


ENGAGE 程繫中大

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SHARING FROM FRESH GRADUATES 2019

CSE
Computer Science
and Engineering

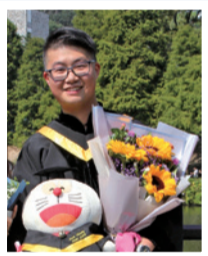


CHUNG Pui Wo Tommy

Assistant Service Engineer, Celki VitalAire

I joined Celki VitalAire as an Assistant Service Engineer upon graduation at CUHK. My job responsibilities include managing sleep laboratories' services in public and private hospitals, processing the polysomnography (sleep) test for the patients and manual scoring the sleep report for the doctors. I was intrigued by exposure to sleep stage scoring since I could apply what I have learned in neuroengineering about the EEG signals. It is glad for me to have the opportunities to contribute in diagnosis and cure for the patients with sleep apneas. Being an engineer, processing in the maintenance and providing technical support for the medical devices builds up a good platform for me to train my communication skills with different people, such as doctors, nurses, medical sales, and the patients because it is common to change some medical or technical terms into common phrases for their understanding. Besides, Celki provides me on-job Registered Polysomnographic Technologist (RPSGT) training, which is an internationally recognized credential by BRPT in the USA, it motivates me to explore more and broaden my horizons as a specialized engineer in this industry.

BME
Biomedical
Engineering



CHUNG Yue Hin Jack

Biomedical Engineer, Medisource Supply (Asia) Co. Ltd.

After graduating from CUHK, I start working as a Biomedical Engineer in medical consumables and devices company, responsible for the maintenance session of the medical devices, such as patient monitors in hospitals. As a part of the service team, I need to help arrange the routine checking for the medical devices in HA hospitals. Besides, the clients will contact us for corrective maintenance if the machine has any failure symptoms. After receiving the order, we have to reach the site as soon as possible, analyzing the faulty type and try to fix the device. The job requires us our biomedical and electronic knowledge, but also teamwork, communication and the ability to improvise. Most of the time, we work in the hospital and need to co-operate with the nurses and clerks inward. It is really challenging as I have to adapt to the tense and busy environment. Yet, the job gives me a sense of success and satisfaction as I can give a helping hand to Hong Kong's medical field by keeping the medical devices in high standard.

SEEM
Systems Engineering
and Engineering Management

CHEUNG Tin Hoi Kaiser

Management Trainee, LF Logistics (HK) Ltd

I have always been passionate about developing a career in the logistics and supply chain industry. My current role provides me opportunities to further understand 3PL operations, from DC management to freight forwarding. Currently, my main duty includes ensuring the accuracy of our inbound and outbound shipments, verifying stock on hand and making sure delivery is made on time as per the customers' requests. Other than daily operations, I also had the chance to be hands on a variety of projects to increase productivity of our staff and eliminate manual handling. I have been learning a lot and will continue to gain knowledge from my work experience. I believe there are lots of opportunities for personal development and one must be able to pass on some responsibilities, pick up new responsibilities and continue the learning process. I wish everyone a great success in the excited journey ahead!

SIU Wing Hei

Software Engineer, Onwards Media Group

I met the Onwards Media Group on the job fair held by the Engineering Faculty in my year 3 of study. I was a summer intern and became a part-time technical staff during my final year. And now I work full time as a Software Engineer after graduation.

My first mission in the company was to develop a facial recognition system from videos. I have taken courses about artificial intelligence and machine learning which gave me the basic knowledge and principle, with the generous guidance and encouragement of my colleagues, I finished my task successfully. The company also gives many opportunities to work on different tasks, such as image/audio processing, frontend/backend development and research a topic like the things did in Final Year Project. I can gain practical experience and apply my skills throughout a variety of tasks.

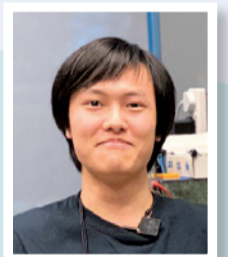
Thank you to CUHK for giving me the courage and wisdom to tackle challenges and seize opportunities and I hope schoolmates can grasp every chance and keep chasing your dream.



YAU Pok Fu Boris

Technical Lead, Rice Robotics

I am working in a robotics R&D startup focusing on smart and fully autonomous design of indoor delivery robot. As a technical lead, my job is to conduct high level design and integration of all components from mechanical, electrical to software. I think this is a particularly challenging job because it requires understanding of mechanisms from a wide range of disciplines such that all components can fit together nicely and seamlessly. I also need to have meetings with both clients and manufacturers in order to fully understand our business needs and constraints. If I were to model myself as a machine in a system then my input would be a list of business constraints and my output would be architectural diagrams and design specifications. Apart from these core duties, I do a wide variety of hands-on works such as programming back-end services, front-end UIs, mobile apps, deploying cloud services, designing / soldering PCBs, sourcing / purchasing components, and training junior engineers. All in all, I think it's a really fun and fulfilling job.





Information Engineering

CHAN Ka Loi Kallai (IE)

Junior System Analyst, Azeus Systems Limited

I am thankful to have entered Azeus, an international IT solutions company which is based in Hong Kong. I am now responsible for two government web systems. Being a system analyst, I have to resolve ad-hoc technical problems and handle system enhancement designs. One important lesson that I am now learning is about technical presentations. In school days, solving problems and having the technical solution are the ultimate goals. However, in the real world, beyond achieving the solution, I will also need to persuade our clients, who may be non-technical people, to accept the solution. Another challenging lesson is about impact analysis. System designs for school projects are mostly in small-scale and independent, and the result would only affect the grades. On the contrary, business projects are usually linked to other complicated system functions, and they can affect the stakeholders in different levels. To conclude, graduation is just the start of another learning journey, so don't give up your learning attitude after leaving the school!

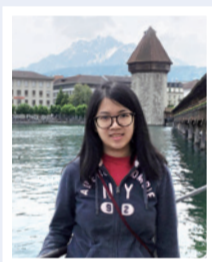


Mechanical and Automation Engineering

CHENG Ching Hei (MAE)

Engineer Trainee, Hongkong International Terminals (HIT)

I joined Hongkong International Terminals (HIT) for my first post-graduate job. During my first-year training, I will be staying in the crane project team, which is responsible for automation and semi-automation projects of all types of cranes. I have been assigned to the new Rail-Mounted Gantry Cranes (RMGCs) projects and is responsible for the automation subsystems. Recently, I assisted with enhancing and stabilizing the performance of the subsystems. It enables me to gain more knowledge of mechatronics systems and common technical problems of different designs. Besides, we are cooperating with Siemens and ZPMC, which helps to develop my communication and work planning skills. And we have a progress review once a month which I will get feedback and advice from colleagues. I found that studying in MAE helps me pick up my job quicker than I thought as the technical side is not too different from what I had learned in CUHK.



TANG Sum Yee (MIEG)

Technology Analyst, J.P. Morgan

I am now working as a technology analyst at J.P. Morgan. It's a 2-year graduate program that starts with a regional orientation in Singapore. During the orientation, I gained some basic knowledge of the financial service industry, from sales and trading to asset management. My team is responsible for algorithmic trading of cash equities and we need to work with quantitative traders to implement different trading strategies. My job is to perform data analysis on the trading and market data using python and KDB+. Working in a global investment bank is eye-opening as you get to work with talented people from different cultures and backgrounds. It's an ideal place to start your career if you are interested in finance & technology, and eager to learn new things every day.



YU Clara Aiting (Energy)

Assistant Consultant, Allied Environmental Consultants Limited

The concept of "green" and "sustainability" becomes more and more important in this decade. I am honored to get involved in a job which is related to green building designs. Allied Environmental Consultants Limited (AEC) is a sustainability and environmental consultancy firm. I have become a member of the environmental engineering professional team to work on different new-developed and redeveloped buildings' projects. Moreover, I have a bigger picture about the potentials and challenges facing in building development in Hong Kong. Indeed, the knowledge learnt and internship provided by the programme have helped me to equip well to enter a closely-related industry. In particular, the courses related to renewables, building services and architecture designs have given me fundamental concepts on all technical aspects, as well as a clearer direction about my future work nature. All in all, thank you all the supports from CUHK, MAE Department, family and friends.



Electronic Engineering

LEE Ho Tin

Graduate Trainee, The Hongkong Electric Co., Ltd.

I am undergoing the scheme A training programme under Hong Kong Institute of Engineers with the electronic discipline. It was a bit strange for an electronic graduate working in a power company but it is absolutely indispensable to include the role of electronic engineers in the power industry. The communication and control knowledge that I learnt at EE could be applied to my work. With the awarding knowledge acquired at EE, I was able to learn and solve problems encountered in my company when it comes to a different industry. I remember the good old days of taking a course "Electronic product design and development" taught by Prof. Michael Cheng. The technical knowledge he taught was inspiring and applicable to my workplace. EE department emphasizes both theories and practical skills and the 4-year study at EE has become the cornerstone of my career.



SIN Yiu Hoi

Hardware Engineer(IoT), Aztech System (HK) Limited

Studying electronic engineering is a wonderful memory for me. The courses I studied in the EE department have aroused my interest in the hardware development on the internet of things and provided me some project development experiences. For example, the Electronic Product Design and Development course which provide me basic training and hands-on experience on electronic product design and development.

I now work as an electronics engineer at a company in Hong Kong Science Park. My jobs included algorithm design and hardware design on IoT products. The experiences in final year project development equipped me with a clear mind to solve the problem under stress and how to research with paper to design algorithms. Special thanks to Prof. WU's support and guide when I do my final year project.



New Faculty Staff



Prof. DUAN Liting

Prof. DUAN Liting received her Bachelor's degree in Chemistry from Renmin University of China in 2010 where she worked on the fabrication and application of micro/nano-patterned structures using hot micro-contact printing. She moved from material engineering to biochemistry/biophysics for her doctoral studies at Stanford University (Ph.D. in Chemistry 2016) with Professor Bianxiao Cui. Her thesis focused on the development of optogenetic strategies to control intracellular activities. During postdoctoral research, she further studied and engineered the

photosensory proteins interactions for optimized optogenetic toolkits with Prof. Bianxiao Cui in Chemistry and Prof. Michael Lin in Bioengineering and Neurobiology at Stanford. In July 2018, she joined the Department of Biomedical Engineering in the Chinese University of Hong Kong as an Assistant Professor.



Prof. Sebastian BEYER

Prof. Sebastian BEYER recently joined the Department of Biomedical Engineering. He is a chemist by training and received his PhD in Biomedical Engineering. His interdisciplinary research background includes self-assembled polymer nanostructures, studying microvascular biology in microfluidics and designing novel materials based on coordination chemistry. His current research interest is to study coordination compounds with advanced spectroscopic methods and to utilize these spectroscopic insights to engineer optimized biomedical

implant and sensor materials. Prof. Sebastian Beyer enjoys bringing different disciplines and perspectives together and is looking forward to synergize with colleagues at CUHK.



Prof. GAO Zhaoli

Prof. GAO Zhaoli completed his Ph.D. in the Department of Mechanical and Aerospace Engineering at the Hong Kong University of Science and Technology in 2014. Since that time, he has been a Post-doctoral Researcher in Prof. Charlie Johnson's group in the Nano/Bio Interface Center and Department of Physics and Astronomy at the University of Pennsylvania. At Penn, Prof. Gao developed a graphene sensor concept that enables the detection of nucleic acid and antigen biomarkers for disease diagnosis at the early stage. He also invented a Ni-Cu gradient

alloy catalytic system for manufacturable synthesis of crystalline multilayer graphene with a tunable energy bandgap for potential applications in high-resolution biosensing. In Oct 2019, Prof. Gao joined the Department of Biomedical Engineering at The Chinese University of Hong Kong as an Assistant Professor.



Prof. WU Yuan Scott

Prof. WU Yuan Scott received the PhD degree in Electronic Engineering from the Chinese University of Hong Kong in December 2008. He was a research associate at the Department of Biomedical Engineering, Johns Hopkins University, with a joint appointment to the Department of Neurologic Surgery, Mayo Clinic. His research focused on the high-resolution endomicroscopy imaging for translational applications. To date, he has published 40 peer-reviewed articles, including Nature Communications and Science Advances, with a total citation about 2000

and an H-index 24 (according to Google Scholar). In early January 2020, Prof. Wu Yuan Scott joined the Department of Biomedical Engineering in The Chinese University of Hong Kong as an Assistant Professor.



Prof. HU Guohua

Prof. HU joined the Department of Electronic as an Assistant Professor in June 2019. He received his PhD degree in Engineering from the University of Cambridge in 2018. His major research topics during PhD included high-speed printing of graphene electronics, CMOS integration of printed graphene for sensing, and printed 2d material based nonlinear optical devices and photodetectors. His PhD thesis title was Printable 2D Material Optoelectronics and Photonics. His current research interest at CUHK is solution-processing and functionalisation of low-dimensional

nanomaterials for printed electronics, with particular focus on electronic skins, flexible and wearable electronics, bioelectronics, photonics, sensing and energy.



Prof. LI Hongsheng

Prof. LI is currently an Assistant Professor in the department of Electronic Engineering at The Chinese University of Hong Kong. He received the bachelor's degree in automation from East China University of Science and Technology, and the master's and doctorate degrees in computer science from Lehigh University, Pennsylvania, in 2006, 2010, and 2012, respectively. From 2013-2015, he was an associate professor in the School of Electronic Engineering at University of Electronic Science and Technology of China. His current research interest at CUHK is

compute vision, medical imaging and deep learning.



Prof. YANG Chen

Prof. YANG Chen received his B.Sc. degree in Mathematics and Applied Mathematics from Zhejiang University in 2008, and his Ph.D. degree in Financial Mathematics from the National University of Singapore in 2017. Prior to joining the Chinese University of Hong Kong, he was a postdoctoral researcher at ETH Zurich from 2017 to 2019. His research interests include optimal investment with market frictions, financial technology, mathematical finance, and market microstructure. One of his papers was published in the leading journal The Review of Financial Studies.



Prof. CHEN Benmei

Prof. Ben M. CHEN is currently a Professor in the Department of Mechanical and Automation Engineering at The Chinese University of Hong Kong. His current research interests include unmanned systems and control applications. Prof. Chen has published a dozen research monographs and more than 400 journal and conference articles. He has served on the editorial boards of several international journals including IEEE Transactions on Automatic Control and Automatica. He currently serves as an Editor-in-Chief of Unmanned Systems. His research team

has actively participated in international drone competitions, and won many championships in the contests. Prof. Chen is a Fellow of IEEE.



Prof. CHENG Shing Shin

Prof. Shing Shin CHENG received B.S. in Mechanical Engineering from Johns Hopkins University in 2013 and Ph.D. in Robotics under the supervision of Dr. Jaydev P. Desai from Georgia Institute of Technology in 2018. He joined the Department of Mechanical and Automation Engineering at The Chinese University of Hong Kong as an assistant professor in August 2018. His work has been published in leading robotics and materials journals and conferences, including IEEE Transactions on Robotics, Journal of Intelligent Material Systems and Structures, IEEE International Conference on Robotics and Automation, and International Symposium on Robotics Research. He is also affiliated with CUHK T Stone Robotics Institute.



Prof. SONG Xu

Prof. Xu SONG obtained his Bachelor degree in Mechanical Engineering and Automation from Tsinghua University, China (2006) and Doctorate degree (DPhil) in Materials Engineering from University of Oxford, UK (2010). After working briefly in Oxford for Rolls Royce on stress analysis and numerical simulation, he joined Singapore Institute of Manufacturing Technology (SIMTech) under A*STAR as scientist/senior scientist from 2012, and won the best industry project award (2016) and best staff presentation award (2019) during his tenure. He recently joined The

Chinese University of Hong Kong in 2019 as Assistant Professor in design and manufacturing, and serves as editor for journal "Materials and Design". He is a member of Institute of Physics (IOP) and Chartered Engineer UK.



Prof. ZHANG Weizhao

Prof. Weizhao ZHANG received his B.S. degree in Mechanical Engineering from Tsinghua University in 2014 and Ph.D. degree from Northwestern University in 2019. His research has focused on the numerical simulation of advanced manufacturing processes especially for polymer composite parts. He has over 15 publications and has received the Best Paper Award at the ASME - Manufacturing Science and Engineering Conference in 2016. During his research period, Prof. Zhang has worked with academic

and industrial partners including the Ford Motor and Dow Chemical Companies to develop computational material tools to systematically analyze the development of CFRP parts in large-volume consumer cars. His material model has been implemented in the commercial software code LS-DYNA by the Livermore Software Technology Corporation.

2019 CUHK Conference on Financial Technology

The Faculty of Engineering of The Chinese University of Hong Kong (CUHK) hosted the "2019 CUHK Conference on Financial Technology (FinTech)", supported by the Centre for Financial Engineering (CFE) and CUHK Business School. The conference titled "When Wall Street Met Main Street – Real vs Virtual Economy" drew close to 500 industry practitioners, professors, researchers, government officials and regulators to explore the trends driving the explosive FinTech development, and future collaboration opportunities.

Prof. CHEN Nan, Professor, Department of Systems Engineering and Engineering Management, Director of CFE and the Bachelor of Engineering programme in Financial Technology (BEng in FinTech) of CUHK, and Co-Chairman of the Conference's Programme Committee said, "The applications of FinTech are pervasive in various kinds of sectors including economics, law and banking. An up-to-date understanding of FinTech is particularly important to keep abreast of the changing market trends and professional personnel training. 2019 marks the second anniversary of the BEng in FinTech launched by CUHK, the first ever FinTech undergraduate programme in Hong Kong. With this multi-disciplinary programme, CUHK is indeed spearheading the effort to supply talent to both academia and industry."



UGC Teaching Award (Early Career Faculty Members)

Prof. Darwin Tat Ming LAU of the MAE Department has been awarded the 2019 UGC Teaching Award (Early Career Faculty Members). It recognizes his dedication and achievements in his learner-centred and experience-based learning ideology. As a leading expert in robotics, he significantly enhances students' learning interest and enriches their learning experience by introducing hands-on experience to the robotics programme.



IE Professors Guoliang XING and Angela YJ ZHANG Elevated to IEEE Fellows

Prof. Guoliang XING and Prof. Angela Yingjun ZHANG from the Department of Information Engineering, Faculty of Engineering at CUHK have been elected Fellows of the prestigious Institute of Electrical and Electronics Engineers (IEEE) in the class of 2020. Prof. Guoliang Xing was elected for his remarkable contributions to “sensor networks and low-power wireless networks”, while Prof. Angela Yingjun Zhang’s was accredited for her research on “resource allocation and optimization in wireless communications.”



The IEEE is the world’s largest professional organisation dedicated to advancing technological innovation and excellence for the benefit of humanity, with more than 430,000 members in over 160 countries. IEEE Fellow is the highest grade of membership and is recognised by the technical community as a prestigious honour and an important career achievement.

IE Alumnus Selected as one of the “30 Under 30” in 2019 by Forbes China

Eric WK Kuo, a distinguished alumnus from the Department of Information Engineering has been named to the Forbes China 30 Under 30 List 2019. He is the co-founder and CEO of the R-Guardian, a solution provider in bags and luggage IoT products. His firm has already successfully completed the second round of project financing with a value over 100 million RMB.

ICTAI 2019 Best Paper Award

Mr. Yuzhe Ma, Prof. Bei Yu and their collaborators received ICTAI 2019 Best Paper Award, for the paper titled “A Unified Approximation Framework for Compressing and Accelerating Deep Neural Networks”.

The IEEE International Conference on Tools with Artificial Intelligence (ICTAI) is a leading Conference of AI in the Computer Society providing a major international forum where the creation and exchange of ideas related to artificial intelligence are fostered among academia, industry, and government agencies. The conference facilitates the cross-fertilization of AI ideas and promotes their transfer into practical tools, for developing intelligent systems and pursuing artificial intelligence applications.

CUHK Team Designs a Rapid Test for a Banana Disease and Wins Gold Award in iGEM Competition 2019

A genetic engineering team of undergraduate students has been awarded a Gold medal at the International Genetically Engineered Machine (iGEM) 2019 Giant Jamboree held in Boston, USA. Under the project named “Banana Savior: The X Sense”, they have designed a rapid test for a new disease Banana Xanthomonas Wilt (BXW). They hope the novel design can help farmers in Africa and quarantine departments to realise early detection of the disease and help stop it from spreading. This is the sixth time that a CUHK team has won gold in the annual premier synthetic biology competition.



Qiu Shi Outstanding Young Scholar Award 2019

Dr. WANG, Xiaomu obtained PhD degree in the EE department at the Chinese University of Hong Kong (CUHK), advised by Prof. XU, Jianbin in 2012 received Qiu Shi Outstanding Young Scholar Award 2019 by Qiu Shi Science and Technology Foundation, Hong Kong.

Founded in 1994, the primary mission of the Qiu Shi Science and Technology Foundation is to promote scientific and technological progress in China by recognizing and rewarding successful Chinese scientists and scholars. There are totally 12 laureates of the Young Scholar Award 2019.



INNOVATION AND TECHNOLOGY STUDENT CLUB

With a view to prepare Hong Kong for upcoming challenges and to develop into a knowledge-based economy, the Faculty of Engineering, The Chinese University of Hong Kong (CUHK) proposed to set up an “Innovation and Technology Student Club” (ITSC) jointly with Innovation and Technology Commission (ITC). Our vision is to nurture young talents to become future technology elites who will contribute to the development of Hong Kong. Since 2009, we have recruited over 2,000 secondary students with similar interests in science and engineering.

ITSC 2019 Summer Activities

During 2019 Summer, we planned many technology visits and DNA fingerprinting workshop for our members as follows:

- DNA workshop on 15 July, 2019 of 3 hours in Science Laboratory learning DNA by Prof SK Kong from School of Life Science

Technology Visits:

- EMSD Guided Tour on Education Path on 16 July in Kowloon Bay
- CITAC – Mic on 23 July in Kowloon Bay learning the innovative construction method (Modular Integrated Construction).
- Visit CAD (Civil Aviation Department) on 23 July in Hong Kong Airport.
- Inno Lab Visit on 8 August in Kwun Tong of many advance Smart home technologies.
- Visit RoboMaster Competition and DJI exhibition in SZ on 9 August.



CAD Visit in Hong Kong Airport

2019 ITSC Summer Camp in CUHK with theme “Programming of Unmanned Aerial Vehicle”

From 29 to 31 July 2019, a 3-day-2 night camp was organized for 30 ITSC members staying in Wu Yee Sun College with excellent views of Tolo Harbour. This year, our theme was set to a current trending topic: “Unmanned Aerial Technology”. Our purpose is for participants to learn and think how AI works, and its contributions or effects toward society. Some highlights of our programme:

- Day 1:
 - o Theme Talk: we invited overseas expertise on unmanned aerial scope - Professor Lin Feng from National University of Singapore – to share advanced unmanned aerial vehicles application and technologies.
 - o 3 hours workshop on Programming of unmanned aerial (Tello)
- Day 2:
 - o Technology visit AI Unicorn company: SenseTime in Science Park
 - o Lab visit of Engineering Laboratories
 - o Pilot Sharing by Jeff of his inspirational experiences on the road to fulfill his pilot dream
- Day 3: Competition on programming the unmanned aerial vehicle



Lab Visit of Electronic Engineering Department

Summer camp participants were programming the unmanned aerial vehicle to finish the mission

Action now to apply ITSC membership and also “Like” us in facebook to receive ITSC first-hand news.

ITSC is planning various activities like Technology reporter, research internship, technology ambassador, summer camp, workshops in coming March and summer. You may view more of our activities on our Facebook page and YouTube channel as below: www.itsc.org.hk, <https://www.facebook.com/ITSC.HK> and www.youtube.com/CUHKcintec.

If you are a secondary student, you are welcome to join our activities by online application for ITSC membership through <http://www.itsc.org.hk/chi/membership.html>. By joining our membership program, most activities will be free of charge.

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