editor of the IEEE Transaction on Pattern Analysis and Machine Intelligence (PAMI) in 2005.
- Professor **Michael Wang Yu** (MAE) was awarded the Chang Jiang (Cheung Kong) Scholar (長江學者講座教授) by the Ministry of Education (PRC) and Li Ka Shing Foundation (Hong Kong) in 2005.
- Professor **David Yao Dawei** (SEEM) was elected as the INFORMS Fellow in 2005.

- Professor **Yue On Ching** (IE) was elected as the HKIE Fellow in 2005.
- Professor **Philip Leong Heng Wai, Chow Chun Tak** and **Mandy Tsui Lai Suen** (CSE) won the Best Paper Award at the International Conference on Field Programmable Technology in Singapore for their paper "Dynamic Voltage Scaling for Commercial FPGAs" in 2005.
- Professor **Leung Ho Fung** and **Lam Ka Man** (CSE) received the Best Paper Award in the 8th Pacific Rim International Workshop on Multi-Agents, PRIMA 2005 for their paper "Risk Strategies and Risk Strategy Equilibrium in Agent Interactions Modeled as Normal Repeated 2x2 Risk Games" in 2005.
- Professor **Robert Li Shuo Yen** and Professor **Raymond Yeung Wai Ho** (IE) together with Dr. **Cai Ning** won the 2005 IEEE Information Theory Society Best Paper Award for their paper "Linear Network Coding" at the 2005 IEEE International Symposium on Information Theory held in Adelaide, Australia (2005).
- Professor **Wong Tien Tsin** and Professor **Heng Pheng Ann** (CSE) won the Best Paper Award of the "IEEE" Transactions on Multimedia, 2005" in 2005.
- Professor **Yan Houmin** and Dr. **Tan Sitong** (SEEM) received the Best Paper Award for the focus issues on Operations Engineering 2003-04 for their paper "Designing an Assembly Process with Stochastic Material Arrivals" in 2005.

2006

- Professor **Hui Kin Chuen** (MAE) was elected as the HKIE Fellow in 2006.
- Professor **Robert Li Shuo Yen** (IE) was awarded the Outstanding Patent Prize (優質專利獎) by the Industrial Technology Research Institute of Taiwan on 2006.
- Professor **William Wang Shi Yuan** (EE) was awarded a fellowship by the International Institute of Advanced Studies (IIAS) for 2006-2007.
- Professor **Michael Wang Yu** (MAE) was elected as the HKIE Fellow in 2006.
- Professor **Wong Kam Fai** (SEEM) received the Innovation Award, China Computer Federation in 2006; CUHK is the only university outside mainland China to win the award.
- Professor **Xu Yangsheng** (MAE) received the Best Research Project Award in Chinese National Hi-Tech Exhibition in 2006.
- Professor **Raymond Yeung Wai Ho** (IE) received the Friedrich Wilhelm Bessel Research Award in 2006.
- Professor **Angela Zhang Yingjun** (IE) won the 2006 Young Scientist Award in the area of Engineering Science, organized and granted by the Hong Kong Institution of Science in 2006.
- Professor **Zhang Yuan Ting** (EE) received the IEEE-EMBS Service Award: "For exceptional and meritorious service to the Engineering in Medicine and Biology Society (EMBS) with outstanding contributions to the development and promotion of EMBS conferences, educational activities, and international collaboration" in 2006. He was also elected as the Fellow of the International Academy of Medical and Biological Engineering (FIAMBE), which was inducted at the 2006 World Congress on Biomedical Engineering and Medical Physics in 2006; was elected as the Fellow of The American Institute for Medical and Biological Engineering in 2006.
- Professor **Du Ruxu** and Dr. **Liang Jian** (MAE) received the "Best of the Best Awards – Most Innovative Project Award" for their project of "A New Absorption Air-Conditioner Powered by Low Quality Renewable Energy" supported by CLP Energy Innovation Fund, CLP Power Hong Kong Ltd. in 2006.
- Professor **Liao Wei Hsin** and **Lau Yiu Kee** (MAE) received the T A Stewart-Dyer/F H Trevithick Prize 2005 for their paper "Design and Analysis of Magnetorheological Dampers for Train Suspension" offered by the Railway Division of the Institution of Mechanical Engineers in 2006.

2007

- Professor **Rosanna Chan Yuen Yan** (IE) was awarded the 2007 new Faculty Fellow by the Center for the Advancement and Scholarship of Engineering Education, National Academy of Engineering in 2007.

- Professor **Heng Pheng Ann** (CSE) was appointed the Chang Jiang Scholar by the Ministry of Education, China, and University of Electronic Science and Technology of China (March 2007-February 2010) in 2007.
- Professor **Michael Lyu Rung Tsong** (CSE) was elected as the Fellow of the American Association for the Advancement of Science (AAAS) in 2007; was appointed the Chang Jiang Chair Professor by the Ministry of Education, China, and National University of Defense Technology (March 2007 – February 2010) in 2007.
- Professor **Sidharth Jaggi** (IE) was offered the Donald D. Harrington Faculty Fellowship (2007-2008) by the University of Texas at Austin in 2007.
- Professor **Michael Wang Yu** (MAE) was awarded the Distinguished Lecturer of IEEE Robotics and Automation Society (2006-2007, 2008-2010); was awarded the 2007 Distinguished Alumnus of the School of Mechanical Engineering, Xi'an Jiaotong University in Xi'an, China in 2007; won the Best Conference Paper Award in the 2007 International CAD Conference and Exhibition (CAD2007) for his paper "A CAD Modeling System for Heterogeneous Objects" in Hawaii, USA in 2007.
- Professor **Xu Lei** (CSE) was appointed the Chang Jiang Chair Professor by the Ministry of Education, China, and Peking University (March 2007 – February 2010) in 2007.

2008

- Professor **Lau Lap Chi** (CSE) received the 2007 Doctoral Prize of the Canadian Mathematical Society (CMS) in 2008.
- Professor **Patrick Lee Pak Ching** (CSE) received the Best Paper award in the ACM CoNext 2008.
- Professor **Charlie Wang Chang Ling** (MAE) won the Best Paper Award at the 28th American Society of Mechanical Engineers (ASME) Computers and Information in Engineering Conference in New York City, USA in 2008.
- Professor **Michael Wang Yu** (MAE) was appointed the Distinguished Overseas Scholar by the Chinese Academy of Sciences, China in 2008.
- Professor **Wong Po Choi** (IE) received the Outstanding Project Award by the Quality Education Fund for his project "VChina" in 2008.
- Professor **Wu Ke Li** (EE) won the Asia-Pacific Microwave Conference (APMC) Prize in the 2008 Asia-Pacific Microwave Conference in Hong Kong in 2008.
- Professor **Xu Yangsheng** (MAE) received the Robotic Drama Award, Robotic Waiter Award, Dancing Robot Award and Household Surveillance Robot Award in the 10th China Hi-tech Fair in 2008.
- Professor **Zhang Shengyu** (CSE) won the Best Paper Award in the 35th International Colloquium on Automata, Languages and Programming (ICALP) for his work "Making Classical Honest Verifier Zero Knowledge Protocols Secure against Quantum Attacks" in 2008.
- Dr. **Guan Mingjie** and Professor **Liao Wei Hsin** (MAE) won the Best Paper Award in Structures of the American Society of Mechanical Engineers (ASME) in 2008.
- Professor **Jeffrey Yu Xu** (SEEM) together with the co-authors **Yang Chi, Liu Chengfei, Li Jianxin** and **Wang Junhu** won the Computing Research & Education 2008 Best Paper Award in the Australasian Database Conference (ADC 2008) for their paper "Semantics Based Buffer Reduction for Queries over XML Data Streams" in 2008.

2009

- Professor **Chen Minghua** (IE) received the IEEE Transactions on Multimedia 2009 Prize Paper Award for his paper "Multiple TFRC Connections Based Rate Control for Wireless Networks" in 2009; received the Best Paper Award in the ICME 2009 for his paper "Multi-rate Peer-to-Peer Video Conferencing: A Distributed Approach Using Scalable Coding" in 2009.
- Professor **Ada Fu Wai Chee** (CSE) received the IEEE ICDE Influential Paper Award in the 25th IEEE International Conference on Data Engineering (ICDE) in 2009.
- Professor **Huang Jianwei** (IE) received the 2009 IEEE ComSoc Asia-Pacific Outstanding Young Researcher Award in 2009; won the Best Paper Award at the 15th Asia-Pacific Conference on Communications 2009 for his paper "Revenue Management for Cognitive Spectrum

Underlay Networks: An Interference Elasticity Perspective" in 2009.

- Professor **Hui Kin Chuen** (MAE) received the 2008 Best Digital Entertainment (Digital Entertainment Software) Certificate of Merit of Hong Kong ICT Awards for his project "Sustainability Voyage" in 2009.
- Professor **Helen Meng Mei Ling** (SEEM) won the 2nd Class Technology Progress Award of the Higher Education Outstanding Scientific Research Output Awards 2009 by the Ministry of Education of China (MoE) for her project "Multimodal User Interactions with Multilingual Speech and Language Technologies – Research and Applications" in 2009.
- Professor **Charlie Wang Chang Ling** (MAE) won the 2008 Best Lifestyle Bronze Award (Work Life and Professional Services) of the Hong Kong ICT Awards for his project "From Styling Design to Fabricated Wetsuit" in 2009; won the Idea Award - 2nd Place for his research "GPU Based Solid Modeler for Complex Objects" at the CAD'09 in Reno, Nevada in June 2009; won the 2009 ASME CIE (Computers and Information in Engineering) Young Engineer Award in 2009.
- Professor **Michael Wang Yu** (MAE) won the Best Paper Award in Information at the 2009 IEEE International Conference on Information and Automation in Zhuhai/Macau, China in 2009.
- Dr. **Xiao Xiaokui** (CSE) was the Winner of the Physical/Mathematical Science for 2009 Young Scientist Awards by Hong Kong Institution of Science in 2009.
- Professor **Xu Jian Bin** (EE) was selected as the Member of International Advisory Committee of International Conference on Nanoscience and Technology, China 2009 (ChinaNano 2009).
- Professor **Raymond Yeung Wai Ho** (IE) was named the Changjiang Chair Professor by the Xidian University in 2009.
- Professor **Zhang Yuan Ting** (EE) received the Best Lifestyle Gold Award (Home Life and Healthy Living) from the Hong Kong ICT Awards 2008 for his papers "Non-contact Electro-cardiogram Monitoring Bedsheet" and "Health-shirt" in 2009.
- Professor **Max Meng Qing Hu** (EE) together with the co-authors **Hu Chao, Liu Li, Pan Yinzi** and **Liu Zhiyong**, from the Center for Intelligent Sensing, CAS/CUHK Shenzhen Institute of Advanced Integration Technology; received the Best Conference Paper Award at the 2009 IEEE International Conference on Information and Automation for their paper "Image Representation and Compression for Capsule Endoscope Robot" in June 2009.
- Professor **Sean Tang Xiaou** and **He Kaiming** (IE) won the Best Academic Paper Award at the 2009 IEEE Conference on Computer Vision and Pattern Recognition (CVPR) for their paper "Single Image Haze Removal Using Dark Channel Prior" in 2009.
- Professor **Peter Yum Tak Shing** and **Zhu Lei** (IE) won the Best Paper Award at the 12th ACM International Conference on Modeling Analysis and Simulation of Wireless and Mobile Systems for their paper "The Optimization of Framed Aloha Based RFID Algorithms" in 2009.
- Professor **Zhang Shuzhong** (SEEM) together with Professor **Luo Zhi Quan**, Tom from the University of Minnesota, USA; won the 2009 IEEE Signal Processing Society Best Paper Award for their paper "Dynamic Spectrum Management: Complexity and Duality" in 2009.

2010

- Professor **Ching Pak Chung**, BBS (EE) was awarded the Bronze Bauhinia Star (BBS) by the HKSAR Government for his contributions and services to the Hong Kong community in 2010.
- Professor **Ronald Chung Chi Kit** (MAE) was elected as the HKIE Fellow in 2010.
- Professor **Du Ruxu** was awarded the Best postgraduate supervisor within Canton Province in 2010.
- Professor **Huang Jie** (MAE) received the 2010 State Natural Science Award (2nd Class) for his project "Nonlinear Output Regulation Problem and the Internal Model Principle" in 2010.
- Professor **Michael Lyu Rung Tsong** (CSE) was co-awarded the 2010 IEEE Reliability Society Engineer of the Year Award for

his distinguished achievements in software reliability modeling, measurement, and engineering in 2010.

- Professor **Anthony So Man Cho** (SEEM) won the 2010 INFORMS Optimization Society Young Researcher Prize in 2010.
- Professor **Charlie Wang Chang Ling** (MAE) received the CAD Computer Aided Designed Top Cited Article 2005-2010 for his paper "Parameterization and Parametric Design of Mannequins" in August 2010.
- Professor **William Wang Shi Yuan** (EE) received the Golden Language Award from the Taiwan University of Science and Technology in 2010.
- Professor **Jeffrey Yu Xu** (SEEM) won the 2010 SIAM International Conference on Data Mining (SDM'2010) Best Paper Award for his paper "Fast Single-Pair SimRank Computation" in April 2010.
- Professor **Huang Jianwei** and Dr. **Hou Fen** (IE) won the Best Paper Award at the IEEE GLOBECOM 2010 for their paper "Dynamic Channel Selection in Cognitive Radio Network with Channel Heterogeneity" in September 2010.
- Professor **Michael Lyu Rung Tsong** and **Zheng Zibin** (CSE) won the First Hong Kong Winners of the ACM SIGSOFT Distinguished Paper Award at the 32nd ACM/IEEE International Conference on Software Engineering (ICSE) 2010 in 2010.
- **Pan Qi**, Professor **Cheng Hong, Wu Di**, Professor **Jeffrey Yu Xu** and Professor **Ke Yiping** (SEEM) won the Best Paper Award at the Australasian Database Conference (ADC) Computing Research & Education 2010 for their paper "Stock Risk Mining by News" in January 2010.
- **Wu Di**, Professor **Ke Yiping** and Professor **Jeffrey Yu Xu** (SEEM) won the 2010 Database Systems for Advanced Applications (DASFAA) Best Paper Award in April 2010.
- Professor **Zhang Shuzhong** and Professor **Tom Luo Zhi Quan** (SEEM) won the 2009 IEEE Signal Processing Society Best Paper Award for their paper "Dynamic Spectrum Management: Complexity and Duality" at ICASSP 2010 in Dallas in 2010.

2011

- Professor **Helen Meng Mei Ling** (SEEM) and her research team received the Best Oral Paper Award in APSIPA 2010.
- Professor **Wang Xiaogang** (EE) received the Outstanding Young Researcher in Automatic Human Behaviour Analysis Award.
- Professor **Wong Kam Fai** (SEEM) received the Medal of Honor by the Chief Executive of the HKSAR for his valuable contribution to the development of Information and Communications Technology in 2011.
- **Huang Pu**, Professor **Charlie Wang Chang Ling** (MAE), and Professor Chen Yong received the Prakash Krishnaswami CAPPD Best Paper Award for the paper entitled "Self-Intersection Free and Topologically Faithful Slicing of Implicit Solid" at the ASME IDETC/CIE 2011 Conference, 31th Computers and Information in Engineering Conference, Washington, DC, USA, in 2011.
- Dr. **Lam Tin Lun**, Dr. **Qian Huihuan** and Professor **Xu Yangsheng** (MAE) were the Winner of the 2011 TMECH Best Paper Award for the paper entitled "Omnidirectional Steering Interface and Control for a Four Wheel Independent Steering Vehicle" in 2011.
- Professor **Angela Zhang Yingjun**, her PhD student Dr. **Qian Liping**, and Professor **Huang Jianwei** (IE) won the prestigious IEEE Marconi Prize Paper Award in Wireless Communications for their paper entitled "Achieving Global Optimal Solution of Non-Convex Power Control Problems".

Highlights of Awards and Prizes Received by Students

2000

- **Cheung Man Hong** (IE) received the top honour among 108 participating students, to have been named in the annual World Wide Lucent Technologies Scholars Scheme in 2000.
- **Bruce Tong Kwong Bun** (IE) won the 1st Prize in the Computer Chinese Checkers Competition of the ACM (Hong Kong Chapter) in 2000.
- **Yip Lung** (EE) won the 1st Prize in the Student Paper Competition at IEEE Asia-Pacific Conference on Biomedical Engineering in 2000.
- The team of CSE students (**Chan Chi Bun, Cheng Chee Kit, Lau Chi Fai, and Lo Wai Hang**) won the 3rd Place in the South Eastern Asian Region Computer Confederation 2000 Micro-Mouse Competition in Philippine in November, 2000.
- **Chan Kwong Wing** and **Wong Leung Chung** (CSE) won the Gold Prize in the Mobile Multimedia Communications Design Contest (Open Category) organized by the Hong Kong Institute of Engineers in 2000.
- The team of IE students (**Chan Pui Chung, Shum Kwan, Hui Ka Yu, Lau Tsz Kit, and Lin Wing Kai**) won the Bronze Awards in two different categories of the Mobile Multimedia Communications Design Contest 2000 organized by the Hong Kong Institute of Engineers in 2000.
- The team of IE students (**Choi Yau Chi, Ho Tze Hang, Lee Pak Ching and Ng Cho Yiu**) won the 3rd Prize in the ACM Hong Kong Chapter Scholastic Programming Contest in 2000. **Fung Kar Man, Lai Wai Chiu**, Professor **Li Wen Jung**, and Professor **Liu Yun Hui** (ACAE) won the Best Student Paper Award in the 2000 International Conference on Information Society in the 21st Century: Emerging Technologies and New Challenges.
- The team of IE students (**Hui Ka Yu, Lam Lok Kwan and Lau Tsz Kit**) won the 1st Prize and the Best content Award in the Open Category of the Web Design Competition organized jointly by the Business and Services Promotion Unit of the Financial Secretary's Office and the South China Morning Post in 2000.
- **Alan Lam Hiu Fung** and **Lai Chun Yu** (MAE) were awarded the Gold Award in the Best Automobile Project of the year 2000 Competition organized by the Institute of the Motor Industry Hong Kong (IMIHK) with the Project "Automobile Suspension Systems with MR Fluid Dampers".

2001

- **Cheung Hoi Pang** (IE) won the Young Inventors Awards 2001.
- **Cheung Man Hong** (IE) was named the Goldman Sachs Global Leader for 2001.
- **Choi Tsan Ming** (SEEM) won the 1st Runner-up Prize in IEE HK Younger Member Section Paper Contest 2001 in October 2001.
- **Fung Chun Kan** (CSE) participated in the HSBC Young IT Entrepreneur Awards Competition and was awarded the Certificate of Excellence in 2001.
- **Raymond Lam Hiu Wai** (MAE) won the 3rd Prize in the IEEE Hong Kong Section 2001 Student Paper Contest in 2001.
- **Leung Wing Yan** (EE) won the 1st Prize for her research paper in the 2nd IEEE Hong Kong MTT/AP/LEOS Postgraduate Conference in 2001.
- **Sung On Loy** (IE) and his team won the Championship of the Young Entrepreneurs Development Council E-Challenge 2001.
- **Bruce Tong Kwong Bun** (IE) won the 1st Prize in the Computer Chinese Checkers Competition of the ACM (Hong Kong Chapter) in 2001.
- **Bruce Tong Kwong Bun** and **Cheng Yuen Fung** (IE) was awarded the Merit Prize in a Basic Law Web Page Design Competition organized by the Home Affairs Bureau of the HKSAR in 2001.
- **Victor Wong Tak Sing** (MAE) won the Lucent Global Science Scholars Award 2001 in 2001.
- The CSE Programming Team (**Lau Chi Fai, Leung Ming Sum, Yan On Sheung, Yeung Hoi Wo and Yeung Tak Shing**) won the Championship in the ACM Collegiate Programming Contest – IT Contest in Hong Kong in 2001.
- The team of CSE students (**Chan Chi Hang, Li Kwok Ching and Liu Yun Kai**) won the Championship of the HK Collegiate Programming Competition in 2001.
- The team of CSE staff and student (**Chan Pik Wah, Ngai Cheuk Han and Sam Sze Kwan Shan**) won the Silver Award of the HK Java 2 Micro Edition-based Application (J2ME) – Open Competition in 2001.

2002

- **Chan Kwok Po** (EE) won the 2nd Prize for his paper presented in the 3rd IEEE Hong Kong AP/MTT/LEOS Postgraduate Conference in 2002.
- **Ho Ying Fai** (IE) was awarded IT Fellow for 2002-2003 T.Y. Wong Innovation & Entrepreneurial Fellowship in 2002.
- **Lam Ping Fai** (IE) won the Championship of the Scholastic Programme Contest of the ACM Hong Kong Chapter in 2002.
- **Lau Kwok Kei** (IE) was awarded the HKIE Scholar 2000/2001 in February, 2002; was awarded the Goldman Sachs Global Leader by the Goldman Sachs Foundation and the Institute of International Education in 2002.

- **Lau Yiu Kee** (MAE) won the Best Final Year Project 2001/02 jointly awarded by HKIE, ASME HK Section, and IMechE HK Branch in 2002.
- **Lee Ka Lun** (EE) won the 2nd Prize for his paper presented in the 3rd IEEE Hong Kong AP/MTT/LEOS Postgraduate Conference in 2002.
- **Leung Ching Man** (IE) was awarded the 2002 Lucent Global Science Scholar from Hong Kong in 2002.
- **Lin Wing Yee** (EE) was selected as one of the final teams for the SmartApps-to-go Competition in 2002.
- **Ou Yang Sheng** (MAE) received the "Student Author Scholarships" in the IEEE International Conference on Robotics and Automation (ICRA 2002) in 2002.
- **Sze Kwan Shan** (CSE) won the 1st Prize (Professional Category) in the Microsoft Web Services Xcellence Award Competition in 2002.
- **Bruce Tong Kwong Bun** (IE) won the championship of the 2002 ACM Hong Kong Chapter Computer Chinese Checkers Competition in 2002.
- **Xue Kun** (EE) won the Best Poster Presentation Award in the National Conference on STM and related techniques in November 2002.
- Dr. **Yang Yang** (IE) won the 1st prize in IEEE HK Section Postgraduate Student Paper Contest 2001; received honorable mention on the 2nd ACM Hong Kong Postgraduate Research Day in 2002; won the 2nd prize in IEEE (Region 10) Postgraduate Student Paper Contest 2002.
- The team of CSE students (**Chan Pik Wah, Leung Pui Yin, Ngai Cheuk Han and Lo Man Kit**) won the Best .NET Application of the Year Award and Most Innovative Application Award in the Microsoft Web Services Xcellence Award Competition (Student Category) in 2002.
- The team of CSE students (**Chan Siu On, Chan Siu Man and Lau Chi Fai**) won the Gold Medal (3rd place) of the ACM International Collegiate Programming Contest (Xian Regional) in 2002.
- The team of IE students (**Chan Chi Pan, Lam Ping Fai and Ng Cho Yiu**) won the 1st and 3rd places for the Champion of the ACM Hong Kong Chapter Scholastic Programming Contest 2002.
- The team of IE students (**Ho Tsz Hang, Lee Kai Yip and Ng Tin Yu**) won the 3rd best team for the Champion of the ACM Hong Kong Chapter Scholastic Programming Contest in 2002.

2003

- **Au Yeung Ching Man** (IE) was awarded the Goldman Sachs Global Leaders Award (2003) by the Goldman Sachs Foundation and the Institute of International Education.
- **Chan Ho Yin** (MAE) and Professor **Li Wen Jung** won the Best Conference Paper Award; Finalist, Best Student Paper; Finalist, Ben Wegbreit Best Manipulation Paper, at the IEEE International Conference on Robotics and Automation (ICRA 2003) for their paper "A Thermally Actuated Polymer Micro Robotic Gripper for Manipulation of Biological Cells" in 2003.
- **Chan Po Shan** (EE) won the Paper Award in the 8th Optoelectronics and Communications Conference in 2003.
- **Grace Chau Man Ping** (IE) was awarded the 2003 Lucent Global Science Scholar from Hong Kong in May 2003.
- **Eric Chow Man Kit** (MAE) won the 5th Prize Award at the 2003 International Student Experimental Hands-on Project Competition via Internet on Intelligent Mechatronics and Automation.
- **Eric Chow Man Kit** (MAE) and Professor **Liu Yun Hui** whose paper "Tele-Coordinated Control of Multi-Robot Systems via the Internet", was selected as one of the five finalists for the Best Student Paper Award at the IEEE International Conference on Robotics and Automation in 2003.
- **Fung Kar Man** (MAE) and Professor **Li Wen Jung** won the Best Student Poster Paper Award, the 3rd IEEE Conference on Nanotechnology IEEE-NANO 2003 Student Competition for the paper "Towards Batch Fabrication of Bundled Carbon Nanotube Thermal Sensors".
- **He Jian** (EE) won the IEEE (HK) Postgraduate Paper Prize in the IEEE Hong Kong Student Paper Contest 2003.
- **Huang Yong** (EE) won the Award for the Best Research Output by Research Post-graduate Students 2003.
- **Charlotte Kwong Ching Han** (MAE) whose paper "Nanometric Optical Fiber Probed Tip Fabrication by Micro-Meniscus Etching" was selected as the best paper of the Best Final Year Project Award 2003, ASME International (HK) Section in 2003.
- **Lai Tsz Wai** (CSE) won the Best MPhil Paper Award of the ACM Hong Kong Chapter in March 2003.
- **Alan Lam Hiu Fung** (MAE) received the 1st Runner-Up of IEE Hong Kong Younger Members Section Paper Contest 2002; won the 1st Prize in the Graduate Division of HK Section Student Paper Contest 2002 organised by IEEE in 2003.
- **Lau Yiu Kee** (MAE) won the Best Final Year Project 2001/02, awarded jointly by HKIE, ASME HK Section, and IMechE HK Branch in 2002; received the 3rd Prize in the Undergraduate Division of HK Section Student Paper Contest 2002 organised by IEEE in 2003.
- **Lo Kwok Wing** (EE) won the IEEE Hong Kong Section (Electronics) Prize in the Regional Inter-University Postgraduate Electrical & Electronic Engineering Conference 2003 in August 2003.
- **Ng Ping Chung** (IE) won the Best Business Strategy Award of the IITEC 2003 by Internet Professional Association (iProA).
- **Qian Yao** (EE) won the Microsoft Fellow Award at the "Computing in

the 21st Century” Conference organized by the Microsoft Research Asia in 2003.

- **Caren Tang Pui Yi** (IE) was awarded the HKIE Scholar 2001/2002 in January 2003.
- **Teng Xiaofei** (EE) was awarded the Region 10 Finalist in the EMBS-Whitaker Student Paper Competition in the 25th Silver Anniversary International Conference of IEEE Engineering in Medicine and Biology Society in 2003.
- **Bruce Tong Kwong Bun** (IE) won the championship of the 2003 ACM Hong Kong Chapter Computer Chinese Checkers Competition in 2003.
- **Victor Wong Tak Sing** (MAE) won the 1st Prize in the Best Paper on Materials 2002 Contest sponsored by HKIE's Material Division in 2003; won the 1st Prize in the Undergraduate Division of HK Section Student paper Contest 2002 organized by IEEE in 2003.
- **Yan Hang Fai** (IE) received the Certificate of Merit in the IITEC 2003 by Internet Professional Association (iProA) in July 2003.
- The team of CSE students (**Lai Tsz Wai, Ching Lap Sze and Liao Yik Fong**) won the Silver Award of the J2ME Open 2003 Competition.
- The team of EE students (**Chan Wai Nang and Kwong Pak Yin**) won the Honourable Mention in the Mobile Multimedia Communications Design Contest 2003 presented by the HKIE.
- The team of EE students (**Gu Yingying and Lee Chi Man**) won the 1st Prize in the 8th National Challenge Cup Competition in 2003.
- The team of IE students (**Chan Chi Hang and Cheung Chin Fung**) received the Certificate of Merit in the IITEC 2003 by Internet Professional Association (iProA) in 2003.
- The team of IE students (**Chan Chi Pan, Cheng Yuk Pong, Ng Cho Yiu, Ng Tung, Wong Chi Hang and Yu Wing Fung**) won the Bronze Medal for the “2003 “逸仙杯” 大學生程序設計競賽” organised by the Zhongshan University.
- The team of IE students (**Chan Chi Pan, Ng Tung and Cheng Yuk Pong**) won the championship of the ACM Hong Kong Chapter Scholastic Programming Contest 2003.
- The team of IE students (**Man Wai Ki and Lau Kwok Kei**) won the Best Project Idea Award of the IITEC 2003 by Internet Professional Association (iProA) in 2003.
- The team of IE students (**Ng Cho Yiu, Lam Ping Fai and Yu Wing Fung**) ranked 4th at the ACM Hong Kong Chapter Scholastic Programming Contest in 2003.
- The team of IE students (**Yau Bik Kan and Wan Wai Yan**) received the Certificate of Merit in the IITEC 2003 by Internet Professional Association (iProA) in 2003.
- The team of SEEM student (**Alan Chan Chi Wai, John Ho Kin Fai and Alvin Yeung Wing Chuen**) won the 1st Runner up of Business Model Writing Competition within CUHK and were sent to Austin, Texas, to participate in the final round World Moot Corp Business Model Writing Competition in 2003.

2004

- **Chow Kin Kee** (EE) was awarded the 2004 Young Scientist Award in the Engineering Science Discipline presented by the Hong Kong Institution of Science in 2004.
- **Gabriel Fung Pui Cheong** (SEEM) won the Best Student Paper Award at the 8th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD'04) in 2004.
- **Jason Ho Wai Kit** (IE) won the Bronze Award of the 4th HSBC Young IT Entrepreneur Awards in 2004.
- **Huang Renbin** (IE) and his team won the 2nd Prize in the Third Greater China General Knowledge Competition in October 2004.
- **Ida Hui Pui Yu** (SEEM) won the 2004 Microsoft Fellowship Award in 2004.
- **Alan Lam Hiu Fung** (MAE) was the Winner of the YDC E-Challenge 2004 Business Plan Competition.
- **Ngai Chi Kin** (IE) won the Best Paper Award for the paper entitled “Multisource Network Coding with Two Sinks”, (co-authored with Professor Raymond Yeung in the area of Communication Theory) at the 2nd International Conference on Communications, Circuits and Systems (ICCCAS 2004) held in Chengdu, China in 2004.
- **Tang Wing Wah** (EE) won the 3rd Prize (2nd Runner-up) of the IEEE LEOS (HK) Postgraduate Conference Paper Award in 2004.
- **Wong Fai Leung** (EE) won the Paper Award (1st Runner-up) in the IEE HK YMS Exhibition / Conference 2004 ; won the Best Student Paper Award (1st Runner-up) in the category of Microwave Theory and Techniques in the 5th IEEE (HK/Macau) AP/MTT Postgraduate Conference in 2004; won the 3rd Prize in the IEEE Hong Kong Section 2004 Postgraduate Student Paper Contest.
- **Wong Yeung** (EE) and his team won the 2nd prize in the Third Greater China General Knowledge Competition in October 2004.
- The team of MAE students (**Raymond Lam Hiu Wai, Joe Wong Chi Yin and Davey Fong Tik Wai**) won the 2nd Prize of the IEEE Hong Kong Section Student Paper Contest for their paper “A Low-Power Wireless Motion Sensing System for Sports Science Applications” in 2004; won the 3rd Prize of the IEEE Region 10 Students Paper Contest 2004.
- The team of MAE students (**Joe Wong Chi Yin, Davey Fong Tik**

Wai and Yan Ruiguang) won the 2nd Prize of the IEEE Best Final Year Project Competition (by MIDS Team) in 2004.

- The team of MAE and CSE students (**Alan Lam Hiu Fung and Yan Ping**) and two other students from the BA Faculty won the 1st Prize of the CUHK New Venture Business Plan Competition 2004 and represented the Engineering and BA Faculties to attend the prestigious Global Moot Corp Competition at the University of Texas at Austin, USA in 2004 to market the MIDS technology and won the 1st Runner-up Prize.
- The team of MAE staff and students (**Kwok Ka Wai, Leung Ka Chun, Wong Cheuk Wun, Wong Sheung Man, Lui Ka Chi, Lai Man Kit and Tse Kit Ming**) won the 2nd Runner-up Award in the Robocon 2004 Hong Kong Contest which was organized by the Radio Television Hong Kong in 2004.
- The team of MAE and CSE staff and students (**Leung Yun Yee, Yan Ruiguang, Chan Fung Lam, Liu Chung Yan, Chim Ho Ming, Yu Ka Fai, Chan Wai Kin, Ho Chun Keung, Tong Chin Fung, Lau Tak Kit, Lau Siu Chit, Tse Mun Sum and Wong Chung Yan**) won the Best Engineering Award in the Robocon 2004 Hong Kong Contest which was organized by the Radio Television Hong Kong.
- The team of CSE students (**Chan Fai, Chung Hin Shun and Ng Yuk Man**) awarded the 2nd Class Honor, “Real-time Embedded Fingerprint Based Multi-User Login System”, National Undergraduate Electronic Design Contest – 2004 Embedded System Design Invitational Contest (Intel Cup).
- The team of CSE students (**Chan Siu Man, Chow Chun Tak and Tsang Chi Chiu**) was awarded the 2nd Class Honor, “A Door Access Control System based on Face Recognition”, National Undergraduate Electronic Design Contest – 2004 Embedded System Design Invitational Contest (Intel Cup).
- The team of EE, IE, and SEEM students (**Chan Wai Nang, Tse Hok Man and Cheryl Wong Po Yan**) won the Regional Championship (Hong Kong) of the Microsoft Imagine Cup 2004 and became one of the 12 finalists in the Imagine Cup 2004 World Championship Competition organized by Microsoft in Brazil in 2004.
- The team of IE students (**Chan Chi Pan, Wong Chi Hang and Yu Wing Fung**) won the Bronze Medal for the 2004 ACM Asia Programming Contest, Shanghai.
- The team of IE students (**Chan Ho Tat and Ip Shun Yin**) received the Certificate of Merit, 4th HSBC Young IT Entrepreneur Awards in 2004.
- The team of IE and CSE students (**Ng Tung, Chan Siu Man and Chan Siu On**) won the Silver Medal for the 2004 ACM Asia Programming Contest, Shanghai in 2004.

2005

- **An Jin** (EE) received the Best Poster Award in the 3rd International Conference on Materials for Advanced Technologies, Singapore in 2005.
- **Bao Shudi** (EE) won the Young Investigator's Award (YIA) and the YIA Best Presentation Award in the YIA finalist session in the 6th Asian-Pacific Conference on Medical and Biological Engineering, Japan in April 2005.
- **Grace Chau Man Ping** (EE) won the 2004/05 Espon Foundation Scholarship Award.
- **Chen Zhenzhong** (EE) received the 2005 Microsoft Fellowship Award in 2005.
- **Jeff Choi Chiu Wo** (CSE) won the 1st Prize of the Paper Contest (Postgraduate Division) in the 2005 IEEE Hong Kong Younger Members Section (UMS) Exhibition/Conference in 2005; received the Certificate of Merit, Post-Secondary Category of the 7th IT Excellence Awards for his project “Salinity in the Macau Raw Water Controlling System” in 2005.
- **Fok Mei Po** (EE) received the 2005 IEEE Lasers and Electro-Optics Society Graduate Student Fellowship organized by the IEEE Laser & Electro-Optics Society; won the Best Presentation Prize in the 6th IEEE LEOS (HK) Postgraduate Conference in December 2005; received the Outstanding Paper Award in the International Symposium on Technology Fusion of Optoelectronic & Communications, Taipei and the IEEE/LEOS Student Travel Grant in the 2005 LEOS Annual Meeting.
- **Michael Ho Kwok Shing** (IE) won the Best Student Paper Award in the Subcommittee of Network Architecture, Management and Applications in the Asia-Pacific Optical Communications Conference and Exhibition for his paper “Capacity Planning of Link Restorable Optical Networks Under Dynamic change of Traffic” in Shanghai, China in 2005.
- **Joe Jiang Wenjie** (CSE) won the Best Student Paper Award in the 2005 International Symposium on Computer Performance, Modeling, Measurement and Evaluation.
- **Kwok Chi Hang** (EE) won the 2nd Runner Up Best Paper Award in the 6th IEEE LEOS (HK) Postgraduate Conference in 2005.
- **Lam Hiu Man** (MAE) won the 2nd Prize of 2005 Undergraduate Student Paper Contest for his paper “A Robot Drawing Technique for Contoured Surface Using an Automated Sketching Platform” organized by IEEE.
- **Raymond Lam Hiu Wai** (MAE) won the 1st Prize of 2005 Postgraduate Student Paper Contest for his paper “Digitally Controllable Polymer-based Integrated Microfluidic Systems for Automating Bio-fluidic Mixing and Manipulation” organised by IEEE.
- **Lee Sim Heung** (EE) won the Best Student Paper Award in the CLEO/Pacific Rim, Tokyo in 2005.
- **Liang Tak Keung** (EE) received the 2005 HKIS Young Scientist Award Engineering Science Panel in December 2005.

- **Liu Chung Yan** and **Lam Tin Lun** (MAE) received the Scholarship Award offered by the Institute of Industrial Engineers (HK) in recognition of their outstanding scholastic ability and potential to serve the industrial engineering profession in 2005.
- **Liu Yang** (EE) won the 3rd Best Student Paper Prize in the 2005 IEEE Lasers & Electro-Optics Society Annual Meeting.
- **Mak Chi Chung** and **Chan Chi Chun** (CSE) won the Championship of the IEEE (HK Computational Intelligence Chapter) Final Year Project Competition 2004-05; won the 3rd Award in the 9th Challenge Cup for their project "The Chinese University Plagiarism Identification Engine System (CUPIDE)" in November 2005.
- **Ng Chong Chon** (EE) won the 1st Runner Up in the "Young Members Exhibition/Conference 2005 in the Postgraduate Section in the 2005 IEE Hong Kong Young Members Section Conference in 2005.
- **Ng Tung** (IE) won the 2nd Place in the Regional ACM Programming Contest held in Taipei in October 2005; won the 8th Place in the Regional ACM Programming Contest held in Hangzhou Contest in November 2005.
- **Carmen Poon Chung Yan** (EE) won the 1st Prize of the IFMBE Outstanding Chinese Student Award held at the 27th Annual International Conference of the IEEE Engineering of Medicine and Biology (EMBC'05) in 2005.
- **Tang Wing Wa** (EE) won the Outstanding Paper Award in the International Symposium on Technology Fusion of Optoelectronic & Communications, Taipei in 2005.
- **Tsang Wai Wah** (EE) won the 1st Runner Up on the 2005 IEEE (HK) Computational Intelligence Chapter – Final Year Project Competition in 2005.
- **Tse Hok Man** (IE) and 3 students from the (EE) won the 2nd Place in the 2005 Image Cup Competition in Software Design (organized by the Microsoft HK Limited).
- **Gatien Wong Tak Lam** (SEEM) received the Merit Award of the 6th ACM Postgraduate Research Day on March 12, 2005.
- **Wong Yee Man** (EE) won the Young Investigator Encouragement Award in the 6th Asian-Pacific Conference on Medical and Biological Engineering, Japan in 2005; won the Silver Award, Post-Secondary Category of the 7th IT Excellence Awards for his Project "Mobile Video Object Tracking Engine" in 2005.
- **Wong Yuk Man** and **Tommy Ng Ying Kit** (CSE) won the 1st Prize of the 2005 IEEE Project competition in August 2005.
- **Wong Yuk Man** (CSE) and other students from the Faculty of Business Administration won the 2nd Runner Up of the 2005 Idea to Product Competition in 2005.
- **Xie Yongming** (CSE) won the 1st Award in the 9th Challenge Cup for his project "Virtual Acupuncture V" in November 2005.
- **Xie Yongming** and **Wang Guangyu** (CSE) won the Gold Award, Post-Secondary Category of the 7th IT Excellence Awards for their project "Virtual Acupuncture" in 2005.
- **Xue Kun** (EE) received the Best Poster Award in the China International Conference on Nanoscience and Technology, Beijing in 2005.
- **Yang Chen** (EE) was the Winner of the Student Paper Contest (Speech Processing Group) in ICASSP 2005 and won the Spoken Language Processing Grant which honoured her Outstanding paper in the spoken language processing area accepted for publication in a conference sponsored by the IEEE Signal Processing Society in 2005.
- The team of EE students (**Chan Wai Nang**, **Ouyang Hua** and **Yeung Yu Ting**) won the 2nd Place of the 2005 Imaging Cup Competition in Software Design organized by the Microsoft Hong Kong Limited.
- The team of EE students (**Kwok Siu Lun**, **Tsang Wai Wah** and **Wang Yang**) won the 2nd Runner Up in the 2005 Robocon Hong Kong Contest.
- The team of EE students (**Carmen Poon Chung Yan** and **Yan Yong Sheng**) won the 1st Prize in the 2005 "E-Challenge Business Plan competition" – Champion Team organized by the Young Entrepreneurs Development Council.
- The team of IE students (**Chan CHIU Yeung**, **Chan Hiu Yeung** and **Cheng Yuk Pong**) won the Honorable Mention (32nd Place) in the Regional ACM Programming Contest held in Hangzhou Contest in 2005.
- The team of IE students (**Grace Chau Man Ping** and **HUI Ka Hung**) won the 2004-2005 Academic Creativity Awards for their work on "Event Server with Event Processor on Mobile Device"; 2004-2005 Yu-Luan Shih Awards for their work on "Easy Viewing – Design Patterns in View".

2006

- **Chen Jiansheng** (CSE) won the Student Paper Contest Finalist in 2006 IEEE International Conference on Acoustics, Speech and Signal Processing (France); received the 2nd Prize of Motorola Best Student Paper in IAPR International Conference on Biometrics.
- **Chen Jiansheng** and Professor **Moon Yiu Sang** (CSE) received the 3rd Prize in IEEE Hong Kong Signal Processing Postgraduate Forum Best Paper Contest 2006 (Hong Kong) in 2006.
- **Dai Ruoli** and Professor **Liao Wei Hsin** (MAE) received Scholarship Award for the 17th International Conference on Adaptive Structures and Technologies (ICAST2006) in 2006.
- **Deng Ning** (IE) won the Champion of the Best Paper Award at the 7th

IEEE (HK Section) LEOS Postgraduate Conference on December 9, 2006; was the Winner of the 2006 LEOS Graduate Student Fellowships.

- **Hu Yan** (IE) won the Best student paper award in the 10th IEEE/IFIP Network Operations and Management Symposium (NOMS 2006) for her paper "Adaptive Flow Aggregation – A New Solution for Robust Flow Monitoring Under Security Attacks".
- **Ku Yuen Ching** (IE) won the Best Presentation Award at the 7th IEEE (HK Section) LEOS Postgraduate Conference on December 9, 2006; won the Best student paper award in the 11th OptoElectronics and Communications Conference for his paper "Patterning Effect Avoidance of SOA-based Demultiplexer in 80-Gb/s OTDM System Using RZ-DPSK Modulation Format" in 2006.
- **Owen Kwok Chi Hang** (EE) won the Best Student Paper Award at the 11th OptoElectronics and Communication Conference (OECC 2006) for his paper "Multi-Wavelength Nonlinear Optical Loop Mirror with Suppressed Four-Wave Mixing Components".
- **Lam Miu Ling** (MAE) received the Best Student Paper Award for her paper "Active Sensor Network Deployment and Coverage Enhancement Using Circle Packings" in the 2006 IEEE International Conference on Robotics and Biomimetics in 2006.
- **Elsa Liu Chung Yan** (MAE) received the Best Student Paper Award for her paper "Frame-Based Expert System for Label Pattern Design" in the 10th WSEAS International Conference on Computers in 2006.
- **Liu Wei** (IE) won the Microsoft Fellowship 2006 in September 2006.
- **Liu Yang** (EE) won the Best Student Paper Award at the 11th OptoElectronics and Communication Conference (OECC 2006) for her paper "High Speed Gain Transient Compensation".
- **Meng Wei** (EE) won the Seventh Postgraduate Conference Best Student Paper Award (1st Prize) in the category of MTT at the Seventh Postgraduate Conference of the IEEE Hong Kong Section, AP/MTT Joint Chapter in 2006.
- **Mok King Keung** and **Tsang Ka Hung** (EE) won the Best Project and Team Award of UG Group at the Institution of Engineering and Technology Hong Kong (IET HK) Younger Members Section Exhibition / Conference (YM EXCON) 2006 for their paper "Adiabatic Smart Card" in May 2006.
- **Tsang Ka Hung** (EE) won the Best Presentation Award at the Institution of Engineering and Technology Hong Kong (IET HK) Younger Members Section Exhibition / Conference (YM EXCON) 2006 for his paper "Adiabatic Smart Card" in 2006.
- **Tsang Wei Mong** (EE) was awarded the E.W. Müller "Outstanding Young Scientist" Award of the International Field Eion Society in 2006.
- **Yim Ho Yan** (EE) won the Seventh Postgraduate Conference Best Student Paper Award (2nd Prize) in the category of AP at the Seventh Postgraduate Conference of the IEEE Hong Kong Section, AP/MTT Joint Chapter in 2006.
- **Yuan Wu** (EE) and other students from the Faculty of Business Administration won the Bronze Prize in the finals of E-Challenge Cup (The 5th Chinese Business Plan Competition) for their project "活生 SPR business plan" in 2006.
- **Mandy Yuen Man Yi** (SEEM) won the IET HK Outstanding Student Award in 2006.
- The team of CSE students (**Fu Kah Kuen**, **Cheung Siu Ming**, **Cheung Kin Wang** and **Cheung Lap Chi**) won the Intel Cup, 2006 of the Intel Cup Undergraduate Electronic Design Contest (China).
- The team of CSE students (**Wong Ming Fai**, **Yu Tsz Ho**, **Ko Hoi Fung** and **Tang Xinmin**) won the 1st Prize of 2006 in Intel Cup Undergraduate Electronic Design Contest (China).
- The team of CSE students (**Xie Yongming**, **Wang Guangyu** and **Wang Xinghe**) won the Asia Pacific Information and Communication Technology Awards 2005, Research and Development Category (Thailand) in February 2006.
- The team of SEEM students (**Chu Ho**, **Tang Sheung Yin**, **Tsao Yow Chian** and **Yau Siu Tsan**) won the Silver Award for the Hong Kong-Macau-Taiwan Section of the e-Challenge Cup held in Shandong, China in 2006.

2007

- **Chan Ngai Shing** (MAE) won the Special Award at the 10th Challenge Cup Competition for his project "Millimeter-Scale Turning Centre" held at Nankai University, Tianjin, China in November 2007.
- **Chen Shikui** and Professor **Michael Wang Yu** (MAE) won the Compliant Mechanisms Award of ASME 31st Mechanisms and Robotics conference in Las Vegas, USA in 2007.
- **Gary Chow Chun Tak** (CSE) was awarded the Croucher Foundation Scholarship to pursue his PhD study at the Imperial College, London in April 2007.
- **Chung Chor Fung** and Professor **Li Wen Jung** (MAE) won the Best Conference Paper Award in the 2007 IEEE/ASME International Conference on Advanced Mechatronics in Zurich, Switzerland in September 2007.
- **Ding Bolin** and **Qin Lu** (SEEM) won the Best Paper Student Paper Award (shared by CUHK and UIUC) in the 2007 IEEE 23rd International Conference on Data Engineering for their paper "Finding Top-k Min-Cost Connected Trees in Databases".
- **Fan Bin** (CSE) was awarded the Carnegie Mellon University Scholarship of HK\$2M in April 2007 to pursue his PhD study.

- **He Kai** (MAE) received the Lee Hysan Foundation Postgraduate Studentship for Mainland China Students 2006-07 in 2007.
- **Hou Wenting, Pan Qi**, Professor **Jeffrey Yu Xu**, Professor **Wang Junhu**, and Professor **Liu Chengfei** (SEEM) won the Yahoo! Kambayashi Best Paper Prize in the 8th International Conference on Web Information Systems Engineering (WISE07) for their paper "On Tree Pattern Query Rewriting Using Views" in December 2007.
- **Hui Ka Yu** (IE) together with two other student team members from the Hong Kong University and Lingnan University won the Best Presentation Award, Grand Finalist in the Hong Kong Social Enterprise Challenge 2007 for their project "Schoolala Academy" organized by the Commission of Poverty, HKSAR.
- **Lam Chi Kan, Poon Ho Shing** and **Wong Hang Fai** (MAE) won the JEC Outstanding Engineering Project Award (OEPA) 2006-07 offered by Jardine Engineering Corporation, Hong Kong in July 2007.
- **Gordon Lei Kin Pang** (EE) won the 1st Runner Up Best Paper Award at the 8th IEEE LEOS (Hong Kong) Postgraduate Conference for his paper "30-nm Self Compensated Dispersion Turing of 10- GHz Short Pulses Generated from a SOA Ring Laser" in 2007.
- **Li Hao Tian, Wai Hoi To** and **Yeung Sung** (EE) won the Championship of the CAHK Trophy – Inter-universities Quiz Competition in 2007.
- **Lum Tak Wai** (EE) won the IET Prize by the Institution of Engineering and Technology in August 2007.
- **Luo Bing, Wan Yujie** and **Wang Fei** (IE) were awarded the 1st Runner Up Team of the CAHK Trophy Inter-universities Quiz Competition organized by the Communications Association of Hong Kong, in 2007.
- **Shi Guangyi** (MAE) won the Best Student Paper Award in the 2007 IEEE International Conference on Robotics and Biomimetics in Sanya, China.
- **Su Shuang** (MAE) won the Student Paper Award in the 2007 International Conference of Signal and Image Engineering in London, UK.
- **Wang Hesheng** (MAE) won the Best Student Conference Paper Award in the IEEE International Conference on Integration Technology in Shenzhen, China in 2007.
- **Felix Wong Ming Fai** (CSE) was awarded the University of Toronto Scholarship of HK\$1M in April 2007 to pursue his MPhil and PhD studies.
- **Zhou Lin, Tang Wai Chung** and Professor **Wu Yu Liang** (CSE) received the Celoxica Best Paper Award of International South Programmable Logic Conference (SPL 2007) plus a Xilinx ESL Educational Board Tool-krit Prize in 2007.
- The team of CSE staff and students (**Ho Chun Hok, Yu Chi Wai**, Professor **Philip Leong Heng Wai** together with Professor **Wayne Luk** (The Imperial College, London) and Professor **Steven Wilton** (The University of British Columbia, Canada) received the Stamatis Vassiliadis Award for Outstanding Paper in the International Conference on Field Programmable Logic and Applications (FPL) in Amsterdam in August 2007.
- The team of CSE and MAE staff and students (**Ho Chun Hok, Yu Chi Wai**, Professor **Philip Leong Heng Wai, Chen Meng, Huang Bufu** and Professor **Xu Yangsheng**) won the Best Paper Award in the IEEE International Conference on Information Acquisition (ICIA 2007) in Jeju, Korea in 2007.

2008

- **Cai Yi** (CSE) won the 3rd Prize of the IEEE (Hong Kong) Computational Intelligence Chapter Postgraduate Student Research Paper Competition 2007-2008 for his paper "Formalizing Object Typicality in Context-aware Ontology".
- **Chen Hua** (EE) won the 2nd Prize in the IEEE HK Section 2008 (UG) Student Paper Contest and was selected to join the IEEE Region 10 Student Paper Contest in 2008.
- **Cheng Lap Kei** (EE) won the Best Student Paper Award in the Asia Optical Fiber Communication and Optoelectronic Exhibition and Conference in Shanghai in 2008.
- **Jordan Cheng Man Fai** (IE) received the Certificate of Merit from the HSBC Young Entrepreneurship Award in February 2008; won the Champion and the Most Creative Plan of the United College Group Sense Innovation and Entrepreneurship Award in May 2008; won the Champion of the 2008 Amway Pan-Pearl River Delta Region Universities IT Project Competition (HK) in 2008; won the Gold Award and the Best Presentation Award of the 2008 Amway Pan-Pearl River Delta Region Universities IT Project Competition (China) in 2008; won the 1st Runner Up of the IEEE CI Chapter Final Year Project Competition in July 2008; received the Certificate of Merit from the Asia Pacific ICT Awards 2008 (International) in November 2008; won the Best Innovation & Research Silver Award and Certificate of Merit of Best Social Responsibility of the Hong Kong ICT Awards 2008 : Best Innovation & Research Award in December 2008.
- **Dai Yong Heng** (EE) won the Best Student Paper Award in the 9th IEEE LEOS (HK) Postgraduate Conference in Hong Kong in 2008.
- **Fok Mei Po** (EE) was awarded a Special Merit in the 2008 HKIS Young Scientist Award Competition on November 1, 2008.
- **Hao Yifei** and Professor **Chen Nan** (SEEM) together with a student team member from the CSE and another student team member from the Beijing University of Post and Telecommunication received the "Honorable Mention" Prize in the Mathematical Contest in Modeling in 2008.
- **Hou Wenting** and **Wu Di** (SEEM) won the Gold Prize for the Hong

Kong-Macau-Taiwan Section in the 6th National e-Challenge Cup for their project "VMiner" at Sichuan University in November 2008.

- **Hou Wenting, Wu Di, Pan Qi** and **Chen Bo** (SEEM) won the Champion of YDC E-Challenge 2008 for their project "VMiner" on June 20, 2008. The team also represented Greater China to join the 2008 Global Moot Corp, "The Super Bowl of World Business Plan Competition". VMiner entered global top 10, which was the best ever result obtained by a Chinese team in history.
- **Lam Fuk Ming** and Professor **Wu Ke Li** (EE) won the Best Student Paper Award in the 9th IEEE (HK/Macau) AP/MTT Postgraduate Conference in Macau in 2008.
- **Lam Miu Ling** (MAE) was awarded the Croucher Foundation Fellowship 2007-2008 with effect from April 15, 2008.
- **Carlos Law** (EE) won the Champion at the Postgraduate Section of Younger Members Exhibition/Conference 2008 of the Institution of Engineering and Technology Hong Kong (IET HK) on June 22, 2008.
- **Li Qingyun** (MAE) together with a student team member from the Science Faculty and another student team member from the Social Science Faculty, won the Silver Prize for the Hong Kong-Macau-Taiwan Section in the 6th National e-Challenge Cup for their project "Internet Robotics Innovation Park" at Sichuan University in 2008.
- **Liang Junrui** (MAE) won the Best Student Contributions Award in the 19th International Conference on Adaptive Structures and Technologies (ICAST 2008) in Ascona, Switzerland in 2008.
- **Liu Lu** (MAE) won the Guan Zhao-Zhi Award at the 27th Chinese Control Conference in Kunming, China in 2008.
- **Luo Yuanxi** and Professor **Du Ruxu** (MAE) received the High Speed CNC Dieless Stamping Machine Award in the 10th China Hi-tech Fair in October 2008.
- **Wu Di** and Professor **Jeffrey Yu Xu** (SEEM) together with the co-authors FUNG Pui Cheong and LIU Zheng won the Best Paper Award in the 10th Asia Pacific Web Conference (APWEB 2008) for their paper "Mining Multiple Time Series Co-Movements" in April 2008.
- **Xu Li** (CSE) won the 2008 Microsoft Fellowship Award in September 2008.
- **Xu Lin** (EE) won the Global Scholarship Programme Award for Research Excellence CNOOC Grants 2008-2009 for the visit of University of Cambridge on November 3, 2008.
- **Yu Chi Wai** and Professor **Philip Leong Heng Wai** (CSE) together with Dr. **Julien Lamoureux** and Professor **Wayne Luk** from the Imperial College, London and Professor **Steven J.E. Wilton** from the University of British Columbia won the Synplicity Best PhD Student Paper Award in the Proc. Southern Programmable Logic Conference (SPL), Pages 63-68, 2008 for their paper "The Coarse-grained/Fine-grained Logic Interface in FPGAs with Embedded Floating-point Arithmetic Units" in 2008.
- **Zhao Ming** (MAE) won the Piero Zampersoni Best Student Paper Award at the 19th International Conference on Pattern Recognition (ICPR'08) in Tampa, Florida, USA in 2008.
- **Zheng Hongying** (EE) won the Global Scholarship Programme Award for Research Excellence CNOOC Grants 2007-2008 for the visit of University of California, Berkeley on May 14, 2008.
- The team of SEEM staff and students (**Liu Jianyi, Liu Xiaoti, Chan Sau Kam, Stella Hon Siu Na** and Professor **Cheng Chun Hung**) won the 2nd Runner-Up Award in the Chartered Institute of Logistics & Transportation Student Competition 2008.

2009

- **Chan Wing Yin** (CSE) 二零零九年十一月第十一屆「挑戰杯」全國大學生課外學術科技作品競賽中，以「虛擬超聲引導穿刺訓練系統」勇奪一等獎。
- **Chen Xia** (EE) won the 2nd Runner Up of the Best Paper Prizes at the 10th IEEE Photonics Society HK Chapter Postgraduate Conference on November 28, 2009.
- **Fu Liqun** (IE) won the Global Scholarship Programme Award for Research Excellence – CNOOC Grants for 2008-09 in January 2009.
- **Gao Wei** (SEEM) won the Best Paper Student Paper Award at the 2009 European Conference on Information Retrieval (ECIR'09) for his paper "Joint Ranking for Multilingual Web Search" in Toulouse, France.
- **Guo Hongtao** (MAE) won the 2nd Prize of Paper Presentation at the 228th Tsinghua Forum for Doctoral Candidates in 2009.
- **He Kaiming** (IE) was awarded the 2009 Microsoft Research Asia Fellowship in September 2009.
- **Ida Hui Pui Yu** (SEEM) won the Best Poster Award of the 9th ACM-HK Student Research and Career Day 2009 for her poster "Cross-Modality Semantic Integration with Hypothesis Rescoring for Robust Interpretation of Multimodal User Interactions".
- **Kou Wai Chu** (EE) won the 2008/09 ESET NOD32 Scholarship in 2009.
- **Lam Hiu Man** (MAE) won the Best Demonstration Award at the 4th Beijing-Hong Kong International Doctoral Forum 2009 for his project "Robotic Expression of Acquired Penmanship (REAP)" in August 2009; won the Best Paper Award at the 4th Beijing-Hong Kong International Doctoral Forum 2009 for his paper "Realization of Robotic Chinese Calligraphy by an Intelligent Art Robot" in 2009.

- **Gordon Lei Kin Pang** (EE) won the IEEE Best Student Paper Award at the 14th OptoElectronics and Communications Conference (OECC) 2009 for his paper "Conversion of 40 Gb/s OTDM to 4x10 Gb/s WDM Channels with Extinction Ratio Enhancement by Pump-Modulated Four-Wave Mixing Using Time- and Wavelength-Interleaved Laser Pulses" in 2009; won the Champion of the Best Paper Prizes at the 10th IEEE Photonics Society HK Chapter Postgraduate Conference in 2009.
- **Li Pak Wing** (EE) won the 1st Runner Up of the IET (HK) YMEC 2009 (Postgraduate Section) for his work "Novel Microwave Power Divider Circuits with Unequal Dividing Ratio and Simple Layout" on July 12, 2009; won the 1st Prize in the IEEE (HK) AP/MTT Postgraduate Conference for his paper "A New Unequal Power-divider Design with Enhanced Insertion Loss Flatness" on October 24, 2009.
- **Li Qingyun** (MAE) won the Outstanding Product Prize of the Benchmark Capital Venture Challenge in MOOTCORP in May 2009.
- **Li Weiliang** (IE) won the Global Scholarship Programme Award for Research Excellence – CNOOC Grants for 2008-09 in January 2009.
- **Liu Xiaopei** (CSE) won the 1st Prize in the IEEE (Hong Kong) 2009 Postgraduate Student Research Paper Competition.
- **Meng Meng** (EE) won the 3rd Prize in the IEEE (Hong Kong) AP/MTT Postgraduate Conference for her paper "An Analytical Approach to Computer Aided Diagnosis of Lossy Microwave Coupled Resonator Filters" on October 24, 2009.
- **Michael Ng Cho Yiu** (IE) won the Sir Edward Youde Memorial Fellowships for Postgraduate Research Students 2008/09.
- **Qian Liping** (IE) won the Global Scholarship Programme Award for Research Excellence – CNOOC Grants for 2008-09 in January 2009.
- **Wu Di** (SEEM) won the Sixth Youth Scientific and Technological Innovation Prize in December 2009.
- **Fung Kam Keung** and **Lee Cheuk San** (CSE) 於二零零九年十一月第十一屆「挑戰杯」全國大學生課外學術科技作品競賽中，以「定位通訊」勇奪三等獎。
- **Hung Yuet Hung** and **Lam Ho** (EE) won the Gold Award for the Hong Kong RFID Awards U-21 RFID Awards 2009 (Undergraduate Stream) for their project "A Smart RFID System for Logistics Application" in 2009.
- **Hung Yuet Mui, Yvonne Li Wing Yin, Chan Chun Sing** and **Ho Ho Fai** (CSE) 於二零零九年十一月第十一屆「挑戰杯」全國大學生課外學術科技作品競賽中，以「基於WEB的新穎颱風分析和預報系統」勇奪二等獎。
- **Kwok Tsz Ho** and **Chan Kwan Chung** (MAE) received the 3rd Prize at the 11th National Challenge Cup, held in Beijing, for the project of "Fast Exemplar-based Image Inpainting Using Discrete Cosine Transformation" in 2009.
- **Leung Kai Man** and **Ng Yue Hei** (CSE) together with a MAT M.Phil. student from the Science Faculty ranked 20th at the 2009 ACM/ICPC World Finals in 2009.
- Dr. **Li Baopu, Simon Fan Yichen, Qi Lin** and Professor **Max Meng Qing Hu** (EE) won the Best Student Paper Award at the 2009 IEEE International Conference on Robotics and Biomimetics (IEEE Robio 2009) for their paper "Intestinal Polyp Recognition in Capsule Endoscopy Images Using Color and Shape Features" in 2009.
- **Liang Junrui** and Professor **Liao Wei Hsin** (MAE) won the Best Paper Award in Automation at the 2009 IEEE International Conference on Information and Automation in Zhuhai/Macau, China in 2009.

2010

- **Chen Wenhao** (CSE) won the Best Student Paper Award at the 11th International Conference on Web-Age Information Management in 2010.
- **Chen Xia** (EE) won the Bronze Prize of the Taiwan Semiconductor Manufacturing Company Outstanding Student Research Award in the Category of Green Electronics for his paper "Apodized Grating Couplers for Efficient Light Coupling between Silicon Nanophotonic Waveguides and Optical Fibers" in 2010.
- **Ding Ning** (MAE) won the Best Poster Paper Award at the 8th World Congress on Intelligent Control and Automation for his paper "Energy-Based Surveillance Systems for ATM Machines" in China in 2010.
- **Fung Yin Wei** (EE) won the Silver Award in Most Innovative EPC/RFID (Electronic Product Code/Radio-frequency Identification) Application for the Hong Kong RFID Awards 2010 in November 2010.
- **Hu Hai** (EE) won the 2nd Prize of the Best Student Paper Award at the 11th IEEE (HK) AP/MTT (Antennas and Propagation/Microwave and Techniques) Postgraduate Conference in 2010.
- **Hung Chun Ho** and **Law Wai Hon** (CSE) together with a student from the Mathematics & Information Engineering Double Degree Programme ranked 36th Place at the ACM ICPC Programming Contest World Finals 2010 in 2010.
- **Hung Chun Ho, Ng Yue Hei** (CSE) together with a MAT student, **Lee Chin Ho**, from the Science Faculty won the Champion at the ACM Programming Contest (Local) 2010 in June 2010.
- **Ip Wei Chi** (EE) won the Champion at the Postgraduate Section of the IET (HK) Younger Members Exhibition/Conference 2010 in July 2010; won the 1st Prize of the Best Student Paper Award at the 11th IEEE (HK) AP/MTT (Antennas and Propagation/Microwave and Techniques) Postgraduate Conference in 2010.
- **Lam Ka Kit** (IE) was awarded the 1st Prize at the 2010 IEEE Hong Kong Section (UG) Student Paper Contest 2010 for his paper "Performance

Analysis and Optimization of Multipath TCP" in December 2010.

- **Li Qiang** (EE) won the 1st Prize at the Postgraduate Forum of IEEE HK Chapter of Signal Processing in 2010.
- **Li Wei** (EE) won the 3rd Prize of the Best Student Paper Award at the 11th IEEE (HK) AP/MTT (Antennas and Propagation/Microwave and Techniques) Postgraduate Conference in 2010.
- **Liang Junrui** and Professor **Liao Wei Hsin** (MAE) won the Best Information Paper Award at the 2010 IEEE International Conference on Information and Automation for their paper "Impedance Analysis for Piezoelectric Energy Harvesting Devices under Displacement and Force Excitations" in 2010.
- **Florian Luisier** (EE) received the Young Author Best Paper Award from the IEEE Signal Processing Society in 2010.
- **Qian Xiaojun** (SEEM) won the 2010 Microsoft Research Asia Fellowship Award in 2010; won the 2010 Best Paper Award at the International BJ-HK Doctoral Forum in 2010.
- **Wan Xiang Wei** (SEEM) won the 2nd Place Prize of the 2010 Best Student Research Paper Award Competition of Financial Service Session, INFORMS in 2010.
- **Wong Pui King** (IE) received the Best Student Paper Award at the 2010 Beijing-Hong Kong International Doctoral Forum for her paper "Performance Analysis of Markov Modulated CSMA Protocols with Exponential Backoff Scheduling" in 2010.
- **Yu Cheuk Him** (MAE) won the Gold Award at the Bi-annual 7th E-Challenge Cup for his plan "CNT Food Wastes Recycling Technology" in September 2010; won the Champion at the Energy Institute 2009-2010 Best Final Year Energy Project Competition for his project "Solar Tracking System Using Circular Fisheye Imaging" in 2010.
- **Zhang Peng** (MAE) won the Champion at the Sustainable Engineering Challenge for his project "New Energy Harvest Device Based on Knudsen Compressor" in 2010.
- **Zhang Wei** (EE) won the 3rd Prize at the Postgraduate Forum of IEEE HK Chapter of Signal Processing in 2010.
- **Zhao Qian** (EE) won the Best Poster Award at the 5th Beijing-HK International Doctoral Forum for her paper "Most Representative Frame Extraction for WCE Video Chips" in 2010.
- **Zhao Ming** (MAE) won the Postgraduate Research Output Award 2009 (CUHK) in April 2010.
- **Zheng Zibin** (CSE) was elected as the IBM PhD Fellowship 2010.
- **Chan Chun Wing, Chan Hiu Yu** and **Zhang Qi** (CSE) won the 1st Prize at the 2010 Intel Cup Embedded System Design Invitational Contest in 2010.
- **Law Wai Hon** and **Hon Man Hin** (CSE) together with a student, **Yuen Chak Fai**, from the Quantitative Finance Programme won the 3rd Place at the ACM ICPC Asia Regional (Taiwan) Programming Contest 2010 in 2010.
- **Lam Ka Chun, Li Yan Kit** and **Ding Qian** (CSE) won the 2nd Prize at the 2010 Intel Cup Embedded System Design Invitational Contest in 2010.
- **Lam Shing Yan** and Professor **Ronald Chung Chi Kit** (MAE) won the 2nd Runner-up at the 7th Final Year Project (FYP) Competition organized by IEEE (Hong Kong) Computational Intelligence Chapter for their project "Panoramic Viewing by Mirror Reflection" in 2010.
- **Ng Yue Hei** and **Hung Chun Ho** (CSE) together with a student, **Li Cheuk Ting**, from the Mathematics & Information Engineering Double Degree Programme won the Champion at the ACM ICPC Asia Regional (Kuala Lumpur, Malaysia) Programming Contest 2010 in December 2010; won the 3rd Place at the ACM ICPC Asia Regional (Jakarta, Indonesia) Programming Contest 2010.
- **Zheng Zibin** and **Zhang Yilei** (CSE) won the Best Student Paper Award at the 8th IEEE International Conference on Web Services in 2010.

2011

- **Chen Chao** (MAE) won the champion at the Professor Charles K. Kao Student Creativity Awards 2011 (Postgraduate Individual Entries) for the project of "Self-Powered, Self-Sensing Magnetorheological Dampers", and received the China Youth Technology Innovation Award in 2011.
- **Christy Fung Ka Yan** (EE) was awarded the Best Student Paper of Section at the 16th Opto-Electronics and Communications Conference (OECC 2011) held in Taiwan in 2011.
- **Lau Tak Kit** (MAE) won the Champion of the Postgraduate Student Research Paper Competition 2010-11, IEEE (Hong Kong) Computational Intelligence Chapter.
- **Hung See Long**, Dr. **Guo Hongtao**, Professor **Liao Wei Hsin** (MAE), Professor **Fong Tik Pui** and Professor **Chan Kai Ming** won the IEEE ICIA 2011 Best Student Paper Award for the paper entitled "Experimental Studies on Kinematics and Kinetics of Walking with an Assistive Knee Brace".
- **Kwok Tsz Ho** and **Chan Ka Chun** (MAE) received the Merit at the Professor Charles K. Kao Student Creativity Awards 2011 (Postgraduate Individual Entries) for the project of "Image-based 3D Human Body Scanner".
- **Li Dahua** and Professor **Sean Tang Xiaoou** (IE) won the outstanding student award for NIPS 2010.
- **Xing Lianping** and Professor **Hui Kin Chuen** (MAE) won the CAD'11 Best Student Paper Award for the paper entitled "A Visual and Geometry Based Hybrid Approach for Surface Simplification".

Celebrations Calendar

Faculty 20th Anniversary Activities

Distinguished Lecture Series

Recent Results for Stochastic Models with Long-range Dependence and Heavy Tails
By Professor Venkat Anantharam, University of California Berkeley

23 February 2011

Secure Multimedia over Mobile Wireless Networks: Challenges and Solutions
By Professor Chang Wen Chen, State University of New York at Buffalo, USA

23 February 2011

工程領袖講座系列：
中國通信產業的歷史與未來

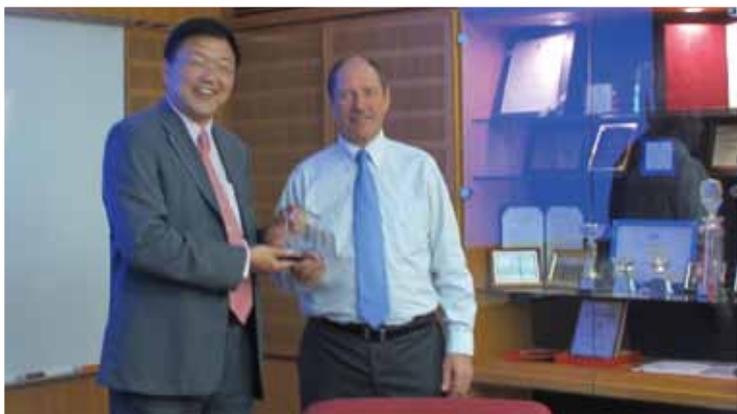
15 April 2011



謝大雄主講
中興通訊股份有限公司執行副總裁

Executive Seminar Series:
The Unfinished Information Revolution
By Mr. Allen Brown, President and Chief Executive Officer, The Open Group

18 April 2011



The Wiring Problem in Electronic Design Automation
By Professor Martin D.F. Wong, Department of Electrical and Computer Engineering
University of Illinois at Urbana-Champaign, USA

18 April 2011

On Reform of Engineering Education
By Professor Michael Lightner (2006 IEEE President),
University of Colorado at Boulder

1 June 2011

A General Attraction Model and an Efficient Formulation for the Network Revenue Management Problem
By Professor Guillermo Gallego, Department of Industrial Engineering and Operations Research,
Columbia University

26 May 2011

Cultural-Based Particle Swarm Optimization for Multiobjective Optimization and Performance Metrics Ensemble
By Professor Gary G. Yen,
Oklahoma State University, USA

6 July 2011



Energy: Where Do We Go From Here?
By Dr. Steven K.L. Poon,
Former General Manager and Chief Operating Officer of China Light & Power

9 September 2011

Distinguished Lecture on Energy
By Professor Timothy W. Tong, President,
The Hong Kong Polytechnic University

16 September 2011

Technology and Humanity: Beyond Human Enhancement
By Professor Omar Wing,
Founding Dean of Engineering

4 November 2011

Celebrations Calendar

Faculty 20th Anniversary Activities

Faculty 20th Anniversary Logo Design Competition 2011

January 2011



Faculty offered a scholarship to Carol Pun, a Year-1 student of Systems Engineering and Engineering Management, to join an expedition to the South Pole to witness the effects of climate change on the fragile ecosystem.

March 2011



Faculty 20th Anniversary Apps Design Competition



Six new focus areas catering to the needs of society are launched.

- Biomedical Engineering
- Energy Technology
- Cyber Security
- Financial Engineering and Service Engineering
- Nanotechnology
- Advanced Packaging and Manufacturing

3 March 2011



Celebrations Calendar

Faculty 20th Anniversary Activities

Faculty of Engineering
The 7th Annual Concert in Celebration of
Faculty 20th Anniversary

25 March 2011

Faculty 20th Anniversary Kick-off Ceremony and
Panel Discussion: "20-year Vision for Technology
Education in Hong Kong"

28 March 2011



Celebrations Calendar

Faculty 20th Anniversary Activities

Inter-school Competition on System Modeling and Optimization (COSMO) – SEEM Day

6 April – 8 May 2011



RoboCupJunior Hong Kong 2011 cum CUHK IT and Engineering Exhibition

4 June 2011



Celebrations Calendar

Faculty 20th Anniversary Activities

Alumni Visit to Shenzhen Institute of Advanced Technology (SIAT)

23 July 2011



Official Launch of facebook page of CUHK Faculty of Engineering www.facebook.com/cuhkerg

9 June 2011

Faculty 20th Anniversary Innovation and Technology Fair

16 – 18 September 2011

Engineering Alumni Homecoming Day
Alumni Happy Hour and Reunion Dinner
in Celebration of the Faculty 20th Anniversary

18 September 2011

Faculty 20th Anniversary Dean's Cup Football Match

3 December 2011

Engineering Student Societies' Singing Contest
in Celebration of Faculty 20th Anniversary

February 2012



We would like to express our sincere gratitude to the following sponsors for their generous support to our anniversary celebration.

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