

# **Skills in Computing and Data Science: insights from the national skills landscape**

**Matt Forshaw**

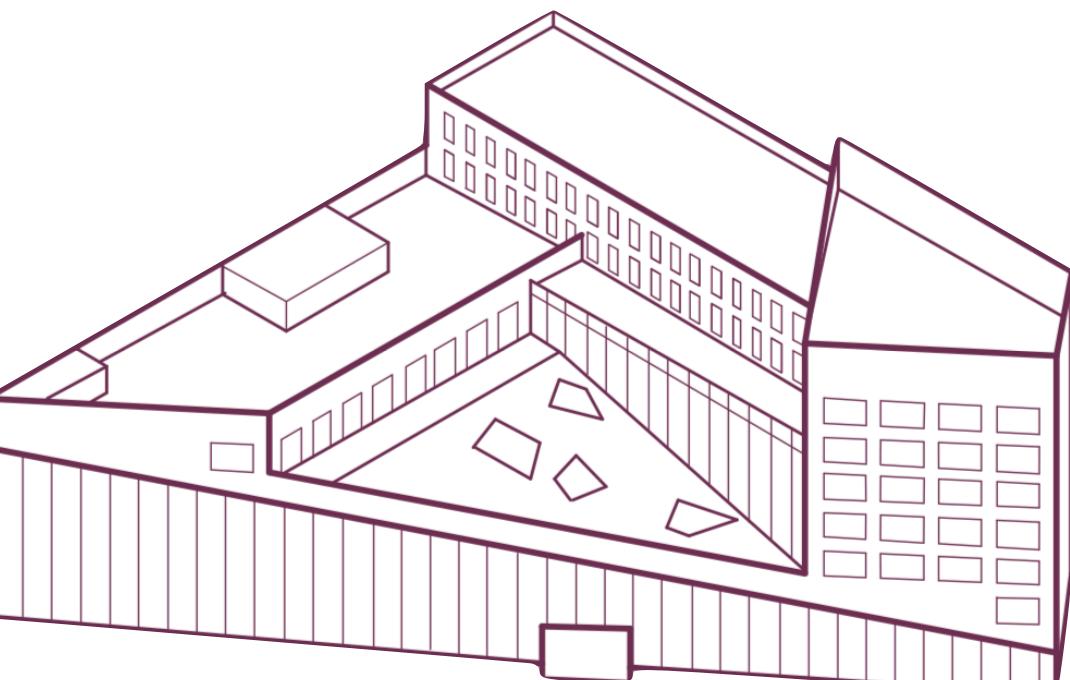
Senior Lecturer in Data Science, Newcastle University  
National Skills Lead, The Alan Turing Institute

[matthew.forshaw@ncl.ac.uk](mailto:matthew.forshaw@ncl.ac.uk) or [mforshaw@turing.ac.uk](mailto:mforshaw@turing.ac.uk)

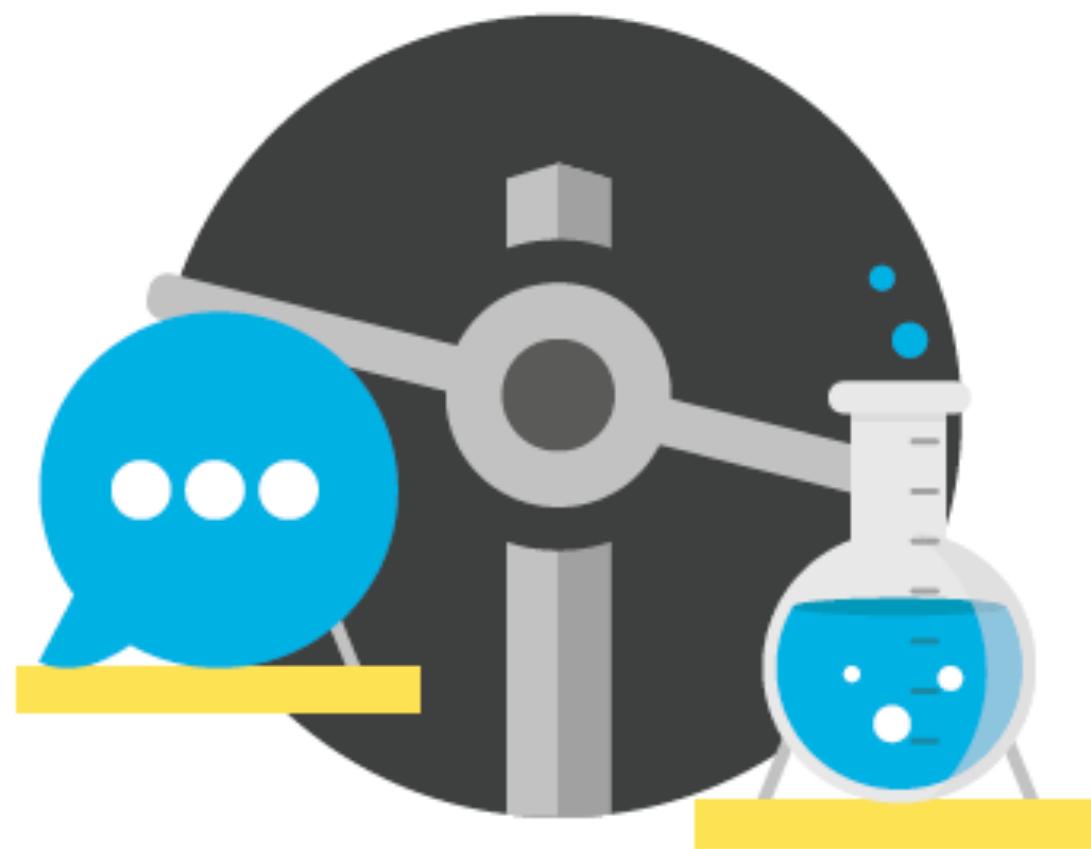
Resources: <https://github.com/MattForshaw/BCS-VFoDS-2020>

**BCS Virtual Festival of Digital Skills, 30th November 2020**

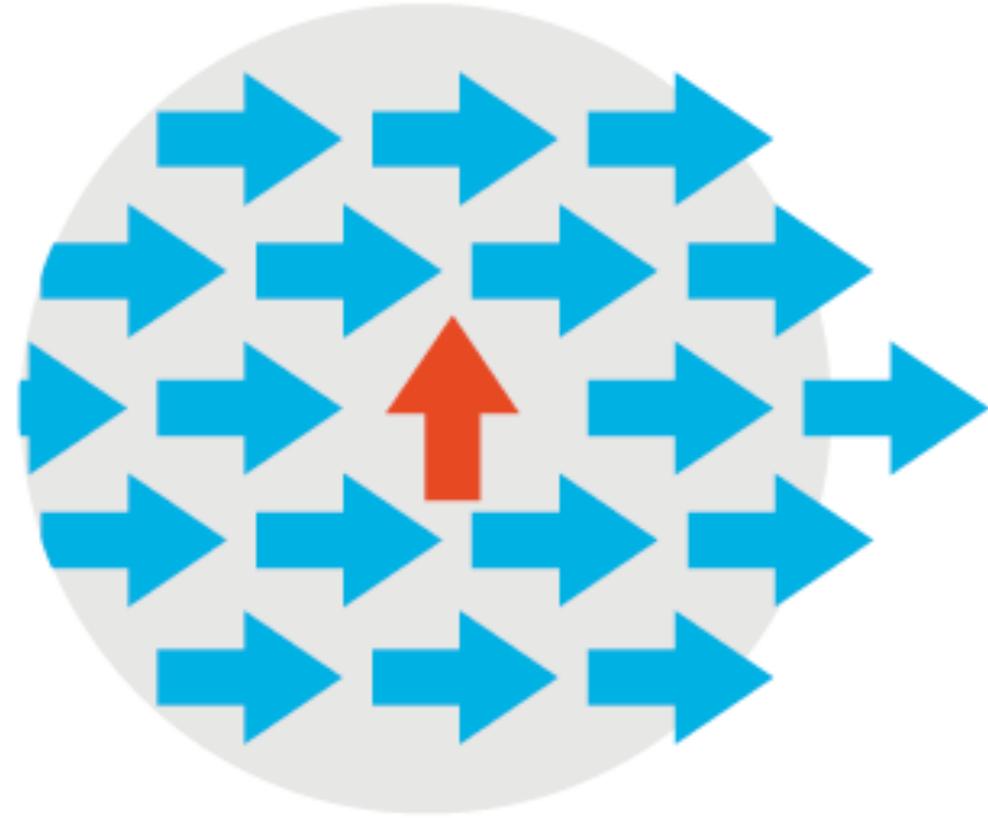
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# Challenges and Opportunities in the data skills landscape



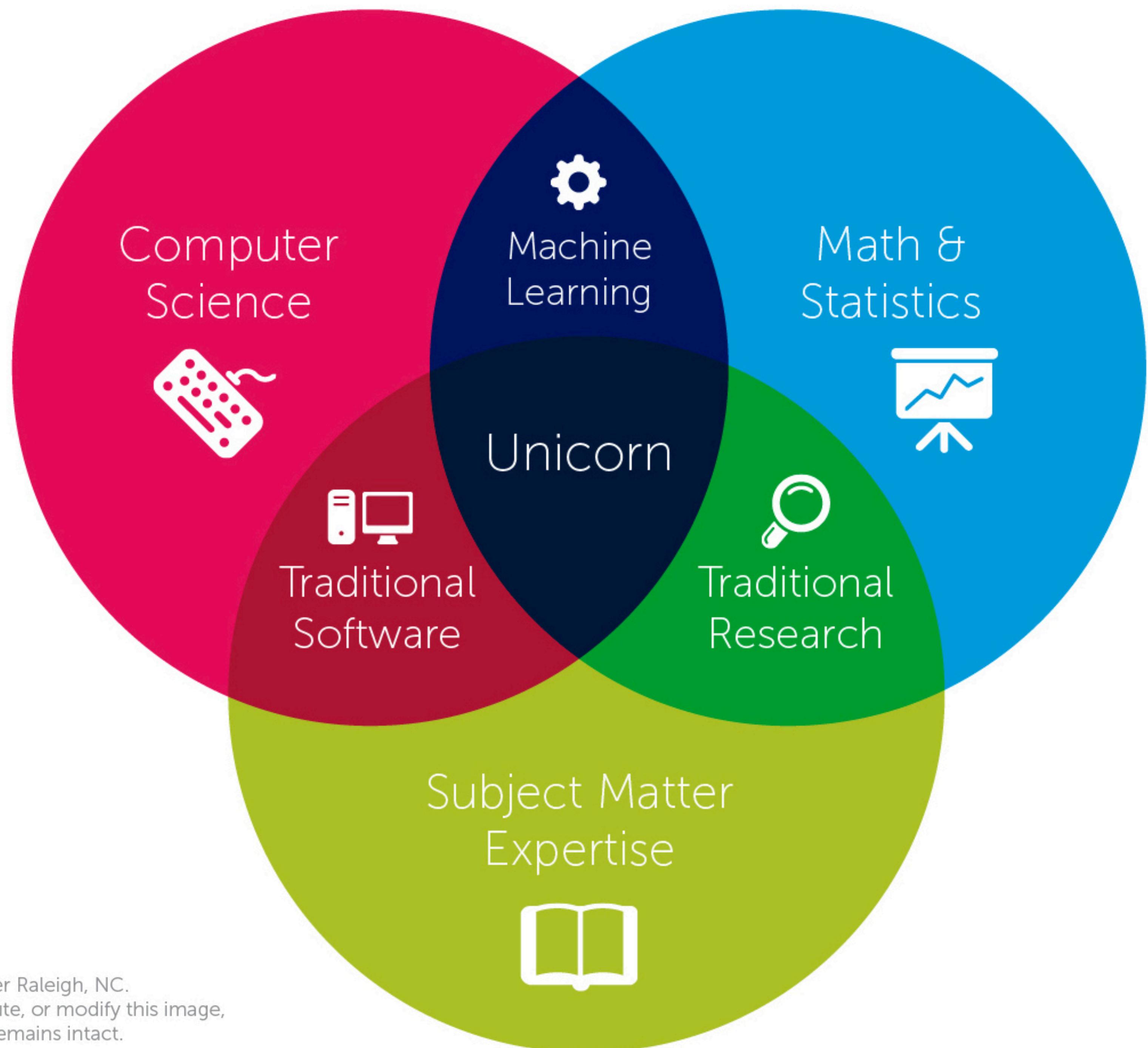
**Terminology and Nomenclature**  
Lack of agreed definitions and role descriptors



**Lack of alignment**  
Mismatch between academic/industry need and skills offerings



**Raising awareness and widening access**  
Visibility of, and access to, the variety of routes to training among students, employees and industry



**85% of big data and data  
science projects fail to move  
from proof-of-concept (POC)  
to production.**

*Gartner*



Newcastle  
University



National  
Innovation  
Centre  
**Data**

Powered by  
Newcastle University

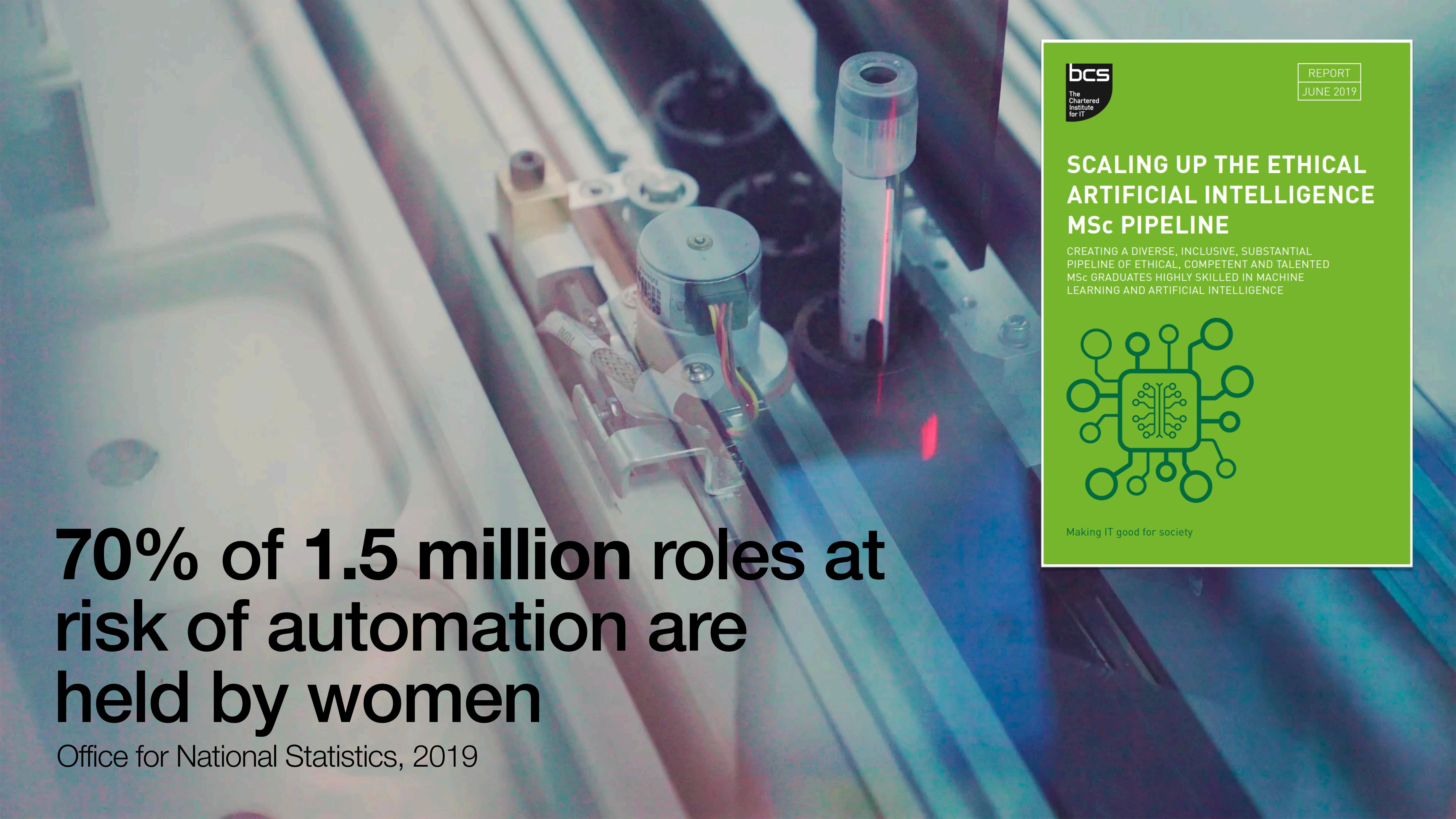


CODE OF ETHICAL BEHAVIOR



Homer Simpson is shown in a futuristic, metallic control room. He is wearing a light blue jumpsuit and has a surprised or excited expression. He is looking towards the right side of the frame. In his right hand, he holds a small, glowing blue device, possibly a smartphone or a small tablet. To his left, there is a large, complex machine with green and orange components, which appears to be some kind of reactor or power source. The background features various control panels, pipes, and a large window showing the interior of the ship. On the right side of the image, there is a prominent sign with the text "DAYS WITHOUT DISCRIMINATORY AI" in bold, black, uppercase letters. Above the text on the sign is a small infinity symbol ( $\infty$ ). The overall atmosphere is one of a high-tech, futuristic setting.

DAYS WITHOUT  
DISCRIMINATORY AI



**70% of 1.5 million roles at  
risk of automation are  
held by women**

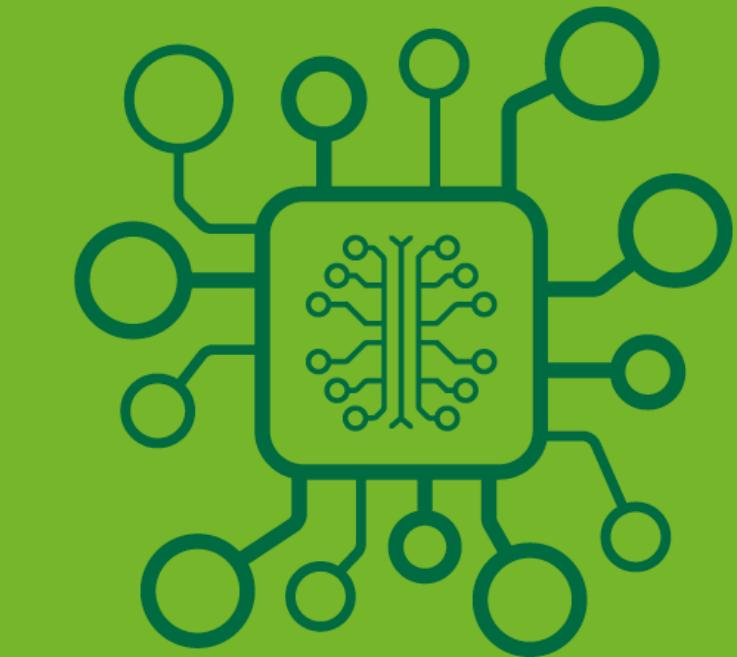
Office for National Statistics, 2019



REPORT  
JUNE 2019

## SCALING UP THE ETHICAL ARTIFICIAL INTELLIGENCE MSc PIPELINE

CREATING A DIVERSE, INCLUSIVE, SUBSTANTIAL  
PIPELINE OF ETHICAL, COMPETENT AND TALENTED  
MSc GRADUATES HIGHLY SKILLED IN MACHINE  
LEARNING AND ARTIFICIAL INTELLIGENCE



Making IT good for society

# Freethinkers wanted

Your future in AI and data science starts here





Support developing diverse teams across disciplines.



Democratise and widen access to training which is responsive and “at scale”



Ensure strong alignment between training and industry/academic needs

BBC - BBC and partners annou x  
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## BBC and partners announce new apprenticeship to drive data skills in the UK

Date: 07.10.2019 Last updated: 07.10.2019 at 16.30

Category: Corporate; Online and interactive

Employers, recent graduates, people interested in technology and employees will be able to benefit from a new apprenticeship that has been created with the BBC, UK universities and a number of agencies.

Employers, recent graduates, people interested in technology and employees will be able to benefit from a new apprenticeship that has been created with the BBC, UK universities and a number of agencies. The Level 7 Artificial Intelligence (AI) Data Specialist Apprenticeship will give people the skills to help the BBC and others stay ahead in a data-driven future.

In 2017, the BBC launched a major Data Science Research Partnership with eight UK universities. Working with a number of organisations such as BT, EasyJet and TUI, the BBC designed and developed this new apprenticeship.

Data is important to the BBC for two reasons:

- In order for the BBC to remain relevant in an era of streaming and subscription services, the BBC uses data to make its products and

“

The introduction of this new standard will help to build the next generation of talent in AI, who are so integral to the future of our society and the UK's industrial ambitions.”

Matthew Forshaw

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### Relevant BCS Skills Festival Sessions

12:30-12:50 Apprenticeships - Rob Nitsch, COO, IfATE

12:50-13:30 Can digital apprenticeships play a key role in economic recovery and growth? (Panel)

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