

## PRACTICAL TRAINING

for a career at the forefront of data science





Recruiting data scientists has become crucial to the success of organisations in almost every sector.

In particular, graduates with a specialist masters qualification are increasingly needed to fill data scientist and advanced analyst roles, with a 230 per cent increase in vacancies in these roles between 2013 and 2018.

Our MSc in Data Science has been designed in collaboration with industry to prepare you for a career at the forefront of data science, opening up roles across many areas – from finance to politics, and advertising to healthcare.

Uniquely, our masters course covers both the fundamentals of data and the technical knowhow you will need to bring structure and analysis to big data. It also offers an optional year-long paid placement in industry, enabling you to apply your knowledge to real world challenges and significantly boost your CV.

### COURSE OVERVIEW

On our one- or two-year MSc in Data Science, you will study:

- Core programme content allied to the EDISON Data Science Body of Knowledge
- Specialist advanced topics including data science principles and practices, machine learning and data mining, practical business analytics, database systems, and cloud computing
- Choice of optional modules in topics such as information security for business and government, image processing and deep learning, AI, and natural language processing
- Optional Professional Postgraduate Year (on two-year course, after successful completion of taught modules)

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The first step in filling the need for data scientists is to understand what they do in businesses. Then ask, what skills do they need?

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**DJ Patil,** formerly Chief Data Scientist of the US Office of Science and Technology Policy, who coined the term 'data scientist'

# WHY CHOOSE SURREY FOR YOUR MASTERS IN DATA SCIENCE?

Surrey's MSc in Data Science is unique in offering:

A strongly vocational training based on what is required by industry, taught by academics and practitioners who understand what it means to be a data scientist in practice.

Experience of applying data science skills to real world challenges. In addition to the Professional Placement Year, all students can opt to do their

dissertation project for an industrial company.

Teaching informed by internationally leading research. You'll learn from academics within Surrey's Nature-Inspired Computing and Engineering (NICE) group, at the forefront of research to solve complex problems using computational models based on natural intelligence.

### PROFESSIONAL PLACEMENT YEAR

A paid, full-time year in industry, the Professional Placement Year not only gives students valuable work experience, it is also a great opportunity to progress into employment and - for international students - to benefit from the UK's new two-year Post-Study Work Visa.

Our students go on placement to a wide range of companies, from start-ups and charitable organisations to specialist data science consultancies and multinational companies. These include:

· CityMaaS · AkzoNobel · Unilever R&D · Royal Surrey County Hospital · Roche · NPL · Medialab



CityMaaS is very pleased to have placement students from Surrey's MSc on board. Not only do we have access to a high calibre of candidates from this course, we are also able to grow our talent pipeline sustainably on the back of this placement.

**77** Rene Perkins, CEO of CityMaaS

#### PROGRAMME LEADER:

#### **Professor Nick Ryman-Tubb**

Leading the MSc in Data Science programme, Professor Nick Ryman-Tubb is an inspirational leader and innovator in the field of data science. Having set up the first business exploring neural networks in 1986, he has since been a passionate pioneer of the practical deployment of machine learning to solve industrial problems, specialising in the financial sector. His innovative solutions in payment fraud detection have been deployed by over 150 institutions worldwide.

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Professor Ryman-Tubb's enthusiasm and real-world experience are obvious. I made sure to learn as much as possible from him, booking regular meetings where we discussed everything from the theory behind Principal Component Analysis through to creating your own start-up. It was a genuine privilege to be lectured by him.

**77** Aleksander Dosti, MSc student







### Contact us

You can find out more about our MSc in Data Science at:

surrey.ac.uk/postgraduate/data-science-msc-2020

You can also contact us at <a href="mailto:admissions@surrey.ac.uk">admissions@surrey.ac.uk</a>



Department of Computer Science

University of Surrey Guildford Surrey GU2 7XH

+44 (0)1483 300800

