



FACULTY OF SCIENCE
THE UNIVERSITY OF HONG KONG
香港大學 理學院

DEAN
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Press Release

For Immediate Release

HKU Launching a New Taught Master Programme “Master of Data Science” Training Data Scientists for Diverse Sectors in the Digital Era

December 10, 2017

The amount and complexity of digital data have grown exponentially over the years. In answer to the desperate call for experts in processing such data, Department of Statistics and Actuarial Science, The University of Hong Kong, is pleased to launch a new Taught Master Programme, Master of Data Science (MDASC), jointly with the Department of Computer Science, to teach students how to analyze data and formulate data-driven strategies.

Data Science – Decipher the Code of Big Data

The colossal amount of data generated every day, if properly extracted, could provide information valuable for making critical strategic decisions. Data Science, an independent discipline emerged recently in response to such need, opens up a new frontier of high-performance analytics to decipher the hidden codes of these data sets, or the so-called “Big Data”.

The illustrations below are two of the many real-life examples of the application of Data Science. Online transaction platforms analyze the browsing patterns and purchasing habits of their customers with the help of Data Science, and recommend products according to the revealed preference of customers. These customized recommendations improve the successful purchase rate of a promoted product per appearance. Advertisements could also be placed on these platforms to increase click-through rate according to customers’ preferences. Hong Kong Tramways, on the other hand, gather the travel patterns of passengers during different times of day using Radio Frequency Identification (RFID). After utilizing Data Science to analyze the data generated, tram service could be adjusted to better match passenger flow.

Data Scientist – The “Sexiest” Job

Data scientists were acclaimed as having the “sexiest” job of the 21st century in an article of Harvard Business Review in 2012, and since then, different sectors over the world are competing for such talents. In the era of big data, the demand for data scientists and its related positions by both the public and private sectors remains high.

In Hong Kong, the recently-released *2017 Policy Address* proposed to take “forward several projects to develop Hong Kong into a Smart City”. Data scientists would play a crucial role in these projects by guiding development directions with data. Big businesses in China, including Baidu, Tencent and Alibaba, are constantly recruiting for talents with background in data science as well to maximize profit earned with more effective strategies from the analysis of big data. The McKinsey Global Institute also projected that US alone could face a shortage of up to 190,000 people with deep analytical skills. Therefore, it comes as no surprise that a growing number of individuals wish to join the profession by pursuing further study in data science.

HKU Master of Data Science – Key to Big Data

“The well-balanced curriculum of the MDASC Programme adopts an interdisciplinary and comprehensive pedagogy of both statistical and computational concepts and methodologies, underpinning applications are not limited to business or a single field alone,” said Professor Li Wai Keung, Chair Professor and MDASC Programme Director. “Graduates of the MDASC programme will be well prepared to enter a wide range of careers with high employability in all organizations and enterprises within the public and private sectors.”

The MDASC Programme promotes the applications of computer technology, operational research, statistical modelling, and simulation techniques to decision-making and problem-solving. It is ideal for those whose interest in high-level analytical skills straddles the disciplinary divide between statistics and computational analytics, and those who wish to pursue further study in the field of data science after studying sciences, social sciences, engineering, medical sciences, information systems, computing and data analytics in their undergraduate studies. Supplemented with the Department’s established career advising programme, graduates would be able to become analytical experts much craved for by the market.

Details of the Programme can be viewed via <http://www.saasweb.hku.hk/programme/mdasc.php>.

For media enquiries, please contact Ms Cindy Chan, Senior Communication Manager of Faculty of Science (Tel: 3917 5286/ 6703 0212; Email: cindycst@hku.hk).

Image download: <http://www.scifac.hku.hk/news/media?page=1>



Image 1. Professor Li Wai Keung, Chair Professor of Statistics and Actuarial Science and Director of MDASC, HKU Faculty of Science

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