
THE ALAN TURING INSTITUTE

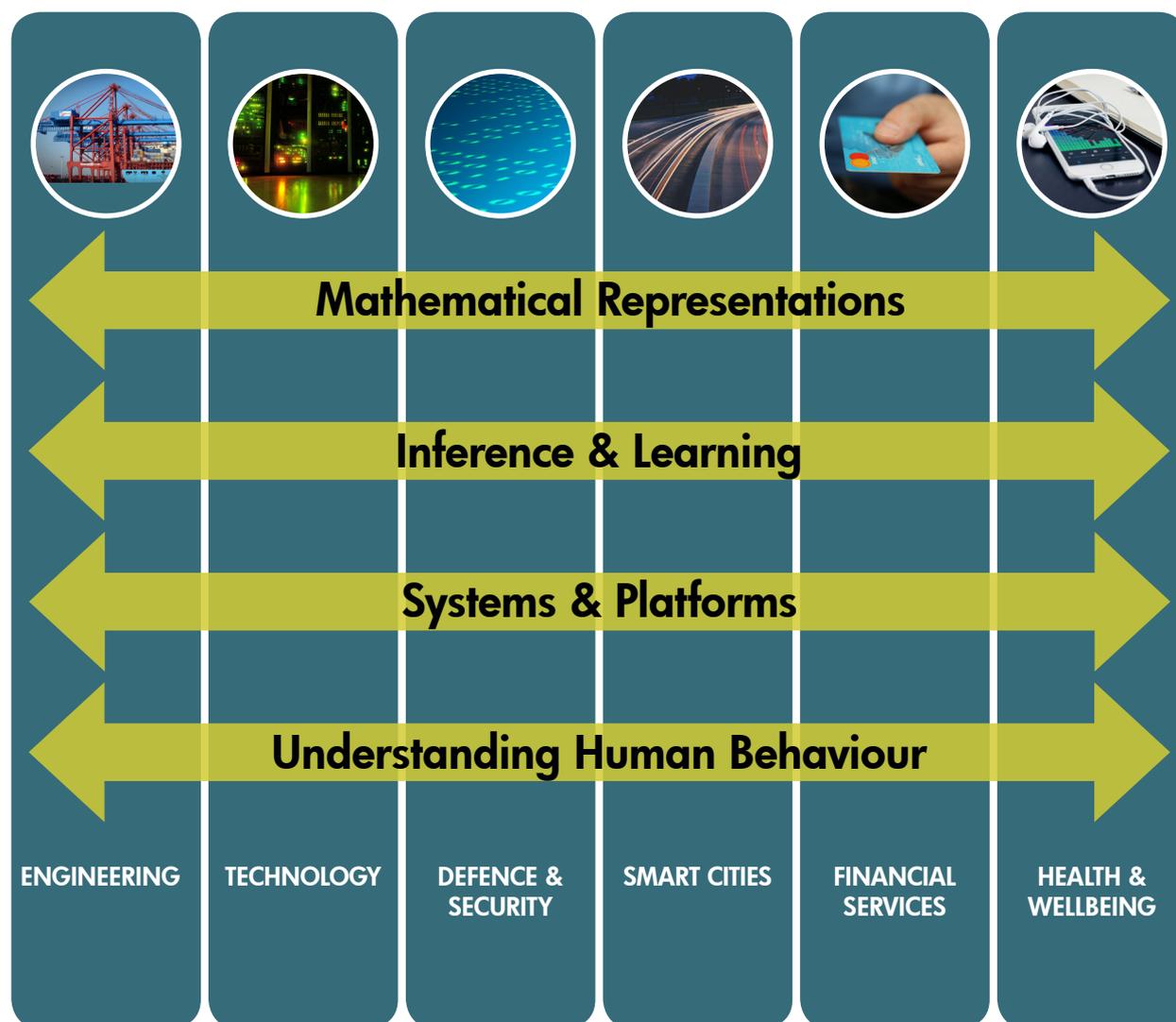
THE UK'S NEW NATIONAL INSTITUTE FOR DATA SCIENCE

Shaping our Strategy

June 2016



OUR STRATEGIC PRIORITIES



Data science—and our way of working as a research institute—is inherently interdisciplinary. Our scoping process identified four key capabilities as our foundational research strengths:

- **Mathematical Representations** of data and models, providing foundations for analysis;
- **Inference & Learning** methodologies for data analytics, enabling scalable algorithms;
- **Systems & Platforms** to scale up and to scale out algorithmic and analytical tools; and
- Social sciences methods and expertise for **Understanding Human Behaviour** from data.

Working across disciplines, we have identified six priority sectors to focus our translational research:

- **Engineering** (in partnership with the Lloyd's Register Foundation); **Technology** (in partnership with Intel); **Defence & Security** (in partnership with the UK Government); **Smart Cities**; **Financial Services** and **Health & Wellbeing**.

To advance our strategic priorities, we will lift common technical challenges out of these sectors; bring our foundational research capabilities to bear on them; and work with our partners to translate solutions back into individual sectors, creating impact that is immediate and transformative.

WHAT NEXT?

We have attracted an impressive talent base to work with us at the Institute:

- Our inaugural call for early-career research fellows received over 300 applications; after peer review and panel interviews, over 10 new fellows will join us;
- We have offered places to over 20 full-time students on our doctoral training programme, and will offer periods of enrichment training for over 20 more;
- We have appointed over 80 inaugural faculty fellows from our founding partner universities, in subjects ranging from mathematics to ethics.

In Autumn 2016 we will begin our first full academic year, and over 100 researchers, plus our business team, will begin work in a newly refurbished space in the British Library.

We recognise and value diversity as a core principle, and are actively encouraging female researchers and students into data science. We are proud to report that in our first year this has led to recruitment of 25–33% female students, research fellows and faculty fellows — significantly above the sector average.

With this strong academic team in place, we will begin our full-time programme of research, focussing on our identified strategic priorities as we continue to seek out novel and timely opportunities for impact.

As we approach the end of the year, our full portfolio of research activities will begin to take shape, with a range of exciting and challenging projects already in development.

We will be open and collaborative, working with the UK and the rest of the world, and partnering across different



Minister for Science Jo Johnson speaks at the launch of the Alan Turing Institute, hosted by our partners the British Library, 11th Nov 2015.

disciplines, geographical locales and research cultures. We will encourage our researchers to work together in new ways, forming new partnerships and collaborations, convening the world's best talent to address data science challenges too large or wide-ranging for any partner or discipline to tackle alone.

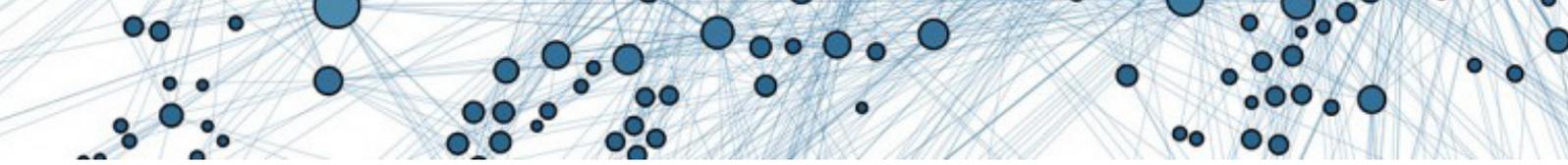
As we build this cross-disciplinary and diverse environment, we will be agile in developing our best ideas, prototyping promising new methods and creating open-source software, platforms and intellectual property to generate maximum impact.

Through our continuing recruitment programme, upcoming visitors programme and ongoing roundtables with government and industry, we will encourage and catalyse world-class research that fosters our mission: to create global impact through research, training and leadership in data science.

We invite you to join us on this exciting journey!

We are headquartered at the British Library's St. Pancras campus in London's new and vibrant Knowledge Quarter. Together we will develop tools and techniques to use its digital resources in new ways, at scale.





EPSRC

Engineering and Physical Sciences
Research Council



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