



News

Outstanding PolyU Alumni will be conferred Honorary Fellow by CityU



Dr Raymond Leung is Chairman of MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA), Chairman of SAE Magnetics (H.K.) Ltd, and Chairman and CEO of TDK China Co Ltd. A distinguished industrialist, he has guided the local based company to become the world's only independent supplier of magnetic recording heads for hard disk drives.

Dr Leung, has provided training opportunities to more than 300 university students for its summer placement, and one-year internship programmes in collaboration with various universities of Hong Kong. The summer student placement programme of SAE began in 2001, while the one-year internship programme was launched a year later. The internship programme aims at providing university students with actual work experience in the Mainland.

To recognize Dr Leung's significant contributions to local tertiary education, the local universities of Hong Kong have conferred various honours and awards. This year, Dr Leung will be awarded the Honorary Fellow from the City University of Hong Kong. The Honorary Fellow Presentation Ceremony will be held on 20 September 2010.

Dr Leung is a strong supporter of education, in particular, the training of young engineers. For the past several years, SAE, led by

Undergraduates Awarded First-class Honour Degree in 2009/10

This year, the 16 undergraduate students who had successfully completed their studies were awarded with first-class honours by the Department of Industrial and Systems Engineering of The Hong Kong Polytechnic University. Among

the 16, Miss Lee Kar Hang Carmen, Mr Ng Ka Yiu, Miss Lois Chan, Miss Wong Wing Kwan Minnie, and Mr Choy Man Tik Dickson shared their study experiences and school life in PolyU with our alumni and new students.

List of undergraduates awarded first-class honour degree in 2009/10

Programme	Name of Students
BSc (Hons) in Enterprise Engineering with Management	Miss WU Sze Nga
	Miss Plaisir CHEUNG
	Miss WONG Wing Kwan Minnie
BSc (Hons) in Logistics Engineering and Management	Mr DAI Wangyuan
	Mr CHENG Zheng
	Miss LIU Ye
	Miss Lois CHAN
BEng (Hons) in Industrial and Systems Engineering	Miss MA Hoi Lam
	Miss LEE Kar Hang Carmen
Double Degree Programme in Business Administration and Engineering (BEng (Hons) Major in Industrial and Systems Engineering)	Miss NG Lai Lang
	Mr NG Ka Yiu
BEng (Hons) in Product Engineering with Marketing (IPD Scheme)	Mr CHOY Man Tik Dickson
	Miss CHEUNG Yuen Man

Miss Lee Kar Hang Carmen BEng (Hons) in Industrial and Systems Engineering

From this programme, I have learned to solve complex problems from a systems perspective that is essential in improving work efficiency in any operational activities. The academic courses offered in the programme are wide-ranging and covered product designs and manufacturing processes, from logistics to management. Therefore, after three years of study, the knowledge I gained can be applied in different industries, such as manufacturing, product designs, logistics, and public utilities. The programme also had an interesting learning atmosphere. For example, there was a business plan competition in which each group of students formed as a company and prepared a proposal. Students can learn from others during the competition.



Photo 1: Business plan competition

The programme also provides useful training for students to gain practical experience. In my first year, I participated in the summer training at the Industrial Centre wherein I learned the production of a French Fry Cutter. I had a strong sense of satisfaction when our group finally produced a complete cutter. Moreover, the programme also equips students with the ability to integrate and apply what they have learned to solve real problems. In my third year, I designed a pair of massage shoes. In creating my design, I had to integrate the necessary knowledge, and learn and apply different software tools and machines for both product and process designs. By studying these integrative courses, my analytical skill was improved considerably.



Photo 2: French Fry Cutter



Photo 3: Massage Shoes

The programme is not concerned with merely studying academic courses, but in developing the full potential of a student as well. It provides various opportunities for students to acquire different experiences. My project for my final year of study required me to work in Kwai Fong Post Office to investigate a service operation on staff utilization through computer simulation. This experience was valuable because I could apply what I have learned from the programme and gain work experience at the same time.

Students studying this programme can also get recognition of their study efforts. In my first year, I received the IIE (Hong Kong) scholarship and thus attended the IIE (Hong Kong) annual dinner. That night, I met other scholarship awardees from different universities and we shared our learning experiences. This has definitely broadened my perspective.



Photo 4: Carmen (right) took photo with colleague at Kwai Fong Post Office



Photo 5: IIE(HK) Annual Dinner

After three years of study, I have become interested in Industrial Engineering. I am going to join the Teaching Company Scheme wherein I can work in a Hong Kong company at the same time to obtain a master degree (through research) in two years. I hope that my research deliverables will have meaningful contributions to my targeted company, as well as the whole industry.



Photo 6: Carmen (2nd left, 1st row) took photo with ISE classmates

Mr NG Ka Yiu

BEng (Hons) Major in Industrial and Systems Engineering (Double Degree Programme)

The curriculum of BEng (Hons) in Industrial and Systems Engineering (ISE) focuses on manufacturing and process improvement. Throughout my four years of studying at PolyU, I have learned various useful theories and techniques, which enabled me to have a good understanding in both areas. I also had the opportunity to select a few elective subjects according to my interests.

In addition to the theories on manufacturing and process improvement that I have learned from this programme, which stressed on applications within real-life scenarios, I gained knowledge through assignments and case studies. Moreover, our final year project required demonstration of technical knowledge with business acumen. Studying Industrial Engineering requires dedication and hard work. Training is provided in problem solving, critical thinking, and problem resolution. I have never once regretted choosing this field.

The Department of Industrial and Systems Engineering has provided me with plenty of opportunities for growth. I have interned in Beijing and New York during the summers, and have also joined the exchange programmes to Mainland China and France. My language, communication skills, and cultural awareness were all improved considerably from these experiences. These eye-opening experiences not only prepared me for my future career, but also enriched my life and living.

In addition to internships and exchange study experiences overseas, I also participated in other learning opportunities. I participated in the 2010 Student Project Competition organized by the Hong Kong Society for Quality (HKSQ) with three classmates. With the support from the ISE department and our professors, my team won the championship.



Photo 1: Ng Ka Yiu with other interns during the internship in Disneyland, USA.



Photo 3: Ng Ka Yiu in Rome while studying in France.



Photo 2: Ng Ka Yiu at Harbin of P.R.C with other Hong Kong students.

Studying in a double degree programme certainly accorded me with numerous advantages when the time came for job-hunting, albeit these kinds of advantages rely on whether one can grasp opportunities and find one's own path. Still, I strongly believe that this programme provides students with an excellent ground for a wide range of careers.



Photo 4: Ng Ka Yiu with team members in the 2010 Student Project Competition organized by the Hong Kong Society for Quality (HKSQ)

Miss Lois Chan BSc (Hons) in Logistics Engineering and Management



Over the past three years, I have explored the various theories and concepts in the field of logistics and obtained a comprehensive knowledge of how the sophisticated system works. This programme has equipped me with the knowledge of managing the process of planning, implementing, and controlling the logistic work flow, from the

perspective of cost saving while meeting the needs of customer.

In order to conduct an in-depth investigation of the topic, I enrolled in courses like Production Logistics and Logistics Facility Design. Apart from these, in order to become better

suited to the increasingly technology-enabled logistics world, I also took courses on Mobile Technologies for Logistics System. During the course of my studies, I was impressed by the applications of radio frequency identification (RFID). With innovative ideas, this useful technology can be applied to diverse workplaces and enhance the efficiency and effectiveness of businesses.

Finally, this programme has helped me develop my ability to manage the complex systems of businesses in both the commercial and industrial sectors. I also became more competitive after completing the programme. The range of courses offered in the programme has provided me and my fellow students with certain advantages while job-hunting because of the course's applicability to a variety of jobs in both the commercial and industrial sectors. The three memorable years I spent at Polytechnic University has been a valuable learning experience.



Photo 1: ISE Department arranged industrial visits to different companies for students during the three years of study.



Photo 2: Lois participated in Joint University Mental Health Ambassador Programme in her third year.

Miss Wong Wing Kwan Minnie BSc (Hons) in Enterprise Engineering with Management

I appreciate and enjoy studying this programme, as this allowed me to gain sound understanding on a wide variety of subject areas, including business operations, enterprise systems, and applications. The business courses I enrolled offered in this programme enabled me to learn the fundamental concepts of accounting, economics, marketing, business law, human resources management, logistics operation, and database management. After studying a wide variety of courses, I was able to determine my interest and choose my future career path, studying my specific area with confidence.

This programme also helped boost my confidence in expressing my opinions and communicating with others effectively. During my final year project study, I developed my time management and problem analytic skills through guidance from experts. I learned to study and source for materials independently.

Moreover, I participated in the study and exchange tours with universities in Beijing and Tianjin, which were jointly organized by the ISE department and ISE Student Society. These study and exchange tours provided me with an opportunity to meet and share experiences with students from the Mainland. I also appreciated having the opportunity to gain better grasp of the learning attitude and atmosphere in Mainland China.

In the summer of my second year, I was given the opportunity to participate in the summer internship in Fachhochschule Oldenburg/Ostfriesland/Wilhelmshaven in Germany, which was organized by the ISE department. My internship experience in Germany not only developed my global outlook, but also enhanced my ability in problem solving. I had opportunity to befriend individuals from other countries and gain a better perspective of the cultures of different nations. My employer in Germany also gave me very useful feedback that will be beneficial to my future career.



Photo 2: Workplace of Minnie in Fachhochschule Oldenburg/Ostfriesland/Wilhelmshaven in Germany



Photo 1: Minnie at the National Stadium and Great Wall during the study and exchange tour to Beijing.



Photo 3: Minnie enjoying a Turkish dinner with new friends in Germany.

Finally, I would also like to express my gratitude to the lecturers and programme leader of the ISE department for their kindness and patience during my study at PolyU.

Mr Choy Man Tik Dickson BEng (Hons) in Product Engineering with Marketing (IPD Scheme)

I realized that studying BEng (Hons) in Product Engineering with Marketing (PEM) was an opportunity to pursue my dream of contributing to the betterment of the quality of life. For the past few years, PEM has provided me with a consolidated platform to establish my knowledge in product design, engineering, and manufacturing from a business perspective. My knowledge was further honed and enhanced through participation in team projects, case studies, and the capstone project. The PEM programme has provided me with opportunities to transform into a product management professional who is innovative, skilful, and responsible. I am pleased to have been nominated for the PolyU Outstanding Student Award and to have received several scholarships, which encouraged me to strive further in my academic studies.



Photo 1: PolyU Outstanding Student Award Scheme 2009

In addition to participating in a number of extra-curricular activities, I also cherished every opportunity to learn during the course of my study. I worked as a voluntary peer tutor in my faculty and a part-time product engineer in a local company. I have every confidence in stating that PEM has equipped me to become an independent person. In the future, I intend to demonstrate that I can make significant contributions for the benefit of Hong Kong by inventing novel products.



Photo 2: Receive Outstanding Student Award from the President, Dr Timothy W. Tong.

Membership Drive

MILESAA membership promotional activities were conducted by MILESAA executive committee members from March 2010 to June 2010. Executive committee members introduced the background and objectives of MILESAA, as well as the benefits

of joining MILESAA and the Federation of the Hong Kong Polytechnic University Alumni Associations (FHKPUAA). We would like to take this opportunity to welcome the new members who joined our big family.

Name of member	Year of Graduation	Title of Award
Mr CHEUNG Ka Chun	2009	BEng (Hons) in Product Engineering with Marketing
Dr LI Ying Hung	2006	Doctor of Engineering
Miss NG Kitty Kit Yin	2009	BSc (Hons) in Enterprise Engineering and E-Business
Mr WONG Eddy Kai Lai	1985	HD in Production and Industrial Engineering
Mr WU Eddy Ka Shing	1979	HD in Production and Industrial Engineering
Mr YUEN Hoi Man	2009	BEng (Hons) in Industrial and Systems Engineering

(in alphabetical order of English surnames)

Technical Seminar on Worldwide Product Certification 27 March 2010 (Saturday)

A technical seminar on 'Worldwide Product Certification' was organized jointly by the MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA), Department of Industrial and Systems Engineering (ISE) of The Hong Kong Polytechnic University, Manufacturing and Industrial Engineering Section (MIES) of the Institution of Engineering and Technology (IET)–Hong Kong Branch, IEEE, and Product Safety Engineering Society (PSES)–Hong Kong Chapter.

The seminar was successfully held on 27 March 2010 at The Hong Kong Polytechnic University. Ninety-two participants attended this event, of which, 22 were members of the MILESAA and students of the ISE Department.

Four speakers were invited to the seminar, including *Ir Terence S.S. Chan*, Executive Administrator of the Hong Kong Accreditation Service, Innovation, and Technology Commission, Government of the HKSAR; *Mr Raymond Cheung*, Chief Executive of the Hong Kong Certification Ltd; and *Mr Ke Dengming*, Supervisor of the Shenzhen Academy of Metrology and Quality Inspection, Shenzhen Bureau of Quality Technical Supervision.



Photo 1: Group photo taken at the end of the seminar



Photo 2: The Panel discussion session chaired by *Ir Dr James Chan*, Director of ORET Testing and Consultants Company Limited

The seminar focused on the following topics: the Hong Kong certification body accreditation scheme; development of a product conformity certification schemes in Hong Kong; defining product certification from ISO/IEC Guide 67; product certification system: rules, procedures, and management in conducting third-party product conformity assessment; recent update on the China Compulsory Certification (CCC); and a recent update on US toys certification.

During the panel discussion session chaired by *Ir Dr James Chan*, Director of ORET Testing and Consultants Company Ltd, the professionals and interested staff shared their views and concerns on the future of certification schemes.

MIES Committee Chairman, *Ir Peter Si*, expressed his sincere thanks to all the guests and speakers, as well as to the organizing and supporting organizations. Gratitude was also extended to the Department of Industrial and System Engineering of The Hong Polytechnic University, the organizing committee, and the volunteers for their full support of the seminar.

Prepared by *Ir M.K. Lam*

Visit to Hong Kong GeoPark (東壩六角柱地質之謎) 1 May 2010 (Saturday)

The MILES Alumni Association of The Hong Kong Polytechnic University SM (MILESAA), University of Warwick, and The Hong Kong Polytechnic University Manufacturing Alumni Association (IGDS Alumni) jointly organized a GeoPark visit to High Island on 1 May 2010.

A total of 51 participants, including families and kids, boarded the tour bus from Kowloon Tong to Sai Kung, and then took taxis to the East Dam of High Island Reservoir where the well, arranged in hexagonal volcanic columns, could be seen clearly at a distance. The tour guide provided a detailed explanation of the formation of the various geographic phenomena, such as faults, folds, twisted rock columns, and dike intrusions.



Photo 1: The tour guide explaining the special concrete unit of the coffer dam

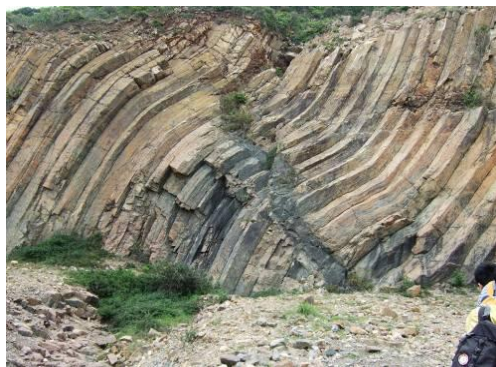


Photo 2: Unique basalt dike inside the twisted hexagonal columnar rock, making Hong Kong GeoPark an accredited park of National GeoPark of China.

After lunch, the participants went to Ma On Shan to see one of the abandoned iron ore mine tunnel exit to learn the old history of Hong Kong. Kudos to the two tour guides for their knowledgeable explanations of the sites visited.



Photo 3: The first of two groups with the tour guide

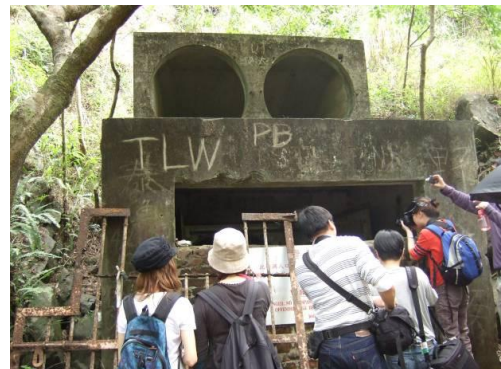


Photo 4: An abandoned Ma On Shan iron ore mine tunnel at 240-metre level

Prepared by Ms Jane Wong

Technical Talk and Visit to The Government of the HKSAR Standards and Calibration Laboratory (SCL) 14 May 2010 (Friday)

On 14 May 2010, a technical talk and visit to the Government of HKSAR Standards and Calibration Laboratory (SCL) was successfully co-organized by the MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA) and the Manufacturing and Industrial Engineering Section (MIES) of the Institution of Engineering and Technology (IET)–Hong Kong Branch.

During the visit, a total of 24 members from MILESAA, engineering students, and members of IET enjoyed a fruitful afternoon in the Standards and Calibration Laboratory.

In the first part of the visit, technical talks on the metrology system, mass and related measurements, force measuring instruments, and testing machines were conducted by Mr T.K. Chan, Electrical and Mechanical Engineer (Mass), and Mr M.C. Yuen, Senior Electrical and Mechanical Engineer.



Photo 1: Technical talks by Mr T.K. Chan and Mr M.C. Yuen.



Photo 2: Mr Geddy Lee (first from left), a committee member of IET, and Ir M.K. Lam (first from right), Vice-Chairman of MILESAA, presented souvenirs to Mr T.K. Chan (2nd from left) and Mr M.C. Yuen (2nd from right).

In the second part of the visit, Mr Chan and his colleague guided the participants in a tour around the Physical and Mechanical Laboratory. Demonstrations on rotational speed measurement and calibration processes were also conducted by the colleague at the laboratory. The visit ended with a Q&A session.

MILESAA would like to take this opportunity to thank Mr Chan, Mr Yuen, and their colleagues for their valuable contribution to the success of this activity.



Photo 3: Group photo taken with Mr T.K. Chan, Mr M.C. Yuen, and MILESAA and IET members and students

Prepared by Ir M.K. Lam

Technical Seminar on Engineering Design of Electrical, ELV, and Vertical Transportation Installation for International Commerce Centre (ICC) 15 May 2010 (Saturday)

The technical seminar for Engineering Design of Electrical, ELV, and Vertical Transportation installation for the International Commerce Centre (ICC) was successfully held on 15 May 2010 at The Hong Kong Polytechnic University. The seminar was organized by the Management Section of the Institution of Engineering and Technology (IET)–Hong Kong Branch. It is supported by The Hong Kong Polytechnic University (PolyU), MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA), University of Warwick, and The Hong Kong Polytechnic University Manufacturing Alumni Association (IGDS Alumni). Around 100 participants attended the seminar.

This seminar focused on redundancy, resiliency, and reliability design of electrical system services to secure the multi-function skyscraper. In the first part of the presentation, Ir Tony Lau introduced the method of feeding ICC main electrical systems from three CLP power substations, the tenant power fed from dual HV risers. Next, he discussed how they incorporated 25 aboveground transformer substations in order to reduce voltage drops and power loss.



Photo 1: Around 100 participants attended the seminar.

In the second part, he introduced the ELV system, including the dedicated ELV fire phone system for fire fighters communication system all over the escape route, hotel floor section, and main FS control room. In the final part, the design considerations of vertical transportation installation were explored.

Topics discussed also included the arrangement of vehicle transportation installation to gain the efficiency of floor plate; the effect of building sway during strong winds; and traffic management of 88 single and double deck lifts to increase movement efficiency.



Photo 2: Organizing committee including Ir M.K. Lam, Vice-Chairman of MILESAA (4th from left) and Ms Jane Wong, Committee member of MILESAA (5th from left) took a photo with speaker Ir Tony Lau, JRP Associate Director (4th from right) at the end of the seminar.

The seminar ended with a sharing and discussion between the speaker and the audience. The members of the Management Section Committee expressed their gratitude to Ir W.K. Pau, SHKP ICC Project Manager; Ir Tony Lau, JRP Associate Director; and Ms Jane Wong, Executive Committee Member of MILESAA. The appreciation was also extended to PolyU, IGDS Alumni, and MILESAA for success of the seminar.

Prepared by Ms Jane Wong

Technical Seminar on Innovation Technology 2010 'How Innovative Products Improve our Competitiveness in the Global Market' 29 May 2010 (Saturday)

The MILES Alumni Association of The Hong Kong Polytechnic University SM (MILESAA), the Department of Industrial and Systems Engineering (ISE) of The Hong Kong Polytechnic University (PolyU), and the Manufacturing and Industrial Engineering Section (MIES) of the Institution of Engineering and Technology Hong Kong (IET-Hong Kong) jointly organized a technical seminar entitled 'Innovation Technology 2010: How Innovative Products Improve our Competitiveness in the Global Market' at M1603, Senate Room, Li Ka Shing Building of The Hong Kong Polytechnic University on 29 May 2010. It was well attended, and had 88 participants, 24 of whom are MILESAA and IGDS Alumni members. Other attendees included students of ISE department of PolyU, and others from IET-Hong Kong, as well as from the industries and the commercial and education sectors.

The seminar commenced with a welcome speech delivered by the guest of honour, Ir Albert Lam, Chairman of IET Hong Kong Branch. Five distinguished speakers were invited to deliver presentations from different perspectives of how innovation technology has been applied and developed successfully. The topics and names of the speakers are listed below.

Topic 1: Development of 3D Quick Tools for Worldwide Market

Speaker: Mr Daniel Lai, Director, 3D Quick Tools Ltd.

Mr Lai shared his successful story of observing market opportunities to develop their CAD system for die and mould industries.

Topic 2: ARIUX–Evolution from Print to Digital

Speaker: Mr Andrew Pang, Director, Leovation Ltd.

Mr Pang presented how augmented reality is being used in his company and how new values can be created and added in the publishing industry.

Topic 3: Recent Development and Application of Radio Frequency Integrated Circuit

Speaker: Mr Henry Lau, Director, Lexiwave Ltd.

Mr Lau talked of the differences between RFID and RFIC and the market outlook. He further shared his experiences of how RFIC can be used in new product development.

Topic 4: Virtual Prototyping in Product Development

Speaker: Mr Eddie Kwan, Director, Ligo Product Design Ltd.

Mr Kwan shared his views on innovation and R&D. He then described how virtual prototyping could speed up the product development process using real life case studies.

Topic 5: Case Study on New Product Development

Speaker: Mr John Chow, Director, Fortune Industrial Products Ltd.

Mr Chow shared his successful case on new product development. Processes from market research, design stages, manufacturing, marketing strategies, and brand building were also explained.

After the presentations delivered by the five speakers, Mr Aman Chan, Principal Consultant of Hong Kong Productivity Council and Vice Chairman of MILESAA, chaired the panel discussion. A constructive, fruitful, and inspiring discussion was undertaken with good interaction among the speakers and participants. A number of practical and well-constructed questions were raised and discussed during the session, illustrating the great interest of the participants on issues related to technology and product innovation.



Photo 2: Panel Discussion chaired by Mr Aman Chan (3rd from left), Vice Chairman of MILESAA with five speakers

In the seminar, information related on the current development of IET was also shared. A membership drive for MILESAA of PolyU and IET-Hong Kong were also promoted. Finally, Mr Geddy Lee, Chairman of the Organizing Committee, gave a closing speech for the seminar.

The seminar brought technical professionals, the academe, and practitioners together to share their views on applying innovation technology during product development. It was held successfully and was well received by the participants.



Photo 1: Group photo taken with honorable guest, Ir Albert Lam (9th from left) Chairman of IET-Hong Kong Branch, speakers, helpers and organizing committee members

Technical Seminar on Mediation and Negotiation 19 June 2010 (Saturday)

On 19 June 2010, a technical seminar on Mediation and Negotiation was co-organized by the MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA), the Manufacturing and Industrial Engineering Section (MIES) of the Institution of Engineering and Technology (IET)—Hong Kong Branch, and The Department of Manufacturing Engineering and Engineering Management of the City University of Hong Kong.

The seminar was successfully held at LT-9 SAE Magnetics Lecture Theatre, City University of Hong Kong, Tat Chee Avenue, Kowloon. A total of 148 participants attended this event, 58 of whom were MILESAA members, students of ISE Department of PolyU, and alumni of The Hong Kong Polytechnic University.

Dr Raymond Leung, Chairman of the MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA), gave an opening and welcome speech to the participants. Dr Leung mentioned that he could see mediation, a form of alternative dispute resolution, becoming more popular in Hong Kong.



Photo 1: A total of 148 participants attended the seminar.

Other speakers included Mr Tom Lam, Board Member of the Society of Certified Mediators and Negotiators, who presented 'Mediation: The Way Ahead in Hong Kong,' highlighting the different applications of mediation and arbitration for engineers. Meanwhile, Mr Charles Chan, Founding Chairman of the Society of Certified Mediators and Negotiators, focused on 'Essential Skills of Mediation and Negotiation for Managers.'

A real case of role playing session was carried out by members of the Society of Certified Mediators and Negotiators. The case concerned a dispute between the owners of two flats concerning water leakage from the upper floor to the lower floor.



Photo 2: Dr Raymond Leung, Chairman of MILESAA (right) presented certificate of appreciation to Mr Charles Chan, Founding Chairman, Society of Certified Mediators and Negotiators (left).

In the panel discussion session chaired by Ir S.L. Mak, Committee Member of MIES-IET Hong Kong, various staff raised concerns on the development of mediation and negotiation skills in Hong Kong.



Photo 3: Ir Peter Si, Chairman of MIES-IET HK (right) presented souvenir to Dr Raymond Leung, Chairman of MILESAA (left).

In the closing speech, Ir Peter Si, MIES Committee Chairman, expressed his sincere thanks to all guests and speakers, as well as to the organizing and supporting organizations. Meanwhile, special thanks were given to the organizing committee and programme volunteers for their full support to the seminar.



Photo 4: Photo taken with speakers, guests and organizing committee members after the seminar.

Prepared by Ir M.K. Lam

Forthcoming Activities

Date	Activity
September 2010	MILESAA Annual General Meeting 2010

Technical Seminar on Integrated Technologies and Applications to Enhance Competitiveness of Land Transportation 8 July 2010 (Thursday)

About 130 delegates from the industries, the public, and the press participated in a seminar entitled 'Integrated Technologies and Applications to Enhance Competitiveness of Land Transportation' held at The Hong Kong Polytechnic University on 8 July 2010. The event was organized by the Department of Industrial and Systems Engineering (ISE) of The Hong Kong Polytechnic University (PolyU), Innovation and Technology Commission (ITC), and Autotoll Limited (ATL). The event was co-organized by the Hong Kong Productivity Council and GS1 Hong Kong (GS1), and supported by the MILES Alumni Association of The Hong Kong Polytechnic UniversitySM (MILESAA). Speakers included Dr S.K. Kwok (PolyU), Mr Jim Kwok (Hong Kong Customs and Excise Department), Mr Owen Leung (ATL), and Mr K.K. Suen (GS1).

The seminar was graced by Honourable Dr Samson Tam, Legislative Councillor (IT sector) and Prof. H.C. Man, Department Head of ISE. Both dignitaries gave the opening and welcome speeches.

Dr Kwok introduced an intelligent eSecurity device, as well as the related software modules and middleware, featuring the integration of various logistics enabling technologies like radio frequency identification (RFID) and global positioning system (GPS). The device can be deployed in different applications, especially in physical assets, containers, and during fleet management. The software can connect with public information sharing platforms, such as OBTIS, ezTRACK, and EPCglobal network, and share and integrate real-time logistics and physical asset information.

To share the achievement of the integrated technologies and applications with the public and the industries, a showcase was opened and displayed for public viewing. The activity was promoted to the industry. The membership scheme was established to comprise people or organizations from various industries for commercialization and technology transfer.

The solution on 'Intelligent eSecurity Device' was covered by two local newspapers and one local TV station on 9 July 2010.

For event details, please visit <http://www.rfid.ise.polyu.edu.hk/eseal/>.



Photo 3: Speakers included (from left) Mr Jim Kwok (Hong Kong Customs & Excise Department), Dr S. K. Kwok (PolyU), Mr K. K. Suen (GS1), and Mr Owen Leung (ATL).



Photo 4: Dr S.K. Kwok showed the demonstration of our Intelligent eSecurity Device to Dr Samson Tam and other VIPs.



Photo 1: Group Photo of VIPs and Speakers



Photo 2: About 130 delegates from the industries, the public and the press participated in the seminar



Photo 5: Prototype of the Intelligent eSecurity Device for Demonstration during the seminar

Prepared by the Department of Industrial and Systems Engineering,
The Hong Kong Polytechnic University

Our Latest Achievements

Collaboration with China Academy of Space Technology

Professor Yung Kai-leung, Associate Head of the Department of Industrial and System Engineering was appointed to lead the Space Project

A senior delegation led by Professor Timothy W. Tong, President of The Hong Kong Polytechnic University (PolyU), has recently visited Beijing to explore collaborations with the China Academy of Space Technology (CAST).

With Professor Tong witnessing the event, CAST Vice President Mr Dai Shou-lun and PolyU Vice President Professor Ko Jan-ming signed an agreement to formalize research collaboration between two parties relating to China's lunar exploration programme.

PolyU will send forth its top-notch expert, Professor Yung Kai-leung, Associate Head of the Department of Industrial and System Engineering, to lead this project. Professor Yung

will work closely with CAST experts on the development of a "Camera Pointing System".

This sophisticated tool will be capable of deploying a camera and controlling its rotational and tilting movement with precision. The camera serves the dual function of image-capturing and surveillance. The system is designed to operate under extreme environment with a high degree of adaptability.

Professor Yung has a wealth of experience in developing state-of-the-art space tools, including the "Mars Rock Corer" for the European Space Agency's Mars Express Mission in 2003 and "Space Holinser Forceps" for the former MIR Space Station. He is also responsible for developing the "Soil Preparation System" for the Sino-Russian Space Mission "Phobos Grunt" to be launched in 2011.



Award received by the academic staff

Award for Teaching and Learning Innovation

Professor Eric Tsui of the Department of Industrial and Systems Engineering was conferred with the 2010 Teaching and Learning Innovation Award. The award aims at encouraging the teaching staff to adopt blended teaching to inspire and motivate the learning of students.

Professor Tsui has been designing and practising blended learning by leveraging Web 2.0 tools (for example, podcasts, wikis, social bookmarking, and RSS) and scenarios to achieve participative and sustainable individual learning environment. Professor Tsui shares this honour for the HKCyberU platform with his team at the Knowledge Management Research Centre and the Educational Development Centre.



Professor Eric Tsui (right) receiving the honour from Professor Walter Yuen, Vice President (Academic Development).

Award received by students

ISE Students won the championship and the first runner-up in the Student Project Competition organized by the Hong Kong Society for Quality

Three teams of students from the Department of Industrial and Systems Engineering (ISE) participated in the 2010 Student Project Competition organized by the Hong Kong Society for Quality. The competition is an annual event offering university students the opportunity to study real-world issues in organizations, allowing them to make recommendations to

address the confronted issues.

Eight teams from four local universities (HKU, HKUST, CityU, and PolyU) took part in the competition. Both the Champion and the First Runner-up awards were bestowed to ISE. The members of the champion team include Mak Man Wa, Ng Lai Lang, Ng Ka Yiu, and Leung Ho Ting, while members of the first runner-up team are Yap Yih Shan, Dai Xin, and Bai Miao.



Photo 1: Champion Team: (from left) Mak Man Wa, Ng Lai Lang, Ng Ka Yiu, Leung Ho Ting receives the prize from Mr Peter Ho, representative of sponsor of the competition



Photo 2: 1st Runner-up Team: (from left) Yap Yih Shan, Dai Xin, Bai Miao, with Mr Anthony Ma, representative of sponsor of the competition

Scholarship received by students

Mr TING Siu-lun, a research student from the Department of Industrial and Systems Engineering, received the 'Scholarship Award of the Institute of Industrial Engineers Hong Kong (IIE Hong Kong)'. IIE Hong Kong scholarships are awarded to students with superior academic performance. Mr Ting is currently pursuing doctorate degree under the supervision of Dr S.K. Kwok, and with Prof. W.B. Lee and Dr Albert H.C. Tsang as co-supervisors. His research work focuses on computer modelling of medical knowledge, medical informatics, and related enabling technologies, such as radio frequency identification technology and electronic medical record system.

The title of Mr Ting's research project is 'Knowledge Acquisition and Modelling System (KAMS) of the Medical Prescription Process'. It proposes a conceptual framework for knowledge acquisition and modelling that incorporates the current technologies in knowledge-based systems, data mining, and artificial intelligence. Prototypes of tools for prescription knowledge acquisition and modelling are designed and developed with the use of system modelling knowledge.

These prototypes will provide a dynamic and customizable method for acquiring the collective prescription experiences of physicians in order to enhance support in making prescription decisions. The research outcomes have been presented in several international conferences and published in various international journals. In addition to his sound academic records, Mr Ting has also won a number of awards in different local and international technology innovation competitions. Some of his outstanding awards include the champion, as member of the 'Best Presentation Team', of Microsoft Imagine Cup 2007. He was also a recipient of the Golden Award on the Application Development Proposal Category of the ICT Innovation Competition, organized by the World Telecommunication and Information Society Day-Hong Kong in 2008.

Development and implementation of cost effective and extensible intelligent eSecurity device and its related fleet management system

An intelligent eSecurity device, also referred to as eSeal, as well as its related fleet management system featuring the integration of various logistics enabling technologies like radio frequency identification (RFID), global positioning system (GPS), sensors, and Bluetooth, was developed by the Department of Industrial and Systems Engineering of the Hong Kong Polytechnic University in collaboration with Autotoll Limited. It can be deployed in a range of applications, such as electronic sealing and unsealing of containers, monitoring of physical assets and cargos security, and fleet management. The system can connect with public information-sharing platforms like the On-board Truck Information System (OBTIS), ezTRACK, and EPCglobal to share real-time logistics and physical asset information. The device and its related fleet management system can provide the following special features and advantages:

- Facilitate and enhance safety monitoring and inspection in logistics operations in land border control and customs clearance operations;
- Simplify the current logistics flow and encourage the use of logistics management system by developing eSeal technology and related software; and
- Conduct automation in logistics operations and achieve supply chain visibility by connecting with current business systems.

Application: Ensuring the transport safety of food supplies

Recently, Hong Kong has been experiencing an increasing number of food poisoning incidents. These cases occur not only in the retail process, but also during production, import, wholesale, and distribution. Apart from financial losses, human lives may also be jeopardized as a result of these incidents. Therefore, food safety has become a critical issue in logistics industry. In order to deal with this problem, the device using sensor technology has been applied to monitor conditions that affect food quality, such as storage temperature, humidity, and level of light-reception and vibration of the cargo during transportation, thereby ensuring the transport safety of food supplies.

Temperature control is of critical importance in assuring the quality of food in transit. Very often, it is difficult to detect degradation of food quality based on visual inspection. It is therefore important to track and monitor conditions of the storage environment during transportation. The device and its related fleet management system can automatically generate an alert message when the temperature is out of range for immediate response action.

Summary

The ITF Project entitled 'Development and implementation of an RFID-based solution and an intelligent eSecurity device for physical asset, container, and fleet management (基於 RFID 技術及適用於資產、集裝箱及車隊管理的智能電子安全裝備之設計和實施)' will be completed on 30 September 2010. Upon completion, a cost-effective and extensible intelligent eSecurity device and its related fleet management system will be made available to improve logistics automation in order to achieve real-time event reporting, management, analysis, and resource optimization.

For project details, please visit <http://www.rfid.ise.polyu.edu.hk/easeal/>.



Photo 1: Main Components of an Intelligent eSecurity Device

Development and implementation of cost effective and extensible intelligent eSecurity device and its related fleet management system (cont'd)



Photo 2: Fleet Management System - Real-time Truck Status Enquiry



Photo 3: Fleet Management System - Real-time Conditions Tracking and Monitoring of Storage Environment



Photo 4: Fleet Management System - Resource Optimization for Fleet Management Scheduling



Photo 5: Fleet Management System automatically generates an alert message instantaneously when the temperature is out of range for immediate response action

Article and photos are provided by the Department of Industrial and Systems Engineering of The Hong Kong Polytechnic University

Editorial Board

Dr Benny Cheung
Associate Professor
Department of Industrial and Systems Engineering
The Hong Kong Polytechnic University
Honorary Secretary
MILES Alumni Association of The Hong Kong Polytechnic University

Dr Sandy To
Associate Professor
Department of Industrial and Systems Engineering
The Hong Kong Polytechnic University
Honorary Financial Secretary
MILES Alumni Association of The Hong Kong Polytechnic University

MILES Alumni Association of The Hong Kong Polytechnic University
EF625, Department of Industrial and Systems Engineering
The Hong Kong Polytechnic University
Hung Hom, Kowloon
Tel: (852) 3400 3185 Fax: (852) 2362 5267
Email: miles.aa@inet.polyu.edu.hk
Website: www.ise.polyu.edu.hk/milesaa

Contact for enquiries:
Ms Carrie Cheung
Department of Industrial and Systems Engineering
The Hong Kong Polytechnic University
General Secretary
MILES Alumni Association of The Hong Kong Polytechnic University