

## **Programme Deputy Director for Health**

### **THE ALAN TURING INSTITUTE**

There has never been a more significant time to work in data science and AI. There is recognition of the importance of these technologies to our economic and social future: the so-called fourth industrial revolution. The technical challenge of keeping our data secure and private has grown in its urgency and importance. At the same time, voices from academia, industry, and government are coming together to debate how these technologies should be governed and managed.

The Alan Turing Institute, as the UK's national institute for data science and artificial intelligence, plays an important part in driving forward advances in these technologies in order to change the world for the better.

The Institute is named in honour of Alan Turing, whose pioneering work in theoretical and applied mathematics, engineering and computing is considered to have laid the foundations for modern-day data science and artificial intelligence. The Institute's goals are to undertake world-class research, apply its research to real-world problems, driving economic impact and societal good, lead the training of a new generation of scientists, and shape the public conversation around data and algorithms.

After launching in 2015 with government funding from EPSRC and five founding universities, the Institute has grown an extensive network of university partners from across the UK and launched a number of major partnerships with industry, public and third sector. Today it is home to more than 400 researchers, 30 in-house research software engineers and a talented business team.

### **THE PROGRAMME**

Professor Chris Holmes is the Director for this major programme of research into the theory and methods of AI, statistics, and data analytics underpinning medical and health applications that will enable scientists to do better science, without compromising respect for privacy and patient trust. Using data-driven innovation in AI and statistical science, the programme aims to accelerate the scientific understanding of human disease and improve human health.

We have a large number of partnerships, working across the NHS and government, charities and foundations, and industry. Due to an exciting period of growth, we are looking for a Deputy Director to support the Director and work with the programme management team and research community in delivering collaborative research partnerships and creating impact.

A key aspect of the Turing's Health Programme is a close partnership and joint scientific programme with Health Data Research UK ([www.hdruk.ac.uk](http://www.hdruk.ac.uk)), the UK's national institute for health data science. HDR UK's mission is to unite the UK's data to make discoveries that change people's lives. By bringing together diverse expertise and providing safe and secure access to large-scale health data, HDR UK aims to create the new tools and technologies needed to better understand disease and discover new ways to prevent, treat and cure them.

### **THE ROLE**

You will be working alongside the Programme Director for Health, Professor Chris Holmes, in helping to shape the strategy and implementation of the Turing's Health Programme, as well as providing research leadership. This will include close working across the Alan Turing Institute and Health Data Research UK, which provides a unique opportunity to join-up national health data science initiatives, to address the big health issues facing the UK.

This is a stand-out opportunity to join a prestigious, national research institute and shape its agenda at an important and exciting time in its development.

The role is ideally suited to candidates who are leading researchers in AI and data science with an outstanding track record in collaborative research across data science related disciplines (AI, mathematical sciences, statistics, computing sciences and/or social sciences) and with deep interests

in data-driven methods and/or approaches for tackling real-world problems in health using data science and AI methods and tools. It offers the opportunity to shape the Institute's research, training, translation and knowledge exchange priorities and establish new programmes of work in the health domain. Areas of particular interest include, but are not restricted to:

- Clinical trials
- Public health and epidemiology
- Genomics and other 'omics data
- Structured and unstructured data from Electronic Health Records
- Health Service/NHS systems

## **ORGANISATIONAL POSITION**

The Deputy Director will report to the Director of the Health Programme and will join the Research and Innovation Advisory Committee for the Institute, ensuring a strong connection between the Institute's research programmes/projects and the overall AI and data science research strategy of the Institute. The Deputy Director will also liaise closely with HDR UK, the Institute research and operations staff, as well as Institute's university researchers and industry, government and third sector partners of the Institute.

## **DUTIES AND RESPONSIBILITIES**

You will ideally have an international profile as a researcher working in one or several disciplines of AI and data science, with significant experience of leading a research team with a focus on health data science – she/he will be expected to work closely with the Health Programme Director to:

- Help develop and deliver the strategy of the Programme;
- Help lead the development and delivery of the strategic themes for the Institute, spanning research, translation/knowledge exchange, training and thought leadership;
- Deputise for the Programme Director as required;
- Build capabilities in the relevant research areas, drawing upon the multidisciplinary nature of the Alan Turing Institute and HDR UK;
- Engage widely within the research and user community in AI and data science to help deliver compelling research outputs and impacts;
- Working with the Director, oversee the Health theme of Turing's AI for Science and Government funding stream (<https://www.turing.ac.uk/research/asg>) and ensure strategic links to other research and partners within the programme
- Conduct an ambitious programme of research in AI and health data science generating first class research outputs, aligned with the aims and objectives of the Institute;
- Help leverage resources for collaborative research in AI and data science from appropriate sponsors (e.g. research councils, government, industry, EU, charities, etc.)
- Disseminate Institute themes and programmes findings at industry, academic and practitioner conferences and meetings;
- Support the Institute CEO and other colleagues as appropriate in the delivery of the Institute's strategic plan;
- Work with the Institute's senior team, university members, partners and staff to maximise opportunities for translation and exploitation of the algorithms, software, methods and ideas developed through Institute's programmes.

## **PERSON SPECIFICATION**

The successful candidate will demonstrate the following:

### **ESSENTIAL**

- Record of excellence in AI, mathematics, statistics, computer, social science and/or related areas with an emphasis on applications to health, obtained in an academic, government and/or industrial setting;
- Leadership and strategic vision skills, especially as required in a complex, research-intensive collaboration with academic and/or industry partners;
- Ability to create and promote a collegiate and collaborative approach to research partnership activities;
- Talent for identifying opportunities for research collaborations beyond the applicant's own academic specialty;
- Analytical and problem-solving capability, with the personal skills and initiative to achieve the solution;
- Communication and advocacy skills, both verbal and written, with the ability to express ideas and concepts clearly and coherently to diverse audiences and to engage in public debate;
- Ability to communicate and network across disciplines;
- Ability to bridge both fundamental and applied research

#### DESIRABLE

- Previous experience in a similar role
- A strong network of contacts across health-related data science disciplines and/or domains

#### APPLICATION PROCEDURE

Please register on our candidate portal and send your 2-side CV, with contact details for your referees and a two-page (maximum) cover letter on how you meet the person specification above and your research interests.

If you have questions or would like to discuss the role further, please contact a member of the Institute's Recruitment Team on 0203 862 3394 or 3357 email [recruitment@turing.ac.uk](mailto:recruitment@turing.ac.uk) in the first instance.

#### TERMS AND CONDITIONS

This is a part time 40% FTE, fixed term post until 31 March 2023. The post holder will be based at the Alan Turing Institute.

Annual salary: competitive plus excellent benefits <https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits>

***Please note all offers of employment are subject to continuous eligibility to work in the UK and satisfactory pre-employment security screening which includes a DBS Check.***

***Full details on the pre-employment screening process can be requested from [HR@turing.ac.uk](mailto:HR@turing.ac.uk).***

#### EQUALITY, DIVERSITY AND INCLUSION

The Alan Turing Institute is committed to creating an environment where diversity is valued and everyone is treated fairly. In accordance with the Equality Act, we welcome applications from anyone who meets the specific criteria of the post regardless of age, disability, ethnicity, gender, gender reassignment, marital and civil partnership status, pregnancy, religion or belief or sexual orientation. Reasonable adjustments to the interview process can also be made for any candidates with a disability. Happy to talk flexible working.

