

# ENGAGE

## INCOMING EXCHANGE STUDENTS IN 2021-22

In 2021-22, despite the pandemic COVID-19, there were international students from Austria, Iceland, Mexico, Spain, UK and USA, just to name a few, joining our faculty as exchange students for one or two academic terms. Here they are telling us how they enjoyed the time and fun in Hong Kong!

### Brenda MONTELONGO HERNANDEZ

Year 4  
Biomedical Engineering (Bachelor's degree)  
Universidad de Monterrey, Mexico  
Originated country: Mexico



An exchange program is an opportunity to immerse yourself in a new culture. Hong Kong was therefore an excellent choice as the city is well known for being the perfect combination of East and West. Although the city faced its most challenging COVID-19 crisis during this term, I'm still very thankful for every moment I spent in Hong Kong, as I came across a different side of the city that only a few people can share. During my experience, I made friends for life and learned more about myself while living in a different country. At the same time, as a biomechanical engineering student exchanging in CUHK, I enriched my knowledge of this field and gained additional tools to continue growing as a professional. I fell in love with the city (from its food to the people), and I look forward to coming back for another visit in the future.

### Melkorka KRISTJÁNSDÓTTIR

Year 2  
Biomedical Engineering (Master's degree)  
Katholieke Universiteit Leuven, Belgium  
Originated country: Iceland



In the fall of 2021, I was fortunate to go on exchange to CUHK, from my home university of KU Leuven, where I study biomedical engineering. I had never before been to Asia, let alone studied there. So I did not know what to expect, including whether the teaching methods would be different, or how the professor-student communication style would be. When the semester started, I was thrilled to see how easy it was to integrate into the student life at CUHK. The professors in the biomedical engineering department were easy to approach to seek guidance on their subject or further instructions for an international student. The student life was also vibrant and exciting. I am so grateful for my exchange experience at CUHK!

### Jose Juan DE LEON GUILLAMON

Final year  
Electronic and Electrical Engineering  
(Bachelor's degree)  
University College London, UK  
Originated country: Spain



Having experienced CUHK Electronic Engineering (EE) for the last academic year, I can say that my learning experience has been unparalleled. A wide variety of courses are offered and are delivered in a very engaging manner. Professors and tutors offer help when needed, and are only an email away. Something that particularly sets CUHK EE apart are tutorials. These are offered weekly and they offer a great opportunity to go deeper into the taught topics and fully understand them. The course load is normally well structured giving students sufficient time to have the material sink in. CUHK's geographical location has the best of both worlds, a calm environment half an hour away from the buzzing city of Hong Kong. In short, CUHK EE is a very balanced option when choosing your study abroad placement.

### Lam NGO

Year 1  
Computer Science (Master's degree)  
University of Vienna, Austria  
Originated country: Austria



I came to Hong Kong in September 2021 to deepen my knowledge of Data Science. In the Department of Electronic Engineering I attended the course "Pattern Recognition". It provides a mathematical foundation for many different techniques in machine learning. I can recommend it to any future data scientists!

I found very good friends by joining the Wine Society of CUHK. Since I was the only foreigner, it was a great opportunity to meet locals and gain access to a cultural experience that would not have been possible any other way. At the same time, I learned so much about wine through numerous wine tastings with wine from all over the world. I was then able to go through internal selection to participate in the Hong Kong Finale of the Left Bank Bordeaux Cup.



**Jaime RODRIGUEZ DE LEDESMA**  
 Year 4  
*International Business (Bachelor's degree)*  
 University of Maastricht, The Netherlands  
 Originated country: Spain



My name is Jaime Rodriguez de Ledesma, I'm a Spanish exchange student from the University of Maastricht in the Netherlands. I started my major in International Business in September of 2018.

The initial duration of my Hong Kong exchange was 5 months, from January to May 2022. However, due to the pandemic and the restrictions that the Hong Kong government imposed on inbound travellers, I spent around 1 month in lockdown. Additionally, I left earlier due to several reasons, mainly the city's restrictions. I therefore only stayed for 3 months. My life in Hong Kong was good. There are tons of nature, tasty food, and interesting places to visit.

**Faridot Olamide OLABODE**  
 Year 2  
*Mechanical Engineering (Bachelor's degree)*  
 Aston University, UK  
 Originated country: UK



My experience of Hong Kong has been a very interesting and fun one. From having only one week of face-to-face lectures to going on beautiful hikes and exploring the city, in a way I probably would not have otherwise. My love for Dim Sum continues to grow with every new one I try. Apart from the wonderful experience, I have been able to grow so much as a person, with this being my first-time living solo in a different country, it made me realise that I am capable so much more than I think.

**Xiangyi LI**  
 Year 4  
*Business Administration (Bachelor's degree)*  
 The University of North Carolina at Chapel Hill, USA  
 Originated country: USA



My time in Hong Kong has truly been special, to say the least. Academically, I had a fruitful experience, both in-person and online teaching; personally, I have fallen in love with Hong Kong's unique terrain and culture. I was able to try multiple activities that I had never done before: 50km HK Trail, surfing, Hong Kong street food, and so many more.

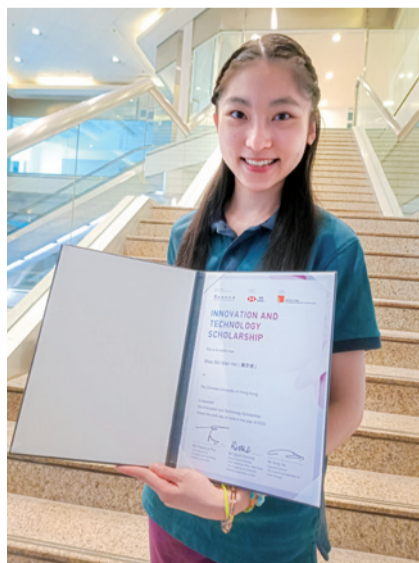
I have especially enjoyed Prof. Daniel Long's SEEM4610 course, where he helped me understand supply chain components and how we can effectively manage them. Moreover, the China-specific activities and examples he used in class helped me gain an insight into how supply chains are implemented in real life.

I appreciate CUHK's support throughout my exchange process. I look forward to returning in the near future!

# OUTSTANDING ACHIEVEMENTS (JAN-JUNE 2022)

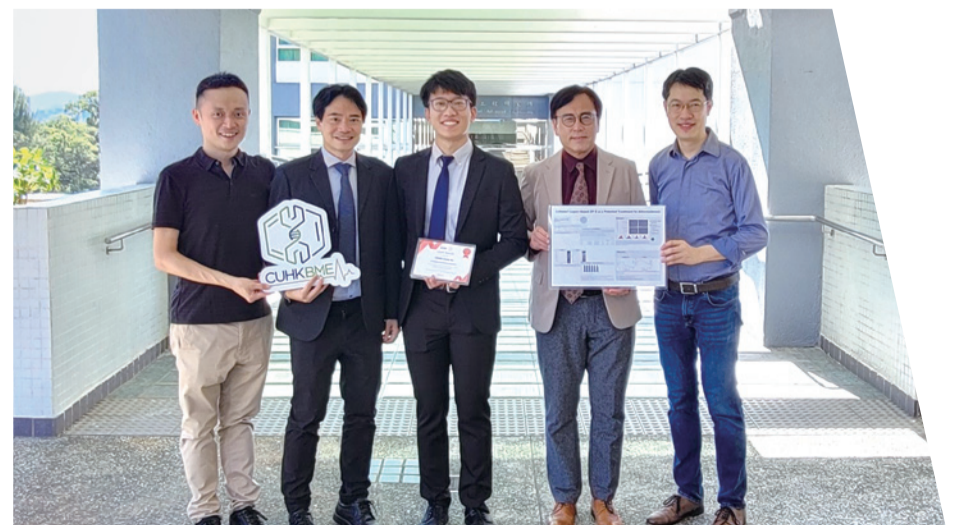
## BME Undergraduate Student Awarded Innovation and Technology Scholarship 2022

A Year 3 undergraduate student, SIU Man Hei Connie, from the Department of Biomedical Engineering (BME), has recently been awarded the Innovation and Technology Scholarship Award. This Award is established with joint sponsorship and support from the Innovation and Technology Commission and The Hongkong and Shanghai Corporation Limited (HSBC), which is organised by The Hong Kong Federation of Youth Groups (HKFYG). The Award recognises outstanding non-final year local undergraduates studying in science-related, technology, engineering, dental and medical disciplines, by providing a scholarship and a series of elite training opportunities, in order to widen students' international exposure, gain industry experience, and nurture students' passion for and commitment to science and technology. Connie is among the total of 25 awardees in Hong Kong. Details of the award scholarship is available at <https://innotechsponsorship.hkfyg.org.hk/>.



## BME Student Wins Gold Award at ASM Technology Competition 2022

TSANG Chung Yin Justin, a final year undergraduate student from the Department of Biomedical Engineering, has won a Gold Award from the ASM Technology competition 2022 with the project titled "Colloidal Copper-doped ZIF-8 as a Potential Treatment for Atherosclerosis". The ASM Technology Award promotes technological innovation in Hong Kong and recognises students for their accomplishments in technology. The winning project is supervised by Prof. Sebastian Beyer, demonstrating a colloidal biocatalyst, copper-doped Zeolitic Imidazolate Framework 8 (ZIF-8) that can convert blood borne s-nitrosothiols into nitric oxide, which can be used as a targeted and sustained colloidal drug carrier for acidic atherosclerotic plaques.





### Prof. Yu LI selected to the Forbes 30 Under 30 Asia

Prof. Yu Li, Assistant Professor, Department of Computer Science and Engineering, has been selected to the Forbes 30 Under 30 Asia (Healthcare Science Category) – Class of 2022. His research focuses on using data and AI algorithms to solve problems in fields such as biology and healthcare. A research paper published by the Microbiome journal last year examined the use of computational methods to better identify antibiotic resistance genes. Prof. Li has published more than 30 papers in academic journals including Bioinformatics and Nature Communications.



### Mr. Ziliang LAI Wins the First Prize of ACM Student Research Competition (SRC) Grand Finals 2022

Mr. Ziliang Lai, PhD student from Department of Computer Science and Engineering, recently won the First Prize of ACM Students Research Competition Grand Final 2022. Ziliang's work, Deterministic Concurrency Control for Private Blockchains, is on transaction execution of private blockchains, in which a fundamental requirement is to ensure all blockchain nodes produce the same results after executing the transactions, i.e., determinism. Such a requirement implies that executing transactions parallelly would be a problem because parallel transaction execution is non-deterministic due to OS scheduling. By introducing a novel deterministic concurrency control scheme, Ziliang's work enables private blockchains with excellent parallelism, achieving over 200% throughput improvement over the state-of-the-art private blockchains.



### CUHK Robotics Team Wins Champion and Best Team Spirit Award in the Robocon 2022 Hong Kong Contest

The CUHK Robotics Team "Golden Striker", comprising students from Engineering and other disciplines was crowned **Champion** and received the **Best Team Spirit Award** in the Robocon 2022 Hong Kong Contest.

This year, the theme is "Lagori", a traditional game originated in Southern India. The team used active casters such that the robots could move across the field more quickly during the game. Computer vision was also adopted to track the opponent's Ball on Head.

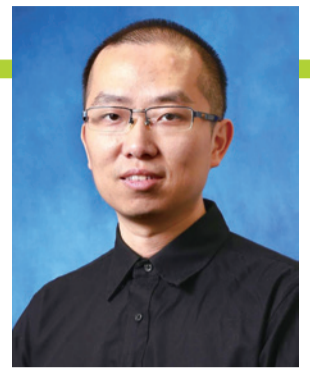
### SEEM Scholars Win Runner-up Prize in the Best Contributed Theoretical Paper Award at INFORMS Winter Simulation Conference 2021

Professor Dohyun AHN and his PhD student, Mr. Lewen ZHENG, from Department of Systems Engineering and Engineering Management (SEEM), won the Runner-up Prize of the Best Contributed Theoretical Paper Award at the INFORMS Winter Simulation Conference 2021. The title of the paper is "Efficient Simulation for Linear Programming under Uncertainty".



### Prof. Hongsheng LI, recognised as 2022 AI 2000 Most Influential Scholar

Prof. Hongsheng Li, Assistant Professor, Department of Electronic Engineering has been recognised as the 2022 AI 2000 Most Influential Scholar Honourable Mention in Computer Vision for his outstanding and vibrant contributions to this field between 2012 and 2021.



The AI 2000 Most Influential Scholar Annual List (<https://aminer.cn/ai2000>) aims to name 2,000 of the world's top research scholars from the fields of artificial intelligence over this decade (2020-2029). The list is conferred in recognition of outstanding technical achievements with lasting contribution and impact. Each year, the top 10 scholars from each domain will be named as "AI 2000 Most Influential Scholars" and the top 11-100 scholars will be awarded as "AI 2000 Most Influential Scholar Honourable Mention."



### IE Students Win the 2<sup>nd</sup> Runner-up Award in the Barrier-free Campus Design Competition

Undergraduate students CHENG Sum Yee (Sammi) and MAK Ka Ling (Elaine) from Department of Information Engineering won the 2<sup>nd</sup> runner-up award in the Barrier-free Campus Design Competition for their Final Year project "IE for Better Living". They built an eye-tracking-based Chinese character input system to help people with physical disabilities for easier and more efficient communication. The project was co-supervised by Prof. Rosanna CHAN and Prof. Pascal VONTOBEL.



### MAE Students Win VTech Innovation and Sustainability Award

The VTech Innovation and Sustainability Award is the initiative of VTech Group of Companies to promote innovation and awareness of sustainability. The Award is open to final-year students in the Department of Mechanical and Automation Engineering (MAE).

Ms. NG Hui Yin, Mr. HO Ka Chun and Mr. HON Wing Ngai were awarded Champion, 1<sup>st</sup> runner-up and 2<sup>nd</sup> runner-up respectively while Mr. YIM Ming Yeung and Ms. CHU Wai Ying received honourable mentions in the Award Presentation Ceremony held on 30 June 2022. The students were supervised by Prof. Hay WONG, Prof. Chun CHEN, Prof. Yunjian XU, and Dr. Dongkun HAN.







# ROBOTICS, STEM AND GREEN INNOVATION (PHASE 2)



## Hong Kong Tech Challenge Junior 2021 (香港少年工程挑戰賽2021)

Hong Kong Tech Challenge Junior 2021 was a junior level inter-school robotic competition, tailored for young kids from primary school and secondary school to have a more hands-on experience in robotics through an engineering challenge. This competition provided chances for students to use their STEM knowledge, creativity, problem solving skills and team work in designing their robots. Due to COVID-19, this year the competition was conducted in two parts: Part A - Skills Worlds Qualification in January and Part B - Skills Local in May to cater to the needs of different participant groups. 12 teams took part in Part A, and 51 in Part B. The winning teams from January were nominated to join the VEX Robotics World Championship in the USA.

## Mitsubishi Electric Green Innovation Competition 2022

"Mitsubishi Electric Green Innovation Competition 2022" is a STEM competition designed for local primary and secondary school students. It is organised by Centre for Innovation and Technology, The Chinese University of Hong Kong, with Mitsubishi Electric (Hong Kong) Limited and The Hong Kong Science and Technology Parks Corporation as the title sponsor and venue sponsor, respectively. "Home" is the theme of this year. Participating teams are required to research and propose creative ideas for tackling environmental problems, such as the increasing domestic waste produced by every household.

The competition final was held on 4 August 2022, and the winner was chosen from a total of 65 teams from 30 primary schools and 18 secondary schools. The competition contained three parts: the preliminary, the finals, and public voting. Between Jun 1 and Jul 21, participants submitted their 2-min concept video and engineer logbook for their preliminary. Judges selected the top 10 primary and secondary school teams and the Most Popular Design team to enter the finals. They then competed for the best green technology design, and the winner was rewarded with educational gifts. The public was encouraged to vote for their top 3 entries from the primary and secondary school teams, respectively, on the public voting website during the voting period.



# INNOVATION AND TECHNOLOGY STUDENT CLUB

## The Volunteer Online DSE Mathematics Tutoring Platform

Organised by Centre for Innovation and Technology, sponsored by ECA Education and co-organised by the Hong Kong Association for Computer Education and the Hong Kong Technology and Innovation Volunteers Alliance, the Volunteer Online DSE Mathematics Tutoring Platform was launched on Mar 22, 2022. This platform served to provide assistance for DSE students with a predicted grade of Level 1 to 3 to achieve higher grading in this year's mathematics examination.

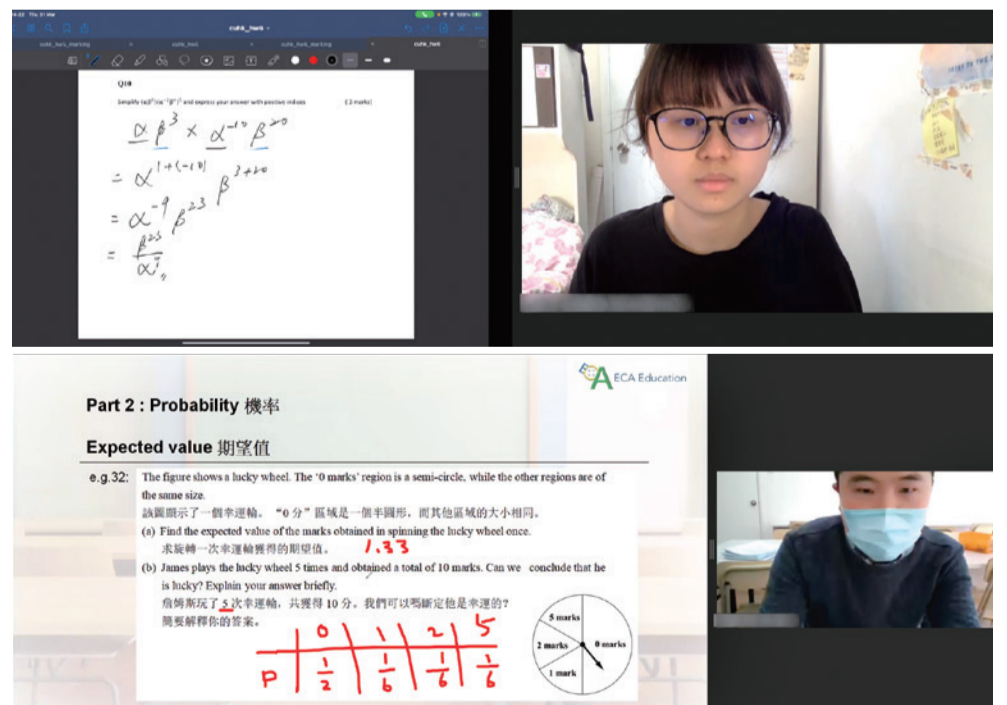
With many uncertainties resulting from the COVID-19 pandemic, DSE students had to overcome hurdles in order to succeed in this year's examination. This platform provided help to those in need and reduced the burden on students resulting from limited lesson time at school and family financial situation. To better prepare for DSE examination and improve their session A's grading, the platform offered four weeks free online lessons, exercises and tutoring services from Mar 22 to Apr 10. The platform was overwhelmed with over 2000 applications. In total 160 students and members were selected to join this meaningful programme. 10 students from our Science and Engineering Faculty have also taken part by providing tutoring services for students. After a four-week intensive programme, students had a foundation of knowledge and confidence for the mathematics examination. Furthermore, another 311 participants also benefited from receiving lesson recordings and exercises to aid their DSE examination from Apr 15 - 25, after the first round application. To increase the number of beneficiaries, another round in this summer was launched, benefiting 100 F.4 to F.5 students.

ITSC is holding a range of activities, such as, technology ambassador, camps and workshops in the coming months. You may review our past events and learn more about them on our Facebook <https://www.facebook.com/ITSC.HK> page and IG [https://www.instagram.com/itsc\\_cuhk/](https://www.instagram.com/itsc_cuhk/).

If you are a secondary student, you are welcome to join our activities and sign up for ITSC membership through online application <https://form.gle/AjFV8bVPi8PWG3A>. If you become a member, most activities will be free of charge.



To prepare Hong Kong for the upcoming challenges in developing into a knowledge-based economy, the Faculty of Engineering of The Chinese University of Hong Kong (CUHK) has founded the "Innovation and Technology Student Club" (ITSC) jointly with the Innovation and Technology Commission (ITC). Our vision is to nurture young talents to become future technological elites, who will bring about innovative and technological advancement in our city. Since May 2009, over 2,000 secondary students with similar interests in science and engineering have become club members.



Student undertaking a tutor session in The Volunteer Online DSE Mathematics Tutoring Platform

## ENGAGE EDITORIAL BOARD

Editor-in-Chief Prof. CHENG Kwok Keung Michael / Deputy Editor Prof. WONG Kam Fai / Editorial Members Ms. Winnie CHAN, Prof. CHEN Nan, Prof. CHEN Yue, Ms. Barbara CHUNG, Ms. Fiona LAM, Ms. Christine KO

Contact Us [engage@erg.cuhk.edu.hk](mailto:engage@erg.cuhk.edu.hk) / [www.facebook.com/cuhkeng](http://www.facebook.com/cuhkeng) / Faculty of Engineering [www.erg.cuhk.edu.hk](http://www.erg.cuhk.edu.hk) / Biomedical Engineering [www.bme.cuhk.edu.hk](http://www.bme.cuhk.edu.hk) / Computer Science and Engineering [www.cse.cuhk.edu.hk](http://www.cse.cuhk.edu.hk)

Electronic Engineering [www.ee.cuhk.edu.hk](http://www.ee.cuhk.edu.hk) / Information Engineering [www.ie.cuhk.edu.hk](http://www.ie.cuhk.edu.hk) / Mechanical and Automation Engineering [www.mae.cuhk.edu.hk](http://www.mae.cuhk.edu.hk) / Systems Engineering and Engineering Management [www.se.cuhk.edu.hk](http://www.se.cuhk.edu.hk)