At CUHK, about 25% of engineering students are now females. Misconception of what it is like to be an engineer and lack of role models are probably the reasons for low female graduation rate. In modern society, a diverse set of abilities (e.g. intelligence, creativity, problem-solving, communication) are needed to tackle challenges all we face. Below are the sharing of our female alumni.

**CHOI Yuk Chin Azura**

2016 BEng (Biomedical Engineering) graduate
Assistant Electronics Engineer, Electrical and Mechanical Services Department, HKSAR

I joined the EMSD as a Biomedical Engineering Graduate to undertake the HKIE accredited 2-year Scheme “A” training. During the training, I was attached to various divisions of EMSD and Department of Health to acquire professional experience in the maintenance and operation of engineering systems and management of biomedical engineering services. Upon completing the training, I was appointed as an Assistant Electronics Engineer. I provided biomedical and electronics systems engineering services to the public healthcare sector, including Hospital Authority and Department of Health.

In addition to my responsibilities at work, I actively supported the activities and promotion of engineering in Hong Kong. I joined HKIE’s President’s Protégé Scheme and shadowed the President of HKIE. I participated as a helper in various significant engineering events, e.g. International Engineering Alliance Meetings, Presidential Address and Engineer Day, to raise the visibility of engineers and promote our image.

**TANG Yu Lam Anna**

2015 BEng (Biomedical Engineering) graduate
Senior Sales Executive, Roche Diagnostics

After my graduation from BME in 2015, I started working as a Product Specialist/ Medical Sales. Both soft and hard skills count in my work as a medical sales. Soft skills include interaction with customers and different departments in the company, initiation of sales, closing a deal, service satisfaction to the customers, etc. Hard skills, which could be learned in BME lectures, include the knowledge of the principles behind medical instruments, and application supports when the customers seek our help. We have to be sensitive to fast changes in technologies employable in medical fields. The career path could be broad, because one can move along the path of Sales Manager/ BU head/ GM/ Director, or move horizontally from sales to Marketing and Product Manager, etc.

**FOK Tsz Ki**

2013 BSc (Computer Science and Engineering) graduate
Vice President – Front Office Developer, Societe Generate Securities (HK) Limited

Since graduation from Computer Science, I started working in the financial industry, from application support, to agile dev-ops, to development for front office. The knowledge I have acquired as an engineering student allowed me to work in different roles in the technology field and adapt rapidly. I obtained a master’s degree in finance 3 years after college, which allowed me to further develop the career path in the financial industry. I am thankful for all the opportunities that the Engineering Faculty has offered to me and enjoyed the time we spent at CUHK a lot.

**YUNG Man Lee Lily**

2016 BSc (Computer Science and Engineering) graduate
Data Engineer, Goldman Sachs

It has been more than 5 years since I joined the Market Data Engineering Team in Goldman Sachs. Working in an investment bank has never been easy. As my team spreads globally in America and Europe, I often need to work long hours and have late night meetings. Recently I became a mother. I would like to spend more time with my little one, while still striving for the best in my career. Sad to say, this is generally less expected from men, and you need to put in extra effort to prove yourself when it comes to competition. Although it was really tough and tiring, it was a very rewarding experience. Throughout the years, I did grow a lot in my career. There is no reason to stop a woman from doing great in career while taking care of the family.
WONG Hiu Tung Hilda
2014 BEng (Electronic Engineering) graduate
Acting Senior Design Engineer – Signalling & Electronic Control Engineering, MTR Corporation Limited
After graduation, I joined MTR as a Graduate Engineer and have gone through the HKIE Scheme A training. During various rotations and attachments in different departments and sections, I have familiarized the organization, operations and international business of the corporation. Currently, I am undertaking a range of design tasks for the signalling and control systems for the operating railway including preparation of system specifications, review of design submissions, support of testing and commissioning activities, fault investigation and recommendation of improvement initiatives in accordance with statutory requirement(s) and international standard(s).

As inspired during the study in EE department that we shall not limit ourselves by the given boundaries while we could explore more opportunities based on the fundamental knowledge, I also participated in a few innovative projects on top of regular duties to develop solutions with non-ordinary and/or new technologies to tackle the pain points encountered during operations and maintenance of the whole railway network. Let’s go smart and beyond.

LUK Pui Ki
2009 BEng (Information Engineering) graduate
Associate Director (Digital Banking), Standard Chartered Bank
After graduation, I joined HSBC as a digital channel frontend developer of digital retail banking in the Asia Pacific region for six years. After that, I worked as a product owner in HSBC and currently in SQS to make Business Internet Banking and Mobile Banking services available for Hong Kong commercial and personal clients in another six years.
I always believe technology can improve human lives by saving time and hassle. I am glad that digital transformation (e.g., eStatements) can help protect the environment by reducing paper use and allowing people to manage finance on the go, even during the pandemic.
I feel so blessed that CUHK IE has equipped me as a fast learner with solid technical knowledge to innovate in this rapidly changing world.

YEUNG Wing King Annabelle
2015 BEng & BSc (Mathematics and Information Engineering) graduate
Solution Lead, Cathay Pacific Airways
I have been in my current company for more than six years, starting as an IT Graduate Trainee. My current role is to lead the team to deliver projects or support applications relating to B2B.
I am attracted to the IT industry because I enjoy the process of problem-solving, the satisfaction of converting users’ vague requirements to a real commercial product. Nowadays, a successful IT person in business is no longer the stereotypical programmer sitting in front of a computer and coding all day. Instead, modern project management and execution demand soft skills such as effective communication, conflict management, and people management. Besides being the party with the technical capability to produce deliverables, IT also acts as a consultant to advise the business on how technology can drive efficiency or revenue growth.
Therefore, if you are good at problem solving and communication, and you are eager to learn about technology, you are always welcome to join this industry.

TAM Hiu Yin Yan
2013 BEng (Electronic Engineering) graduate
Lead Consultant Specialist, The Hongkong and Shanghai Banking Corporation
I have been working for HSBC almost 10 years, I joined the company back to 2012 through the work study program when I was a year-2 student until now. Thanks for the program, I not only gained the valuable exposure for working in a global company, but also gave me the opportunity to pursue my career in HSBC after my graduation as the trading applications support. It was the position to provide the rapid response & fix the system problem for internal users. Now I am managing a small team which not only provide the support but also deliver the projects to enhance the system to fit the users’ daily need. Thanks EE department, gave me the entry point to develop my own career where I demonstrate my value as well as gained a lot of satisfaction. I also know my husband here and form a family of 3 already. It was memorable & happy time when I studied here.

MAE
Mechanical and Automation Engineering

CHEUNG Ting Ting Tracy
2012 BEng (Mechanical and Automation Engineering) graduate
Postdoctoral Research Fellow, UQ Centre for Natural Gas, University of Queensland
Over the last ten years, my research and teaching experiences have been in energy transitions, climate change, and planning and development in European and Asia-Pacific cities and regions. Through the engineering training at MAE and the general education courses in CUHK’s curriculum, I developed an interdisciplinary interest in clean energy technology and its implications for sustainable development. After my B.Eng. studies, I pursued an M.Sc. degree in Integrated Climate System Science at Universität Hamburg, Germany. I recently completed a joint doctoral degree between Universität Hamburg and Macquarie University, Australia. My current research at Queensland explores opportunities and challenges for new energy projects, focusing on large-scale solar and hydrogen.

CHAN Pui Ying
2016 BEng (Energy Engineering) graduate
Senior Consultant, PwC Hong Kong
I have been working as a consultant specializing in corporate sustainability since my graduation. Now I am part of the climate and sustainability team in PwC which provides environment-related consulting services. With climate change becoming an emerging global challenge over the past few years, enterprises in Asia and even the globe are more aware of the relationship between environment and their business performance. Therefore, consultants play a more important role in the commercial world. I would like thank MAE for equipping me with solid knowledge which is essential and irreplaceable for my career.

LAI Sharon
2011 BEng (Systems Engineering and Engineering Management) graduate
FinTech Manager, Hang Seng Bank
“Reset, be innovative”, it’s a daily cheer to myself. I enjoy so much for learning new thing, solving new problems. Don’t be satisfied for being an expertise, it’s fun to explore the untapped areas and challenge the status quo. Break the boundaries now and get out of your comfort zone.
Be passionate, be open-minded, be a sponge, you will find a path blending your ability, work experience and importantly, my life.
**New Faculty Staff**

Prof. CHANG Hing-Chiu Charles

Prof. Chang Hing-Chiu Charles received his PhD degree in Biomedical Electronics from the National Taiwan University in 2012, and completed his postdoc training at Duke University Medical Center. Before joining the academia, he worked in a medical imaging industry and developed prototype magnetic resonance imaging (MRI) software for research purpose. He has pioneered several 2D and 3D multi-shot echo-planar imaging (EPI) techniques to enable high-resolution and time-efficient brain diffusion-tensor imaging (DTI) on clinical MRI scanner for neuroscience research. He is practically interested in clinical application and routine examination of MRI, and has been actively working with radiologists on improving diagnosis and patient care using different advanced MRI techniques. In July 2021, he joined the Department of Biomedical Engineering in the Chinese University of Hong Kong as Assistant Professor.

Prof. MAK Wing Cheung Martin

Dr. Mak Wing Cheung Martin has more than twenty years' international research experience in Sweden, Singapore, Germany, and Hong Kong in the field of biosensors and materials sciences. His research activities are focused on biosensors and bioelectronics, advanced transducer materials and wearable sensors, membrane/paper-based biosensors and analytical chemistry, and with a strong interest in advanced material design and fabrication strategies to improve biosensor performance. He has authored over 70 peer-reviewed research articles covering the fields of biosensors, bioelectronics, analytical chemistry, materials science, and biomedical engineering. He is actively interested in transferring academic research to industrial applications. He has considerable experience in industrial R&D as a technical manager, entrepreneur of spin-off companies, and inventor of several patents in the field of biosensors and healthcare diagnostics. In December 2021, he joined the Department of Biomedical Engineering at the Chinese University of Hong Kong as Associate Professor.

Prof. FARNIA Farnaz

Prof. Farnaz Farnaz joined the Department of Computer Science and Engineering as an Assistant Professor on 5 July 2021. He received M.Sc. and Ph.D. degrees in electrical engineering from Stanford University and his B.Sc. degree in electrical engineering and mathematics from Sharif University of Technology. Prof. Farnaz believes that the Laboratory for Information and Decision Systems, Massachusetts Institute of Technology, from 2019-2021.

Prof. HO Tsung-Yi

Prof. Tsung-Yi Ho joined the Department of Computer Science and Engineering as a Professor on 2 August 2021. He received Ph.D. in Electrical Engineering from National Taiwan University in 2005. His research interests include several areas of computer-aided design, especially in design automation of microfluidic biochips. He is a Distinguished Member of ACM. His research interests include machine learning, deep learning theory, optimization, and information theory.

**Professor Raymond Tong Scoops Two Awards at “the Oscars” of Asia Pacific’s Eldercare Industry**

Prof. Raymond Tong, Chairman of the Department of Biomedical Engineering, has been honored with the “Global Ageing Influencers 2021” award at the 9th Asia Pacific Eldercare Innovation Awards Ceremony held by the Ageing Asia in Singapore, in recognition of his outstanding achievements in rehabilitation innovation, programmes and services that advance the standard of living for older adults on a global scale.

Prof. Raymond Tong’s team, The “HOPE 4 Care” programme, also delivers focused rehabilitation: the “Hand of Hope”, the exoskeleton ankle robot, the interactive functional electrical stimulation cycling system and the AR Rehab Training System. They also are the winner of the Best Rehabilitation Programme in the world in 2021.

**Prof. Jonathan Choi and His Team Develop Novel Gold Nanoparticle as Alternative Treatment for Psoriasis**

Prof. Jonathan Chung Hang CHOI, Associate Professor of the Department of Biomedical Engineering and his team have developed a new gold nanoparticle as a self-treatment for psoriasis. devoid of steroids or biologics, this gold nanoparticle can downregulate the genes that are linked to epidermis hyperproliferation and inflammation and is an effective treatment for psoriasis.

**Alumnus Wong Kwan Hang Won Silver in Tokyo Paralympics**

Wong Kwan Hang, an alumnus of Department of Computer Engineering, Hong Kong, UC Berkeley, Johns Hopkins University, Children’s Hospital Boston, Harvard Medical School, and National University of Singapore. He joined the Department of Electronic Engineering, The Chinese University of Hong Kong in 2020 as Associate Professor. He served as publicly chair and Organizing Chair (workshop on Surgical Robots) for ICRA 2017, and video chair for ICRA 2021. He is the recipient of IFMBE/IMBE Early Career Award 2018, Interstellar Early Career Innovator Award 2018, and ICBI Young Investigator Award 2019. He is also the recipient of Best Conference Paper Awards at IEEE ROBO 2019, IEEE RCAR 2016, IEEE CCECE 2015, IEEE Cyber 2014, and IEEE ROBIO 2013.

Prof. CHEN Fei

Prof. Fei Chen received the B.S. degree from XITU in 2006, the M.S. degree from HIT in 2008, and the PhD in robotics from Nagoya University, Japan, in 2012. Then he found the Active Perception and Robot Interactive Learning laboratory at IIT, Italy. Since 2020, he has been an assistant professor with MAE, CUHK. His research interests lie in robot learning and control for various types of mobile manipulation robots.

Prof. WONG Hay

Prof. Hay Wong (HW) obtained his B.A. and M.Eng from the University of Cambridge, then Ph.D. from the University of Liverpool in 2019. He joined the MAE as an Assistant Professor in 2020. HW’s research interests include metal additive manufacturing and quality control. His work has earned him 2 international patents pending and 2 IET Innovation Awards. HW is the first solo author of 8 published peer-reviewed journal articles.

Prof. CHEN Yue

Prof. Yue Chen is an assistant professor at MAE, CUHK. She received her B.E. ('15) and Ph.D. ('20) degrees in Electrical Engineering from Tsinghua, and her B.S ('11) degree in Economics from Peking University. She was the awardee of Stanford Biological & Material Postdoc Fellowship and was selected as the 2020 EECs Rising Stars by UC Berkeley. Her research interests include optimization, game theory, and their applications in integrated energy systems.

Prof. Fei Chen received the Ph.D. degree from CUHK in 2014. After graduation, she worked as a postdoctoral research associate at Princeton University in Prof. Paul Pruncul’s group, investigating and developing new fronts in computing and information processing using light. Her current research at CUHK is dedicated to building faster and more efficient hardware for neuromorphic computing on photonic integrated circuits and developing related applications.

**Save mum’s voice** —

a meaningful application AI based text-to-speech

Prof. LEE Tan’s team helped an oral cancer patient who lost her natural voice after surgery to “speak” again in her own voice. This was done using a tailored text-to-speech system based on deep learning (AI) and the patient can now communicate with others by typing words or sentences in the app and the app will generate speech in the patient’s own voice. The team is improving the technology in the hope of helping more people in need in the future.

Prof. CHESTER SHU elected 2022 Optica Fellow

Prof. SHU Ching Tat, Chester, Professor and Chair of the Department of Electronic Engineering, was elected an Optica Fellow in the 2022 class for seminal contributions to “effective control and processing of optical signals in communications”. Fellows are members who have served with distinction in the advancement of optics and photonics through distinguished contributions to education, research, engineering, business and society.

Optica, formerly known as The Optical Society (OSA), has been the world’s leading authority, accessible and archived.
Silver Award in the Intelligent Logistics Handling of the “Smart +” Category in the national finals of the 2021 China University Students Engineering Practice and Innovation Ability Competition

The CUHK team, comprising four undergraduates Miss WANG Xingyu (MAEG), Miss WANG Xingyu (MAEG), Miss WANG Wei (EEEN), and Mr. CHEN Yiwei (EEEN), received the Silver Award in the Intelligent Logistics Handling of the “Smart +” Category in the national finals of the 2021 China University Students Engineering Practice and Innovation Ability Competition.

This year, the competition was held synchronously on site at Tsinghua University and online on 16th-18th September 2021.

Corporate Visits to Mitsubishi Electric (Hong Kong) Limited Headquarters

A group of secondary school students have visited the Headquarters of Mitsubishi Electric (Hong Kong) Limited on Dec 14. During the visit, Engineers have shared their work and career path to interested students. Students were also engaged in the Showroom tour where the staffs happily introduced them with the company contribution in local green technology applications and energy saving strategies.

The CUHK team “404NoBrain” won the PwC Hackday 2021. This is the third time our students won this event since its inauguration in 2017. Champion for 2017, 2018 and 2021. The winning team is composed of two CS and two IE students.

Prof. Zhenyu Yan awarded “Rising Star Award” from ACM SIGBED China Chapter

The ACM SIGBED (ACM Special Interest Group on Embedded Systems) China Chapter is a regional professional community in the fields of embedded systems, Internet of Things, electronic design automation, and Cyber-Physical Systems. Every year, no more than three young scholars who have demonstrated outstanding scientific research achievements and scientific research potential in related fields are selected to win the mentioned award.