

The Alan Turing Institute

PDRA in Government AI

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 500 researchers, a rapidly growing team of in house research software engineers and data scientists and a business team.

BACKGROUND

The Public Policy research programme works alongside policy makers to explore how data-driven public service provision and policy innovation might help to solve long running societal problems. We also work hand-in-hand with public sector organisations and citizens to develop practice-based ethical standards for the responsible development and use of data science and AI. Our dynamic group has co-produced—with the Office for AI and the Government Digital Service—the UK Government's official public sector guide for designing and implementing ethical and safe AI. We have also co-authored—with the Information Commissioner's Office—the first guidance ever released by a UK regulator on explaining AI-assisted decisions.

In addition to our work with government and regulators, we carry out interdisciplinary academic research in the area of AI ethics and governance as well as AI and society. Our research projects rely entirely on public funding, and they include a review of the ethics of machine learning (ML) in children's social care; an exploration of the relationship of notions of AI, human agency, privacy and trust in intercultural and global contexts; an investigation into how to build grassroots data rights charters through deliberative democracy; an examination of the role of responsible data management in criminal justice applications of AI; and an analysis of the interpretability needs of AI systems in the financial services sector.

The AI for Public Services Team is a new part of The Turing's Public Policy Programme. It aims to provide state of the art research into how artificial intelligence and machine learning are changing the nature of contemporary government, and the consequences of these changes for governments ability to deliver effective, high-quality services to all citizens

ROLE PURPOSE

The Public Policy Programme, part of the Alan Turing Institute, is developing a major new stream of work dedicated to bringing ethical, safe and effective artificial intelligence into the heart of government work for the benefit of citizens and the public good.

As part of this work, we are seeking to appoint a Postdoctoral Research Associate in Government AI (the post is available either full time or part time). The successful candidate, who should specialise in data science, machine learning or related disciplines, will work on a range of projects with major government departments to pilot the introduction of artificial intelligence into government decision making. They will gain experience in building machine learning pipelines that can be

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put into practice with genuine impact across a wide variety of sectors. As part of this work, they will also co-produce high impact journal publications in major outlets across computer science, human-computer interaction, political science and related disciplines.

DUTIES AND AREAS OF RESPONSIBILITY

The successful candidate will:

- Conduct original research in the area of artificial intelligence in government
- Work alongside government departments to build and implement machine learning systems
- Submit written and verbal evidence to UK- and European Government consultations, such as Select Committee hearings, white papers, regulation and advisory reports.
- Support the work of policymakers, regulators and others by providing advice, attending workshops and giving talks.
- Write Turing Public Policy Briefing Paper, blogs and insight reports.
- Support with building the AI and public policy community at The Turing.

Please note that job descriptions cannot be exhaustive, and the postholder may be required to undertake other duties, which are broadly in line with the above key responsibilities. This job description is written at a specific time and is subject to changes as the demands of the Institute and the role develop.

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PERSON SPECIFICATION		
Skills and Requirements	Essential (E) Desirable (D)	Tested at application (a) Tested at interview (i)
Post holders will be expected to demonstrate the following:		
Education/Qualification		
Research Associate level: PhD-level degree in data science, mathematics, computer science, quantitative social science, or a related discipline.	E	A
Knowledge and Experience		
Background and competence in machine learning and / or data science	E	A/I
Competence in a relevant programming language such as R or Python	E	A/I
Demonstrable interest in government and public administration	D	A/I
Experience and/or interest in scientific communication	D	A/I
Experience in study of public services	D	A/I
Communication		
Excellent writing skills and proven ability to communicate complex, specialist or conceptual information/research findings clearly and persuasively to diverse audiences.	D	A
Teamwork and Motivation		
Highly motivated and committed to achieving the project goals	E	I
Liaison and Networking		
Participates in networks within the organisation or externally to share knowledge and information in order develop practice or help others learn.	D	A
Decision Making		
Independently makes decisions which are low risk and that mainly affect themselves or a small number of people and are guided by regulation and practice.	E	I
Initiative and Problem Solving		
Creatively solve problems, working both independently and with other team members	E	I
Analysis and Research		
Ability to organise working time, take the initiative, and carry out research independently, under the guidance of the PI.	E	I
Ability to use own judgement to analyse and solve problems.	E	I
Other Requirements		
Commitment to EDI principles and to the Organisation values	E	I
Flexible attitude towards work	E	I

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OUR VALUES

The Alan Turing Institute is committed to equality diversity and inclusion and to eliminating discrimination. All employees are expected to embrace, follow and promote our [EDI Principles](#) and Our Values.

Our values

- Trust**
We create an environment where we have trust and can be trusted
- Inclusivity**
We expect our Turing community to contribute to a culture that is inclusive and free of barriers
- Respect**
We all have different roles, priorities and challenges but our shared purpose is the same
- Leadership**
Leadership is everyone's business; Turing leaders set the right tone and lead by example
- Transparency**
Everyone should understand the how and the why of our decisions and actions
- Integrity**
We are all ambassadors for the Turing's mission of changing the world for the better

APPLICATION PROCEDURE

If you are interested in this opportunity, please click the apply button below. You will need to register on the applicant portal and complete the application form including your CV and covering letter. If you have questions about the role or would like to apply using a different format, please contact us on 020 3970 2148 or 0203 862 3340, or email recruitment@turing.ac.uk.

CLOSING DATE FOR APPLICATIONS: XXXXXXX

TERMS AND CONDITIONS

This full-time post is offered on a fixed term of two years. The annual salary is £37,000-£44,000 plus excellent benefits, including flexible working and family friendly policies, <https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits>

Candidates who have not yet been officially awarded their PhD will be appointed as Research Assistant at a salary of £36,235 per annum.

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 reassignment, marital or civil partnership status, pregnancy and maternity, religion or belief, sex and sexual orientation.

We are committed to building a diverse community and would like our leadership team to reflect this. We therefore welcome applications from the broadest spectrum of backgrounds.

Reasonable adjustments to the interview process will be made for any candidates with a disability.

Please note all offers of employment are subject to obtaining and retaining the right 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.