MESSAGE FROM THE PRESIDENT

I take great pleasure in writing for the Data Science Magazine 2022 published by the School of Data Science (SDSC) at CityU. It seemed like yesterday when I was interviewed by the magazine a year ago for a feature profile on “Building Appreciation for Data Science”.

Over the one-year period, we have witnessed rapid development in the pioneering School, as we get back on our feet almost fully in the post-pandemic era. SDSC accelerated more than ever, seeing a fast surge in student numbers and an increase of faculty size as well as expansion of external grants, international recognition and corporate collaborations. SDSC's diverse environment, both in faculty and student bodies, mirrors the CityU community which stands proud in support of diversity and harmony, inclusive of every necessary perspective for study and research. We are also gaining prominence in the world. Recently, I am proud to share with you, the SDSC Dean, Professor S. Joe QIN, received the Computing in Chemical Engineering Award (2022 AIChE CAST Division Awards), the first person educated in mainland China to have received such a prestigious award.

Big Data analytics has become one of the most powerful technology trends and is changing the way the world uses business information. We saw this trend and responded to it dynamically. In Hong Kong and the Greater Bay Area, we work hand in hand with corporate and government organizations, aiming to be leaders in data science and AI, at the same time, attracting and nurturing talents. Together, we are doing what data scientists should do – serve the community with the best digital solutions and human resources.

Among the handful of energetic schools at CityU, SDSC has always invoked amazement because of its nature as an emerging, eclectic discipline that draws from several other academic traditions. At the same time, it is also a valuable and fundamental technology that empowers other fields, from Social Sciences to Sciences. This is the reason why I deem data science to be indispensable in a world-leading university. We had our HK Tech Forum on Data Science and AI cum Data Science Day in July 2022. This annual occasion does not only signify our awe in data science, but also the School's ambitions in the discipline. SDSC represents CityU's cutting-edge lead on Tech, AI and Informatics. Our Forum this year has gathered the foremost researchers and leading scholars from all over the world to address challenging issues in these two fields.

As we celebrate the fourth anniversary of SDSC and Hong Kong Institute for Data Science, it is notable that the School, the Institute, together with CityU, are continuously gaining momentum to excel further. As a young but progressive institution, our aim is to sustain an innovative approach to integrating teaching and research.

"We’re entering a new world in which data may be more important than software. Who has the data has the power."— Tim O’Reilly. Cultivating leaders for our fast-changing, globalised world is the key to accomplishing our mission to be a world-class university. I look forward to seeing more of SDSC's new heights in research.

Way KUO
President and University Distinguished Professor
Faculty Member, School of Data Science
July 2022
DEAN'S FOREWORD

Starting this September, we will have enrolments of all four years of undergraduates reaching 400 students, over 100 MS and PhD students. I am delighted to see the fast expansion in students, faculty, international recognitions, and research activities as the first School of Data Science in the world. SDSC cultivates multidisciplinary endeavours over the last academic year with the development of multiple research areas.

The School of Data Science (SDSC), housed in one of the world’s fastest-growing universities this decade, bears the vision to bring on leading-edge education and research. SDSC, with a mission to contribute to society. We position ourselves in rooting in Hong Kong and providing talents to the Greater Bay Area. With the collaborative effort between HKIDS and SDSC, I am pleased to report that talents and innovations in data science and AI are increasingly welcomed by the local industrial and government sectors.

As the Dean, I am honored to have witnessed its fast-growing discipline. As the Dean and Chair Professor of Data Science, we are pioneering the development of this new and fast-growing discipline. We strive to continuously improve our curricula as we are pioneering the development of this new and fast-growing discipline. In the coming year, we are commencing the two-semester long thrust of young talents devoting their studies to Data Science. In financial data analysis to meet the demand of Hong Kong as a smart city with smart living. We are fully geared to prepare the talents and innovations needed for the city's digitalized and high-tech future.

Over the last year, our faculty has also strengthened in size and diversity. We achieve such goal with the power of people. Over the last four years, our faculty has grown to 38 members, including 12 affiliate members. People with diverse perspectives constitute an excellent academy—just like how bits of data contribute to a mega picture. The School of Data Science (SDSC)'s outstanding performance and high academic standards are driven by a diversified and multicultural faculty. Collectively, we are an army of researchers aiming to excel in various fields of data science and technology.

THROUGH DIVERSITY

Professor S. Joe QIN is our Dean and Chair Professor of Data Science, as well as the Directors of the Hong Kong Institute for Data Science (HKIDS) and Centre for Systems Informatics & Engineering (CSEI). His research revolves around Structure, Diffusion, and Statistical Learning. System Data Science, Latent Variable Methods, High-dimensional Time Series, Latent Variable Modeling, Data-driven Control and Optimization.

Professor Dingxuan ZHOU, our Associate Dean and Chair Professor of Data Science, is our Chair Professor of Computational Social Science. His research revolves around Structure, Diffusion, and Statistical Learning. System Data Science, Latent Variable Methods, High-dimensional Time Series, Latent Variable Modeling, Data-driven Control and Optimization.

Professor Minghua CHEN covers a wide array of research topics, including: Online Optimization and Algorithms, and Machine Learning in Networked and Societal Systems, Energy Systems (such as smart power grids and energy-efficient data centers), Intelligent Transportation Systems and Delay-constrained Networking.

Professor Junhui WANG is our Chair Professor of Computational Intelligence, explores areas like Neural Computation, Optimization Methods, Data Processing and Intelligence Control.

Message People

This annual magazine presents to you our exemplary teaching and research activities as the first School of Data Science in the world. As a young and pioneering School, our uttermost mission is to MESSAGE PEOPLE.

FROM THE PAST TO THE FUTURE

Thank you for reading this publication and welcome your suggestions and ideas from the past to guide us through the future. I hope you will enjoy and enjoy the many international recognitions received by our faculty, who are specially highlighted in this magazine. You will also see the many international recognitions received by our faculty, who are specially highlighted in this magazine.

Academic Excellence

Professor Alain BENSOUSSAN, our Chair Professor of Risk and Decision Analysis. His research revolves around Structure, Diffusion, and Statistical Learning. System Data Science, Latent Variable Methods, High-dimensional Time Series, Latent Variable Modeling, Data-driven Control and Optimization.

Professor Minhua CHEN covers a wide array of research topics, including: Online Optimization and Algorithms, and Machine Learning in Networked and Societal Systems, Energy Systems (such as smart power grids and energy-efficient data centers), Intelligent Transportation Systems and Delay-constrained Networking.

Professor Junhui WANG is our Chair Professor of Computational Intelligence, explores areas like Neural Computation, Optimization Methods, Data Processing and Intelligence Control.

FACULTY MEMBERS

Professor S. Joe QIN is our Chair Professor of Data Science, as well as the Directors of the Hong Kong Institute for Data Science (HKIDS) and Centre for Systems Informatics & Engineering (CSEI). His research revolves around Structure, Diffusion, and Statistical Learning. System Data Science, Latent Variable Methods, High-dimensional Time Series, Latent Variable Modeling, Data-driven Control and Optimization.

Professor Dingxuan ZHOU, our Associate Dean and Chair Professor of Data Science, is our Chair Professor of Computational Social Science. His research revolves around Structure, Diffusion, and Statistical Learning. System Data Science, Latent Variable Methods, High-dimensional Time Series, Latent Variable Modeling, Data-driven Control and Optimization.

Professor Minghua CHEN covers a wide array of research topics, including: Online Optimization and Algorithms, and Machine Learning in Networked and Societal Systems, Energy Systems (such as smart power grids and energy-efficient data centers), Intelligent Transportation Systems and Delay-constrained Networking.

Professor Junhui WANG is our Chair Professor of Computational Intelligence, explores areas like Neural Computation, Optimization Methods, Data Processing and Intelligence Control.
AFFILIATE MEMBERS

Professor Min XIE is a Chair Professor of Industrial Engineering at the Department of Advanced Design and Systems Engineering. His research focuses on Reliability Engineering, Quality Management, Software Reliability and Applied Statistics.

Professor Yanzhi David LI is an Associate Professor at the Department of Management, Singapore Management University. His research covers network analysis, high-dimensional statistics, information theory, statistics and machine learning.

Professor Zhixin ZHOU is an Associate Professor at the Department of Management. His research focuses on statistical analysis, semi-parametric models, latent variable models, and efficient estimation methods in statistical inference.

Professor Weiming QIAO is a Chair Professor of Management at the Department of Management, Zhejiang University. His research focuses on business analytics, marketing and strategy.

Professor Kai-Fu LEE is the Chief Scientist of Sinovation Ventures and President of Sinovation Ventures Artificial Intelligence Institute. His expertise covers artificial intelligence, machine learning, speech, natural language, and robotics.

HONORARY PROFESSORS

Professor John E. Hopcroft is an IBM Professor of Engineering and Applied Mathematics at Cornell University. His research focuses on the theoretical aspects of computing.

Professor David LI is a Chair Professor of Information Systems and Business Analytics at the Department of Management, HKBU. His research focuses on business analytics, marketing and department.

Professor Yanzhi David LI is an Associate Professor at the Department of Management Sciences, Singapore Management University. His research focuses on network analysis, high-dimensional statistics, information theory, statistics and machine learning.

Professor Zhixin ZHOU is an Associate Professor at the Department of Management. His research focuses on statistical analysis, semi-parametric models, latent variable models, and efficient estimation methods in statistical inference.
GLOBAL EXPERTISE
SDSC faculty are leading experts in their fields from across the world. Most are doctoral graduates of elite universities, including Oxford University and Imperial College London in the UK; Harvard University, Princeton University, Yale University, the University of California, Columbia University, and the University of Pennsylvania in the US; and Tsinghua University and Peking University in China.

WORLD-LEADING SCIENTISTS
Six Professors at SDSC are among the top 2 per cent of scientists in the world, according to a list compiled by the prestigious Stanford University in 2021. These elite global scientists are Dean Professor Joe QIN, Associate Dean Professor Ding-Xuan ZHOU, CityU President Professor Way KUO, Professor Jun WANG, Professor Minghua CHEN and affiliate member Professor Min XIE. Stanford’s rankings are based on six important metrics and are scientifically adjusted for several factors, including the number of years spent in a particular research field. In 2021, more than 170 scientists from CityU made the list, and the rankings of professors QIN and WANG were among the top 10 in the university’s history.

POSTGRADUATES: THE NEXT GENERATION OF DATA SCIENTISTS
Students as well as faculty are flocking to SDSC, which is receiving more applications from high-quality candidates. Postgraduate applicants are particularly keen to join the School.

As of September 2022, SDSC will have admitted approximately 120 PhD students. These candidates hold undergraduate degrees from prestigious universities such as the University of Texas at Austin; the University of British Columbia; Johns Hopkins University; New York University; the University of California, Davis; Pennsylvania State University; the University of California, San Diego; University College London; the University of Edinburgh; the University of New South Wales; Tsinghua University; Peking University; Xi’an Jiaotong University; and Nanjing University.

We are also accepting a growing number of master’s students. SDSC is currently home to approximately 110 Master of Science in Data Science students and will receive more than 120 new students in September 2022. All of our forthcoming master’s students graduated from world-class universities (Project 985, THE Top 200, ARWU Top 200, Project 211 or QS Top 200).

DIVERSE UNDERGRADUATE BODY
The diversity of SDSC’s student body reflects the highly international nature of data science. In 2021, 37 percent of our undergraduate students came from overseas, including mainland China, Indonesia, Kyrgyzstan, and South Korea. More information on our undergraduates’ backgrounds can be found below.

RESEARCH THAT BENEFITS THE WORLD
SDSC faculty are one of the world’s leading communities of data scientists. Working across the field, both in-house and affiliated faculty conduct cutting-edge research on data science theory and algorithms. We are committed to practically applying our research to benefit society, as demonstrated by applications ranging all the way from Industry 4.0, smart city development, and intelligent transportation to renewable energy, new media, quantitative finance, and medical informatics.

DIVERSE BACKGROUND FOR 2021 INTAKE

<table>
<thead>
<tr>
<th>Gender</th>
<th>Programme</th>
<th>Country / Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JUPAS (Local)</td>
<td>Mainland: 42%</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>Hong Kong (Local): 64%</td>
</tr>
<tr>
<td></td>
<td>Non-JUPAS</td>
<td>Others: Bangladesh, India, Kazakhstan, Pakistan &amp; Vietnam: 5%</td>
</tr>
<tr>
<td>65%</td>
<td>BScDS (incl. ASI)</td>
<td>Korea: 2%</td>
</tr>
<tr>
<td>35%</td>
<td>BScDSE (incl. ASI &amp; ASII)</td>
<td>Kyrgyzstan: 5%</td>
</tr>
</tbody>
</table>

Data Visualization
Data Mining
Optimization and Control
Approximation Theory
Modeling of Time Series
System Analytics
Statistical Learning/Modeling
Machine Learning
Reliability Engineering
Social Computing
Computational Intelligence
Computational Mathematics
Industry 4.0
Risk Management
Financial Technology
Predictive Maintenance
Data science is a growing discipline within the University and its School offers undergraduate students an interdisciplinary curriculum that not only provides a solid foundation in data science but also offers a state-of-the-art spectrum on relevant subjects. Students here are offered the opportunity to take part in projects and courses that touch on Fin Tech, the Internet of Things (IoT), artificial intelligence (AI), industrial AI, statistical learning, social media analysis and Smart City applications, among many other topics.

The School's extensive industry networks and partnerships allow students to partake in open-ended projects and even realise their dream data science products. It is therefore important that the School facilitates future data science professionals with the academic support of diverse and highly respected researchers and professors in the data science field.

Dr. Li ZENG is an Associate Professor who earned her MSc in Statistics and PhD in Industrial Engineering from the University of Wisconsin-Madison. Her years in the field of statistical machine learning and quality engineering with applications in manufacturing and biomedical engineering have led to her research in better modelling and prediction of domain science that integrates data analytics.

Growing up, Dr. ZENG said she was rather different from the rest of her family who are outgoing and expressive, whereas she was shy and sensitive. The Sichuan-born Dr. ZENG's research attempts to understand the systems that converge in the realm of integrating domain science and data science.

“We need to understand the system or topic by using data science techniques,” she explains. The interest she cultivated for her field didn’t come instantly. Dr. ZENG says that it took her some time to realise what she wanted to do. “At the beginning, no one told me what topics I should work on,” she says, referring to her junior faculty years. “I read a lot of papers in the field of biomedical engineering and talking with researchers; I was collaborating with them and participating in the experiments they were working on. And I really immersed myself in papers. Eventually I would contribute to identifying problems and develop systematic, data science methodologies to solve these problems.”

“This is something I’m proud of. It’s not just applying data science technologies, but also identifying problems, a problem which is meaningful even to the domain experts,” Dr. ZENG adds.

As we enter Industry 4.0—an explanation of Industry 4.0 by explained by specialising in this field is Associate Professor Dr. Lishuai LI, whose research in the interdisciplinary field of intelligent transportation systems and data science has seen her developing analytical methods for large-scale operational data in airline safety management and operations improvement. She also came up with analytical methods for air traffic management and health monitoring of train systems. Her research group recently developed path-finding methods for drone delivery networks to overcome infrastructural challenges in urban air mobility.

At CityU’s School of Data Science (SDSC), five extraordinary women faculty members have paved the way in their respective science fields. These female academic researchers have emerged from the modest beginnings from where they were born and bred, to have attended some of the most prestigious universities in the world, including MIT and Harvard.

At the beginning, no one told me what topics I should work on,” she says, referring to her junior faculty years. “I read a lot of papers on the field of biomedical engineering and talking with researchers; I was collaborating with them and participating in the experiments they were working on. And I really immersed myself in papers. Eventually I would contribute to identifying problems and develop systematic, data science methodologies to solve these problems.”

“This is something I’m proud of. It’s not just applying data science technologies, but also identifying problems, a problem which is meaningful even to the domain experts,” Dr. ZENG adds.

As we enter Industry 4.0—an explanation of Industry 4.0 by explained by specialising in this field is Associate Professor Dr. Lishuai LI, whose research in the interdisciplinary field of intelligent transportation systems and data science has seen her developing analytical methods for large-scale operational data in airline safety management and operations improvement. She also came up with analytical methods for air traffic management and health monitoring of train systems. Her research group recently developed path-finding methods for drone delivery networks to overcome infrastructural challenges in urban air mobility.
Dr. Li's main research focuses are the development of a series of data science tools and methods to analyse high-dimensional time series data and improve data interpretation and prediction.

Her work is driven by her passion for using data science to address real-world problems, particularly in healthcare and environmental science. She emphasizes the importance of having a strong foundation in both statistical methods and practical experience in industry to leverage powerful data science tools and interpret complex data.

Dr. Li encourages motivated PhD students to join her team and work on innovative projects that can make a significant impact.

For more information, please contact Dr. Li directly or visit her research website.
DIALOGUE ON DATA SCIENCE

DATA SCIENCE FOR AIR TRANSPORTATION SYSTEMS

The aviation sector has always been technology driven. With the advancement of sensor and data technologies, more and more data becomes available which contains rich information about aircraft conditions, airline operations, aircraft maintenance, air traffic management, etc. Yet the aviation sector has not been able to harness the power of big data, artificial intelligence (AI) and other emerging technologies as much as some other sectors. Targeting this opportunity, my team focuses on the interdisciplinary research of intelligent air transportation systems and data science, developing analytical methods and practical algorithms for the design, management, and operations of air transportation systems, via collaborations with industrial partners from flag carrier airlines to tech start-ups.

In a joint project with a major airline, my team builds data-driven models to predict flight delays and their causes. Our research team has developed a delay prediction model and a flight delay detection model. The delay prediction model is based on historical flight data and meteorological data. It can predict flight delays up to 24 hours in advance with an accuracy of over 80%. The flight delay detection model uses machine learning algorithms to identify flight delays in real-time. It can detect flight delays within 5 minutes with an accuracy of over 90%.

Additionally, my team has developed a system for flight monitoring and safety management. The system uses onboard sensors to collect real-time flight data, including flight altitude, speed, and engine performance. This data is transmitted to ground stations where it is analyzed using AI algorithms. The system can detect anomalies in flight data such as unusual engine performance, which may indicate a potential safety issue. The system also monitors weather conditions and can alert pilots to potential hazards.

Moreover, my team has developed a system for fuel efficiency optimization. The system uses machine learning algorithms to predict fuel consumption for each flight based on historical data and real-time flight data. The system can also predict fuel consumption for new routes based on historical data and simulated flight conditions. The system has been tested on a number of flights and has shown significant fuel savings of up to 15% for some flights.

Finally, my team has developed a system for urban air mobility. This system uses AI algorithms to plan drone routes in high-density urban areas. The system takes into account traffic conditions, air traffic control constraints, and other factors to plan efficient drone routes. The system has been tested in several urban areas and has shown promise in reducing traffic congestion and improving air mobility.

In conclusion, my team is making significant contributions to the field of air transportation systems through data science. By harnessing the power of big data, AI, and other emerging technologies, we are able to develop practical algorithms that can help airlines and other stakeholders improve their operations and reduce their environmental impact.
The City University of Hong Kong (CityU) School of Data Science (SDSC) emulates the US model, something which he had in mind when he took over as the first Dean. “In the US we always work with the biggest technology companies, we have a partnership with Google, Facebook, and Amazon,” he explained.

Professor S. Joe Qin and PCCW Solutions’ Managing Director Jerry Li perceive Hong Kong as being amongst the most innovative and forward-thinking in all of Asia. At just 28 years old, CityU has always kept itself at the forefront of technology and innovation oriented American universities like the University of California Berkeley, Columbia University, and the University of California at Los Angeles. They define this very fast-growing discipline of data science in Hong Kong as the Fluor Professor at the prestigious Viterbi School of Engineering at the University of Southern California.

The MoU with PCCW Solutions is a big part of that forward transformation. “What attracted me to CityU was the opportunity to lead and transform the School into one of the world’s leading tech universities,” Professor Qin said. “This is why Data Science is becoming such a lucrative field, and it’s more determined to develop data science than CityU, and I felt very lucky to have been selected as their first Dean.”

Professor Qin is joined at the helm by Jerry Li, the Managing Director of PCCW Solutions. Li, a Hong Kong native, is more driven by the idea of how they can bring the latest technology and innovation to the city. “Nowadays most major US companies will have a Vice President of AI, but in Hong Kong, I didn’t have that even 10 years ago. And if you don’t have a VP of AI, then you need to catch up to the US and other countries. Now the government is also promoting data science and AI, so it’s the right time for us to take it further.”

PCCW Solutions is a very unique place in Hong Kong as there is a lot of technology investment, but also a bit of a talent shortage. The client-market mismatch, as Dean it was difficult to know who the equivalent players were in the US, like Google or Amazon,” he explained. “But when I first started out as Dean it was difficult to know who the equivalent players were in the US, like Google or Amazon,” he explained. “But when I first started out as Dean, I was very surprised to me,” he continued. “I didn’t realize they had already been doing real-world work in data science. I think this shows that Hong Kong does have some technical tech-savvy in their own Industries. We also allow our students to take courses from other disciplines, to learn how to apply their skills and knowledge in different domains.”

Professor Qin believes working with PCCW Solutions will provide exposure to Hong Kong’s tech-driven companies.

PCWW SOLUTIONS AS HONG KONG’S LEADING TECH INNOVATOR

Despite working at the company for less than a year, Jerry has “been a lot of excitement back then as well as uncertainty, and analytics is not enough.”

Professor QIN believes working with PCCW Solutions will provide exposure to Hong Kong’s tech-driven companies.

PCWW SOLUTIONS AS HONG KONG’S LEADING TECH INNOVATOR
"I am very proud to work here because this company is not purely commercial, we have a lot of projects in public sectors that are really helpful to Hong Kong and its global infrastructure," Winsome said. "Our SDSIC internships have already been involved with two key projects like a healthcare-related government department, which is a very hot topic right now because of COVID. So already, I've had the opportunity to use the knowledge I've learned in university." She noted that the students have also been quickly learning new analytical methodologies like SAAS programme management. More importantly, they have been learning how to work in different environments for students to learn, and we invest a lot of time into nurturing tech talent in our internship programmes, and put students into real-world projects with different IT experts, not just project managers but data analysts and scientists," she explained. "We try to give students the opportunity to work on projects that they will have a real impact on the world. And with the expected influx of new talent, Jerry hopes to turn Hong Kong into a global technology hub, increasing its status as an international enterprise; and cheekily noted what he believes is the company's greatest asset: "a boost it would be to her CV. She believes this experience will help her stand out in the tech industry."..."
Let AI Automate the Performance Curve/Visual Identification for Renewable Energy Systems

Wind turbines represent the typical windfarms. They are sparsely distributed over a large area to take advantage of the wind's natural movements. The dynamics are complex and heterogeneous, making the assessment of their performances challenging. In recent years, metro companies in the transportation and industrial informatics domains have pioneered studies of computer vision techniques for automating various analytical tasks based on collected railway infrastructure. The foreseeable infrastructure of any foreign objects ideally.

Innovations have appeared on both the railway infrastructure. The foreseeable train surface defect inspection, detection and the assurance of the analytics quality.

AI has a potential of simplifying the medical diagnosis process.

In recent years, Dr. ZHANG has been invited by doctors from Nanfang Hospital to explore the feasibility of developing a machine vision assisted AI model for diagnosing lung adenocarcinoma types via using only CT scans. The success of such a model is quite exciting to see that AI models can facilitate the routine task. AI models can facilitate the routine task. AI models can facilitate the routine task. AI models can facilitate the routine task. AI models can facilitate the routine task. AI models can facilitate the routine task.

To respond to such emerging challenges, Dr. ZHANG and his research group have pioneered studies of computer vision models of missing components, and foreign object identification of any foreign objects ideally.

The research team led by Dr. Zijun ZHANG has designed an AI-assisted computer vision model to detect the lesion area that most likely indicates the feasibility of replacing humans

To automate the system identification.

Vision AI: A New Analytics Paradigm for Advancing Clean Energy, Urban Transport Safety and Medical Services

Data science has the great potential of developing the "brain" for automating data analytics from the vision perspective for various processes of different fields. The research effort of any group is dedicated to discovering the new horizon of leveraging advantages of data services in multiple fields, such as clean energy, urban transport safety and medical diagnosis. Our recent results reported the multiple facets of knowledge discovery via a new analytics paradigm, the machine vision assisted artificial intelligence. By Dr. Zijun ZHANG
CITYU’S MULTI-DISCIPLINARY RESEARCH PLATFORM:
HONG KONG INSTITUTE FOR DATA SCIENCE

Established in 2018, the Hong Kong Institute for Data Science (HKIDS) operates alongside the School of Data Science to develop cutting-edge research platforms and collaborates with different stakeholders to promote talent development, research and knowledge sharing.

HKIDS also hosted the new distinguished seminar series on topics below:

- 29 September 2021: Large-Scale Time Series Data (Speaker: Prof Ruey S. Tsay)
- 17 November 2021: Applications to the Optimization of Engineering Systems (Speaker: Prof Ignacio Grossmann)
- 20 October 2021: Statistical and Optimization Program Centre for Systems Informatics Engineering Seminar: Partial Least Squares for Big and Small Data: As a Means to Draw Distinctive Scientific Consequences (Speaker: Professor Qiu Qin)
- 18 May 2022: Climate, Carbon and Computer Science (Speaker: Srinivasan Keshav)
- 23 September 2021: Learning and Control in Power Distribution Grids (Speaker: Prof Steven Low)
- 13 October 2021: Climate, Carbon and Computer Science (Speaker: Prof Ignacio Grossmann)
- 30 November 2021: Climate, Carbon and Computer Science (Speaker: Prof Ignacio Grossmann)

The Institute aims to attract talents and outstanding scholars from around the world. In the first year, HKIDS has already attracted 16 outstanding scholars from around the world to join the permanent faculty. In addition, we have several visiting scholars, whose research aims at providing new perspectives and breakthroughs in data science.

The Institute states its objective as “enhancing Hong Kong’s competitiveness in technology-based industries and attracting talents through applied research.”

Collaboration: CityU x ASTRI

HKIDS is currently working with the Hong Kong Applied Science and Technology Research Institute (ASTRI) on potential collaboration in research and development.

Further details of the collaboration are featured under ‘Dialogue on Data Science’ (P16-19).

Professor S. Joe Qin, Director of HKIDS, added: “In his address, Professor Richard Yuen, Chief-of-Staff of City University of Hong Kong, expressed delight to see CityU’s alliance with ASTRI. At the signing ceremony, Mr. Jerry Li, Managing Director of PCCW Solutions, said: ‘As the leading IT service company in Hong Kong, mainland China and Southeast Asia, which not only puts into practice our academic achievements for the betterment of society but also brings real experiences from industry to the campus, thus leveraging the strong research capabilities of HKIDS and the proven digital expertise of PCCW Solutions, the collaboration brings the latest research works into real life industry applications. The two parties jointly develop innovative solutions using data analytics and artificial intelligence technologies, focusing on developing solutions for sustainable urban development, such as smart energy management for Hong Kong, mainland China and Southeast Asia, which not only puts into practice our academic achievements for the betterment of society but also brings real experiences from industry to the campus, thus nurting talented data scientists’.

Professor Qin further talks: “Data Science has always been a pioneer discipline and this MoU seeks to bring the latest and most advanced research work in the fields of data analytics and artificial intelligence to resolve real-world challenges. We look forward to co-developing useful smart city solutions for Hong Kong. I am confident that our collaboration on Commercialisation: CityU x ASTRI

Launched in 2018, the Centre for Systems Informatics Engineering (CSIE) aims to provide an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform. It also provides an experimental stage for research opportunities to PhD students and train the next generation of data scientists. It is an international focal point of excellence for research initiatives and translational activities in data science, and the region’s leading data science platform.
SPEARHEADING DATA SCIENCE AND AI DEVELOPMENTS ON ALL FRONTS

Data Science (HKIDS) co-organised the annual CityU Data Science Day 2021 on 10 August 2021. The occasion also marked the third anniversary of SDSC and HKIDS. The day commenced with the opening address by Professor Way KUO, CityU President and University Distinguished Professor, who is also a faculty member at the SDSC. It was followed by an overview on the SDSC and HKIDS’ development progress, delivered by Professor S. Joe QIN, Dean and Chair Professor of SDSC, and Director of HKIDS. Professor Wen GAO, a world-renowned scholar in the areas of AI, multimedia and computer vision, delivered a keynote speech virtually on “Peng Cheng Cloud Brain Open Source Ecosystem.” Professor GAO is an academician of the Chinese Academy of Engineering, Director of Peng Cheng Laboratory (PCL), Shenzhen, China, Boya Chair Professor, and Dean at the School of Electronics Engineering and Computer Science at Peking University. PCL, being the first independent E-level artificial intelligence supercomputing platform in China, is open source with ultra-high computing density, super large-scale computing power and ultra-fast training speed. It focuses on strategic, forward-looking, original scientific research and core technology development in the related fields. It is expected to create an ecological environment to support future scientific research and empower industrial development.

GRANTS AND FUNDED PROJECTS

HKIDS EARLY CAREER RESEARCH GRANTS (ECRG)

Professor Michael YANG, Vice President (Research and Technology) of CityU, then gave a thorough introduction on “HK Tech 300 Venture” – the flagship innovation and entrepreneurship programme launched by CityU in March 2021. It was followed by one of the highlights of the day—panel discussions with members comprising scholars across CityU, including Professor Michael TSE, Associate Dean and Chair Professor of the School of Creative Media; Professor Richard ALLEN, Dean of School of Creative Media; and Professor Houmin YAN, Director of Laboratory for AI-Powered Financial Technologies Limited. They discussed ‘Accelerating AI and Data Science Impact Catalyzed by the HK Tech 300 Initiative’, where Professor QIN moderated.

Another highlight of the day in the afternoon included a total of six technical presentations to showcase HKIDS’ cutting-edge research progress. This session was chaired by Professor Dingxuan ZHOU, Associate Dean and Chair Professor of SDSC, and co-chair Professor Minghua CHEN. Topics were as follows:

• Using Network Science to Evaluate and Enhance Hong Kong’s Bridging Role in One Belt One Road (OBOR)—by Professor Jonathan ZHU, Chair Professor, Department of Media and Communication
• Big-data-driven Performance Analysis, Prediction and Control of Smart Factories—by Professor Hong YAN, Chair Professor, Department of Electrical Engineering
• Unstructured Data, Structured Analysis Using Digital Trace Data to Advance the Understanding of Digital Activism—by Dr. Yuner ZHU, Postdoc, Department of Public Policy
• Genomic Data Search and Analytics with Applications to Colorectal Cancer Subtype Classification—by Dr. Ka Chun WONG, Assistant Professor, Department of Computer Science
• Towards More Accurate Virus Classification Using Graph Convolutional Network—by Dr. Yanni SUN, Associate Professor, Department of Electrical Engineering
• Towards Linguistically-motivated Text Readability Assessment for Chinese Learning in Hong Kong—by Dr. John LEE, Associate Professor, Department of Linguistics and Translation

Finally, the day concluded with “Sharing by PhD students”, a new initiative to engage 12 PhD students from the School to do lightning talks, which was chaired by Professor Junhui WANG. It provided an interactive learning platform for our PhD students to showcase their research works and projects, exhibiting the young energy of SDSC.
EVERY MILESTONE COUNTS: OUR FOOTPRINTS IN THE WORLD OF DATA SCIENCE

Data Scientists are the most forefront analysts of the 21st new epoch. The School of Data Science (SDSC) constantly strives to find our place in modern science and society. While we navigate in the world of mega data, we never stop in realising our goals. SDSC goes above and beyond from achieving our educational mission to providing an ideal soil for research. It is our honour and pride to have accomplished these targets. They also serve as future benchmarks for our continuous achievements.

SCHOOL DEAN RECEIVING 2022 AICHE CAST DIVISION AWARD

Professor S. Joe QIN, Dean and Chair Professor of SDSC and Director of the Hong Kong Institute for Data Science, has become the first scholar educated in mainland China to receive the 2022 CAST Computing in Chemical Engineering Award. The award, which is presented by the American Institute of Chemical Engineers (AIChE), recognises his outstanding contributions in the application of computing and systems technology to chemical engineering.

Professor QIN has been selected for his pioneering use of data analytics and AI for process engineering applications and fault diagnosis and for his efforts to unify industrial model predictive control practices used by industries worldwide. The award also reflects the high status of research at CityU.

PROFESSOR QIN INDUCTED TO NATIONAL ACADEMY OF INVENTORS (NAI)

Professor S. Joe QIN, Dean of SDSC, has been inducted into the National Academy of Inventors (NAI) as a Fellow of Class 2020. He is one of 175 newly elected fellows for this class. At the Induction Ceremony, he was officially presented with a Fellow medal and rosette. Professor QIN's research over two decades set standards in various manufacturing processes. Some of the inventions are being commercially used today. Professor QIN is also a Fellow of the IEEE, the International Federation of Automatic Control (IFAC), and AIChE.

PROFESSOR MINGHUA CHEN ON ELEVATION TO IEEE FELLOW

The IEEE Board of Directors has elevated Professor Minghua CHEN to IEEE Fellow, effective 1 January 2022, with the citation: 'For Contributions to Delay-Critical Networked Systems'. Each year, following a rigorous evaluation procedure, the IEEE Fellow Committee recommends a select group of recipients for elevation to IEEE Fellow. IEEE has more than 400,000 members in more than 160 countries and less than 0.1% of voting members are selected annually for this member grade elevation.

SDSC CONTRIBUTES TO CITYU’S REPUTATION—BEING NAMED AS “TOP BLOCKCHAIN UNIVERSITY”

CityU’s recognition was reported on the international newsletter CoinDesk on 25 November 2021, naming CityU as “Top Blockchain University”.

The forum brought together scholars in academia and senior experts from regional industry from Asia and the U.S.
Aerospace, Health and Telemetry—SDSC and HKIDS’s Project Awarded Innovation and Technology Fund 2021/22

A research team led by Prof. S. Joe Qin, Dean and Chair Professor of SDSC and Director of HKIDS, has been awarded a grant of HK$1.1 million for a research project entitled “Aerospace System Optimisation”. The research team comprises CityU’s Dr. Xiang Zhou, Dr. Long Feng, and Dr. Xiao Qiao on their remarkable achievements, and look forward to their outstanding research outputs.

Co-Effort in Winning Best Paper Award at International Conference

Our School Dean Professor S. Joe Qin and Assistant Professor Dr. Junhui Wang, winner of the Best Paper Award at the 3rd International Conference on Industrial Artificial Intelligence (IAI 2021) held on 19-20 November 2021 in Hong Kong, were co-investigators of the winning paper. The paper, titled “Plant-Wide Troubleshooting”, was co-authored by Dr. Zhenliang Guo, Dr. Zejun Zhan, and Dr. Hongyan Wang from the University of South Carolina.

Six Faculty from SDSC Receiving General Research Funds

SDSC has been awarded HK$4.26 million for six research projects as part of the 2022/23 General Research Fund (GRF) and Early Career Scheme (ECS) announced by the Research Grants Council (RGC). SDSC continues to succeed in developing a strong research culture which indicates that we have a high-quality research capability and environment.

We congratulate our principal investigators, including Professor Minghua Chen, Professor Junhui Wang, Dr. Matthias Tan, Dr. Xiang Zhou, and Dr. Long Feng on their remarkable achievements, and look forward to their outstanding research outputs.
Equipping Students for Career Success

Miss Joan YUN
Hong Kong Applied Science and Technology Research Institute (ASTRI)
Summer Internship Programme at the Chief Technology Office

Mr. Roy LEUNG
PVH Far East Limited
Business Analyst

Miss Ivan Law LAW
Alpha AI Technology Limited
Machine Learning Engineer Intern
During my internship at DFS, I provided ad hoc support to internal users and I have also been involved in some short- and long-term projects. My daily tasks included giving desktop support to users, such as solving bugs/config issues on laptops and educating users about software operation. I also updated and managed inventory data, as well as delivered monthly reports.

I have been involved in projects as follows: the launch of a lab that provides instant support to users; name tag design and data cleaning to update employees’ position titles; giving suggestions about facilities and booking methods for new meeting rooms; and arranging laptop and monitor replacement for all users. Many more projects are coming up, and I look forward to the challenges they will bring.

Working here gives me insights about the industry's working culture in my potential career. Working with a wide range of people has also given me a better understanding of how job distribution works and why it is so important. This internship has given me a preview of a real future job!
Data Science is a global language—and exchanges strengthen the skills to master it. The School of Data Science (SDSC) encourages students to outgrow their comfort zones and gain global exposure in learning and experience. In every possible aspect, including connecting with renowned institutions, we support our undergraduates to take a bigger step in order to connect with the world. In this session, four students who went on student exchange programmes for Semester B, 2021/22, at top QS ranked institutions across Asia, North America and Europe are eager to share their stories.

Yuchen QIU, UNIVERSITY OF TORONTO, CANADA

I am so glad to have the chance to spend the winter at the University of Toronto, Canada. I took four high-level courses during my study there and the curriculums are quite demanding. Three courses were in the Statistical Learning module and one course was in the AI module, in accordance with the major requirements of CityU. The Deep Learning course in the AI module at University of Toronto (which is the powerhouse of AI research in the world) is among the best introductory courses on this subject. The course features the lecturer Jimmy BA, one of the leading researchers in AI who is the student of Geoffrey HINTON (Godfather of Deep Learning) and co-author of the most popular optimisation algorithm Adam. The course is very well structured with both theoretical and coding assignments. It covers both the foundational ideas and the recent advances in deep learning. All in all, the course gives an overview of many practical applications like image recognition, language processing and game playing agent.

I benefited a lot from the course and was able to gain a thorough understanding of this actively researched area. Since my personal preference is theory rather than application, the other three courses I selected are math oriented. I spent a lot of effort and time working out the mathematical proof. Very challenging as it has been, it was an intellectually rewarding process that encouraged me to study extensively, even well after the exchange period. Thanks to the collaborative culture, peer students formed many study groups, which not only made my learning experience smooth and productive, but also helped me establish friendships and get accustomed to life in a new country. One of my group mates who is also from China shared a lot of useful tips; another exchange student in my group invited me to go skiing with him… it was my first time! It was really satisfying that I finally mastered my speed and turns after countless attempts. I am grateful to have met them during my exchange.

Studying in a historic campus is also full of wonder. The campus sprawls across a very large area, making it a challenge to rush from one building to another for the next course, but along the way, one can discover beautiful and Gothic-style architecture, and sometimes squirrels too! The natural scenery in Toronto is gorgeous. I miss my time there!

Qingyang YU, NATIONAL UNIVERSITY OF SINGAPORE

It has been an unforgettable experience to stay at the best university in Singapore, NUS! I took four modules at NUS, including Stochastic Process, Simulation, Design and Analysis of Experiment, and Social Network Analysis. One big advantage of taking these four modules is that the courses could be transferred to CityU. This was a very encouraging point for me as an exchange student.

NUS has a very widespread campus where students need and quite a number of bus stops. It is easy to get lost if you are not familiar with them. However, you would get a sense of the world. Outside the campus, I also enjoyed the various outdoor activities with my friends, like cycling around the Marina Bay, zipping at Sentosa, and hiking. I really appreciate Singapore’s local people. They are very helpful, open-minded, and energetic. As a foreigner, I felt welcomed and was able to blend into the new environment easily because of their inclusive culture. I guess that is why most people believe that Singapore is one of the most livable countries!
Summer LAM
UNIVERSITY OF OSLO, NORWAY
If I were to recall the most unforgettable experiences of my university life, my Norway exchange study would definitely be one of them!
Growing up in Guangdong and Hong Kong, I had never seen snow until the day I arrived in Norway. It was stunning to see everything in white. During my quarantine, we could even go for a walk, for at most two hours.
After my quarantine, my exchange started off with a “buddy week” which was full of activities for newcomers to hang out with students at the University of Oslo. I met friends from Norway, Germany, Korea and Singapore who were in the same buddy group as me. Later I found out I took exactly the same courses as a Korean girl named Michelle. It was quite a coincidence. And because of that, we always hung out and studied together. We became best friends in Norway. Sometimes I hung out with my buddies—we talked about our own culture and learned from each other. I learned a lot from them, breaking some of the stereotypes that I had previously towards different cultures.

I went ice bathing, skiing, snowboarding, sledding, and all kinds of winter sports with friends from the buddy group and classmates from Hong Kong. I was especially attracted to snowboarding. It became my favorite sport after my first try.
Aside from sports, I even chased northern lights at the park near the student village where I lived! The winter in Oslo was amazing.

Studying at the University of Oslo was not much different from studying in Hong Kong. However, face to face classes were never terminated since the semester started. This might be the biggest contrast. In terms of course structure, the university allowed students to take overlapping classes as long as they could manage it. I was quite surprised by this since it gave us adequate flexibility to study what we wanted. Some of the professors would even record the class for students who had overlapping classes.

As a student who loves nature, studying in Norway was the perfect choice for me. It is going to be one of the most precious memories in my life.

---

Yutian CHEN
As an exchange student, my recent experience at NUS was very meaningful.
The campus is quite big, and it was like a whole new world for me to explore. My professors at NUS were so energetic and active that I was highly encouraged to be responsive.
There are various canteens providing different types of food like Chinese, Western, Korean, and local. Although all my lectures were online, I didn't give up any opportunity to make friends with other students. I met Wan Ting, a local student who had the same major as me, and we quickly became good friends. Also, she acted as a personal local guide for me to explore Singapore. We took interesting photos with the Merlion, walked along Marina Bay, and tried Hokkien shrimp noodles and satay at Lau Pa Sat. How I wish I could spend more time with her!

My residence life was also excellent. The dormitory was quite different from the one when I lived in CityU. It looked like a flat in the countryside and there were many animals around! Additionally, my neighbours were also very friendly and we enjoyed lots of hall activities together.

All in all, I was so glad that I took part in the exchange programme because I have gained so much from it. An exchange programme, even for a very short period, can always cheer one up and inspire one to go further—the world is enormous but we should never stop exploring it!
SDSC STUDENTS EXCEL IN REGIONAL BIG DATA ANALYSIS CONTEST

In the 2021-2022 academic year, SDSC students achieved outstanding results in the Regional Big Data Analysis Training Camp held in Hong Kong. The contest, which aimed to foster students’ abilities in data analysis and innovation, attracted teams from various institutions across the Greater Bay Area. SDSC students showcased their skills in navigating the real world, and their projects demonstrated innovative approaches to solving complex problems.

The award-winning project, Priority Probing Algorithm on Spread of COVID-19, developed by a team of seven students from CityU, was presented at the award ceremony held on 14 January 2022. The project was acknowledged for its potential to provide a more efficient strategy to handle the spread of COVID-19. The students used priority probing to estimate the degree of contagion impact on confirmed cases.

The students’ dedication and hard work were evident in their presentation, which was based on months of research and development. Their project consisted of a system used for computing the stationary distribution of critical nodes in the spread of COVID-19 through priority probing. This approach was innovative and showed how data science education can be applied to real-world problems.

The winners of the competition were thrilled with their recognition. The prize was not only a testament to their hard work but also a symbol of CityU’s pioneering role in providing data science education to students with multidisciplinary backgrounds. The students expressed their gratitude to their advisors and the support from SDSC for their achievement.

This recognition highlights the importance of fostering innovation and collaboration in data science education. It encourages students to think critically and apply their knowledge to solve real-world problems, which is essential for developing future leaders in the field of data science.

In summary, the SDSC students’ success in the Regional Big Data Analysis Training Camp is a testament to their dedication, hard work, and the strong support from their educators and the university. This achievement demonstrates the value of providing students with opportunities to engage in multidisciplinary projects and prepares them for the real-world challenges they will face in their future careers.

SDSC’s Exclusive Career Training Workshop Series

In addition to academic excellence, SDSC students are also provided with rich internships and career opportunities. The School of Data Science, in collaboration with external partners, conducted exclusive career training workshops for students. These workshops aimed to prepare students for the workforce by equipping them with practical skills.

On 25 November 2021, ASTRI hosted an on-campus recruitment talk exclusively for SDSC students. The talk focused on leadership, employability skills, social mobility, and knowledge of the job market. It was an excellent opportunity for students to gain insights from professionals in the field of STEM, and to connect with potential employers.

The School of Data Science understands the importance of preparing students for the real world. They continue to strengthen networks with prospective corporate partners and line up recruitment talks for students. This ensures that students are well-prepared for their future careers and can apply the knowledge and skills they have acquired during their studies.

In conclusion, the success of SDSC students in regional big data analysis contests and the exclusive career training workshops demonstrate the School’s commitment to preparing students for their future careers. They are equipped with the skills and knowledge necessary to excel in their respective fields.
COMMENCEMENT CELEBRATES THE CLASS OF 2022

The School of Data Science (SDSC) held its third annual Commencement on 27 May to honor 94 students graduating this year from the Doctor of Philosophy, Master of Philosophy, and Master of Science in Data Science programmes. Held online, the ceremony brought together graduates from different regions to celebrate their accomplishments with family and friends.

Kicking off this historic event, Professor S. Joe QIN, Dean of SDSC, expressed his heartfelt congratulations to the graduating class of 2022. “I am proud that you have achieved your goal at CityU to fulfill your dreams!”

Looking ahead to another milestone, the fourth anniversary of the SDSC’s establishment, Professor QIN reminded the graduates of their key role in the School’s early success. “With the effort of every one of you,” he said, “we are becoming an exemplar of data science schools regionally and worldwide.” As professional data scientists, graduates of the SDSC have an important mission to fulfill. Stressing the damage done by the spread of misinformation, Professor QIN urged his audience to think critically and “triple-validate” all information before sharing it. “Better yet, as data scientists, we may develop a solution to misinformation,” he added. After sharing some of his own ideas for combating the spread of false information, Professor QIN ended his speech on an upbeat note. “Please return to visit us when the pandemic restrictions are removed!”

Next to address the graduates was Mr. Joseph TSE, a CityU Council Member and a keen supporter of SDSC. Mr. TSE told his company that leverages data technology to make small business loans more accessible to Chinese SMEs. Reminding the graduates that data science can be a double-edged sword, he urged them to use the power of data for the benefit of humanity rather than doing damage. Mr. TSE concluded his speech by assuring the graduates that they would emerge from this challenging time wiser and more resilient. “Tough times never last, but tough people do!”

Last to speak was Mr. Aaron CHEUNG, a 2022 graduate of the Master of Science in Data Science programme. After thanking the University, the School, and his teachers for their support, he congratulated his fellow graduates on overcoming the many challenges arising from the pandemic. “We accepted the obstacles thrown at us and found ways to adapt. I believe that this adaptive mentality will be crucial in our careers as data scientists.” Like Professor QIN, Aaron ended his speech by looking to the future. “It is now time for us to move on to a new stage of life,” he said. “Our experience at CityU has prepared us for whatever goal we want to achieve.”

Some of the highlights from the Commencement included:

- Dr. Qingpeng ZHANG received the “CityU Outstanding Research Award for Junior Faculty” from the School Dean.
- Professor S. Joe QIN presided at the 2022 Commencement.
- Vanguard of the Class of 2022-
Emerging as New Data Scientists
PHD STUDENT OF SDSC WINS TOP AWARDS AT THE GLOBAL AI CHALLENGE FOR BUILDING E&M FACILITIES – AI COMPETITION

The School of Data Science (SDSC)’s PhD student Yiren LIU, who is supervised by School Dean Prof. S. Joe QIN, has won a Grand Prize in the Global AI Challenge for Building E&M Facilities and we also applaud the four-member team advised by Professor QIN and Dr. Xiangyu ZHAO, Assistant Professor, for their valuable guidance and support.

The winners express gratitude to Professor QIN, Dean of SDSC, Dr. ZHAO, and Dr. ZHAO, Assistant Professor, for their valuable guidance and support. They are delighted to receive the award for their team’s achievement.

LIU, the team leader, said he has learned a lot from the experience. He is happy to share that he had the opportunity to learn the theory of data quality analysis of foreign exchange from the National Interbank Funding Center in Shanghai, Yuchen is happy to share that he had the opportunity to learn the theory of data quality analysis of foreign exchange from the National Interbank Funding Center in Shanghai.

The School Dean Prof. S. Joe QIN, being their mentor, expressed his satisfaction, “Outstanding AI Influencer Award” sponsored by Microsoft, and the “Outstanding AI Influencer Award” by Cheung, Chief Engineer of EMSD. The competition is organised by the Guangdong Provincial Association for Science and Technology, and the EMSD of Hong Kong. A first of its kind, Global AI Challenge is the world’s largest AI event aimed at promoting AI technologies in building energy conservation and to encourage further research in smart buildings.

The AI competition is open to all participants around the globe, denominating the AI and data science for practical use”. We are very honored to have received these awards. More importantly, we raised the interest among students on campus to participate in this competition as all the entries were of world-class quality. The best five teams from each category will be awarded the grand prizes sponsored by Huawei, Siemens, AWS, Microsoft and Towngas, respectively.

The Global AI Challenge for Building E&M Facilities emphasizes that the award brings and acknowledges the remarkable achievements in the Global AI Challenge for Building E&M. The winners express gratitude to Professor QIN, Dean of SDSC, Dr. ZHAO, Assistant Professor, for their valuable guidance and support. They are delighted to receive the award for their team’s achievement. The winners express gratitude to Professor QIN, Dean of SDSC, Dr. ZHAO, Assistant Professor, for their valuable guidance and support. They are delighted to receive the award for their team’s achievement.

The winners express gratitude to Professor QIN, Dean of SDSC, Dr. ZHAO, Assistant Professor, for their valuable guidance and support. They are delighted to receive the award for their team’s achievement.