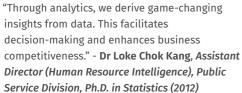Some of our graduates have established successful careers in data science-related fields.

"Data science enabled me to contribute to Citi Asia Pacific's retail revenues and subsequently, to manage my consulting company." - **Eric Sandosham,** *Founder-Partner, Red & White Consulting Partners, B.Sc. (Hons) in Mathematics (1995)*

"Through analytics, we derive game-changing insights from data. This facilitates decision-making and enhances business competitiveness." - **Dr Loke Chok Kang,** *Assistant Director (Human Resource Intelligence), Public Service Division, Ph.D. in Statistics (2012)*

"I build computational models driven by advanced analytics. This enables us to deliver the right drugs at the right price to patients." - **Ivan John Clement**, *Data Scientist, Merck & Co., B.Sc. (Hons) in Computational Biology (2013)*

Admission Requirements

Applicants should have a very good pass in H2 Mathematics and a good pass in H2 Biology or H2 Chemistry or H2 Physics or H2 Computing.

Smart **Healthcare**

Smart **Buildings**

Smart **Homes**

Smart **Governance**

Smart **Transportation**

More Information

View the Faculty of Science's video on our leadership in data science

For further infomation, you may contact Melissa.Thong@nus.edu.sg

NUS National University of Singapore | Faculty of Science

NEW

BACHELOR OF SCIENCE IN **DATA SCIENCE AND ANALYTICS**

^Pending approval

BACHELOR OF SCIENCE IN
DATA SCIENCE AND ANALYTICS^

Preparing Future Leaders in Data Science and Analytics

The nature of data has changed dramatically. Between the dawn of civilisation and 2003, the human race created five exabytes (5×10^{18} bytes) of information. Now we are producing that amount every two days. Such a huge amount of data, collectively called Big Data, creates an urgent need to make sense of it.

Data science is an emerging field that involves using novel mathematical and statistical tools to collect and analyse massive data sets to derive insights that facilitate decision-making in businesses and in Government. This has brought about a revolutionary transformation across our society and industries.

> "Data is the 'new oil' of the 21st century. With better connectivity and more powerful computational technologies, data analytics enables businesses to draw sharper insights into their customers and operations. It can make businesses smarter, more productive and more competitive, thereby powering economic growth."
> **[Infocomm Media 2025, IDA*]**

* Infocomm Development Authority of Singapore

First Data Science and Analytics Degree Programme in Singapore

NUS' Faculty of Science is the first in Singapore to offer a four-year direct honours programme leading to a Bachelor of Science in Data Science and Analytics. The programme will be offered in Academic Year 2016/2017.

- **Multidisciplinary curriculum.** A key facet is the interdisciplinary nature of the programme, which integrates knowledge, concepts and applications from the foundations of mathematics, statistics and computer science as well as various other disciplines.

- **Experiential learning.** You will have opportunities to participate in research projects, final year projects and industrial attachments, where you can apply your domain knowledge in a workplace setting, to address and solve real industry problems and challenges.

- **Global exposure.** You can choose to participate in a range of study abroad and student exchange programmes at over 300 partner universities. This opens the door to a global learning experience, grooming you to be resilient and culturally sensitive.

The programme will equip you with analytical tools and techniques to resolve complex data-scientific problems in various sectors and domains, and skills to communicate insights gained using visualisation tools. You will also benefit from NUS' research expertise in science-based data research, data-driven scientific research, big data computing and data-driven decision sciences.
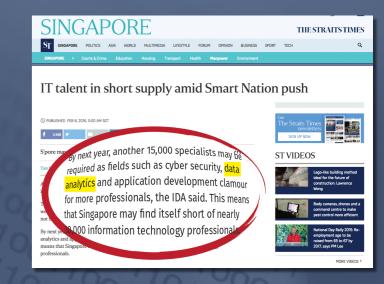
Varied and Exciting Career Prospects

Based on IDA's Infocomm Manpower Survey 2014, the total demand for data analytics professionals was about 2,100. An additional 650 specialists will be needed by 2017. Over a three-year period from 2014, about 15,000 new infocomm technologies jobs are expected to be created which includes Smart Nation work, in areas such as data analytics, cyber security, etc.

There are career opportunities in many organisations and industry sectors seeking to make better decisions through smart data and intelligence. Through the Smart Nation vision, the Government is harnessing technology and the power of data analytics to improve lives by addressing challenges such as healthcare, transport, housing, security, an ageing population and energy sustainability.

As the first university to offer a Data Science and Analytics degree programme, our graduates will enjoy a competitive edge in the job market. Through a rigorous education which provides you with a firm grounding in mathematical, statistical and computer science skills, you will be prepared for diverse and exciting career opportunities.

> "The Government's response to critical challenges is to turn Singapore into a Smart Nation - one that is powered by big data, uses analytics to improve decision making...to improve the overall quality of life." -
> **Dr Vivian Balakrishnan**, *Minister-in-charge, Smart Nation Programme Office, at Quality and Standards Conference 2015, August 2015*

THE STRAITS TIMES — SINGAPORE

IT talent in short supply amid Smart Nation push

PUBLISHED FEB 8, 2016, 5:00 AM SGT

By next year, another 15,000 specialists may be required as fields such as cyber security, data analytics and application development clamour for more professionals, the IDA said. This means that Singapore may find itself short of nearly 30,000 information technology professionals.

Exciting Career Opportunities
Audience insights analyst
Big Data analyst
Big Data engineer
Business analytics specialist
Business intelligence specialist
Data scientist
Data analytics specialist
Data visualisation developer
Machine learning scientist
Market strategist
Statistician
etc.

Industry Sectors
Biomedical sciences
Business intelligence
Clean technology
Consumer businesses
Financial services
Government
Healthcare
Infocomm technologies
Manufacturing
Pharmaceuticals
Re/insurance
Safety & Security
etc.