

The Alan Turing Institute

Research Fellow - Trust & Transparency in Artificial Intelligence

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 Alan Turing Institute's Defence and Security has three aims – to support defence and national security agencies to keep societies and citizens safe; to protect the privacy and security of citizens, institutions and industry; and to contribute to the global good by enabling societies around the world to derive benefit and prosper from emerging technology. To achieve these aims, the programme has formed long-term strategic partnerships, with the UK Government defence and security organisations, and a range of academic and industry partners.

The Research Fellow role will sit within the Alan Turing Institute's Defence & Security programme and will support the work of the Dstl Experimentation Hub within Dstl's Defence AI Centre (DAIC-X).

ROLE PURPOSE

The Research Fellow will work across the research portfolio to leverage the current understanding within the Institute to support the delivery of research and advice relating to the application of Trust and Transparency to AI within defence and security. This role will both directly address Dstl's immediate research requirements and further develop this capability within MOD.

DUTIES AND AREAS OF RESPONSIBILITY

- Plan and conduct research studies focussed on the specific Trust and Transparency challenges and opportunities associated with a series of Defence AI use cases.
- Explore the context specific nature of AI Trust and Transparency when applied to next generation AI-enabled systems.
- Develop guidance, good practice and standard setting for Trust and Transparency principles with respect to the development and use of AI-enabled systems.
- Provide thought leadership and help inform senior MOD stakeholders about the Trust and Transparency implications of AI in defence.
- Contribute to planning and developing Dstl's internal Trust and Transparency capability helping to define competencies, skill mix, and training requirements within Dstl.
- Establish links, facilitate interaction, and raise awareness of Trust and Transparency approaches to AI needs, design approaches, and evaluation methods, across Turing, Dstl, wider MOD, academia and industry.
- Engage with international partners and contribute to international research collaboration activities.

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- Evaluate Defence AI use cases based on a selection of the next-generation AI concepts including those being developed within the DAIC-X.
- Produce reports highlighting both specific insights to inform the further development of next-generation AI concepts, as well as principles applicable to AI projects across Defence.
- Contribute to the development and validation of tools, methods and guidance aimed at addressing Trust and Transparency considerations throughout the development and evaluation of AI concepts.
- Communicate research in a way that can inform and influence MOD stakeholders from varying backgrounds and levels of seniority, including those working on policy relating to AI in Defence.
- Organise events to facilitate engagement between various stakeholders across MOD, industry and academia focussed on Trust and Transparency of AI in defence.
- Work with international partners to explore the Trust and Transparency implications of AI in coalition operating environments and build common understanding and interoperability (Support to other international research collaboration activities such as NATO may also be required).
- Attend and present research findings and papers at academic and professional conferences and contribute to the external visibility of Dstl.
- Establish a community of interest by developing partnerships, for example to help identify sources of funding, identify opportunities for research impact, or build relationships for future activities.
- Remaining time will be spent on training, development and networking opportunities at the Alan Turing Institute. For example, this might include participation in Communities of Interest, the Defence and Security meetup, and other Turing Events. The Fellows will also be expected to pursue further professional development in the field of Trust and Transparency through attendance at academic conferences for example.

OTHER DUTIES

- Teaching may be required as part of collaboration work

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 Post holders will be expected to demonstrate the following:	Essential (E) Desirable (D)	Tested at application (A) Tested at interview (I)
Education/Qualification		
PhD or an equivalent qualification in Applied / Practitioner Ethics or a related discipline.	E	A
Knowledge and Experience		
Knowledge and understanding of the Defence and Security domain.	E	A/I
Understanding of artificial intelligence and digital ethics.	E	A/I
Strong track record of research publication in the area of applied ethics.	E	A/I
Established, vibrant research and practitioner networks at the national and international level.	D	A/I
Experience of initiating and managing collaboration with colleagues in partner institutions, and research groups	E	A/I
Experience working with funding bodies, attracting funding and managing research budgets	E	A/I
Effective strategic thinking and mentoring skills.	E	I
Communication		
Excellent communication, negotiation and influencing skills at all levels.	E	A/I
Excellent verbal and writing skills and proven ability to communicate complex, specialist or conceptual information/research findings clearly and persuasively to diverse audiences.	E	A/I
Teamwork and Motivation		
Ability to interact professionally with others from a broad range of disciplines in multi and inter-disciplinary teams.	E	I
Highly motivated and committed to achieving wider project goals	E	I
Liaison and Networking		
Networks with others with shared interests, collaborating on projects and strengthening future relations.	E	I
Ability to create and promote a collegiate and collaborative approach to interdisciplinary research activities.	E	I
Project Management & Project Delivery		
The ability to develop and implement strategic research and capability development plans.	E	I
Decision Making		
Ability to make strategic or operational decisions collaboratively, as part of the team.	E	I
Analysis and Research		
Ability to organise working time, take the initiative, and carry out research independently.	E	I
Ability to report findings to wider community and to withstand challenge by relying on evidence gathered and processes used for analysis.	E	I

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Other Requirements		
Commitment to EDI principles and to the Organisation values	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 3862 3558 or email recruitment at recruitment@turing.ac.uk.

CLOSING DATE FOR APPLICATIONS: Sunday 20th August 2023 at 23:59

TERMS AND CONDITIONS

This full-time post is offered on a 2-year fixed term basis. The annual salary is £53,576 - £55,125 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 £40,148 per annum. **Successful candidates will need to undergo a security check by DSTL's security team.**

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.

We are committed to making sure our recruitment process is accessible and inclusive. This includes making reasonable adjustments for candidates who have a disability or long-term condition. Please contact us at adjustments@turing.ac.uk to find out how we can assist you.

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.