

The Alan Turing Institute

Research Assistant, Applied Research Group (ARG)

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 Defence & Security (D&S) programme at the Turing is looking to build a newly funded dedicated research group – the Applied Research Group (ARG) – working on real-world cyber-security and machine learning problems for the Ministry of Defence (MoD).

As a team, we will aim to advance the state-of-the-art and produce academic reporting, code repositories, supporting documentation and pilot studies. Projects will vary in scale, from short-term literature reviews to early-stage research engineering and longer-term proofs-of-concepts. Day-to-day, we will collaborate closely with partners' technical and subject matter experts as well as academics from across the Turing's research community.

The team will practice an agile, experiment-driven approach and values a positive, supportive and collaborative environment in which 'radical candour' and 'lifelong learning' are encouraged. We embrace failure as a learning opportunity and necessary precursor to success. We are empowered to take ownership of our work and operate with a high level of autonomy in our roles to deliver measurable impact to our partners.

ROLE PURPOSE

We are looking to hire a Research Assistant to act in support of the Research Associate in delivering world-class applied research and assist other ARG members with frequent partner engagement. The ARG will be a cross-disciplinary team – therefore able to respond to a wide variety of problem sets – and encourage applications from both generalists and specialists including those who self-identify as statisticians, software engineers, machine learning practitioners, data scientists or data engineers.

If not already held, successful candidates will need to be willing to undertake the SC/DV process once in-post. Eligibility criteria and further information on the process can be found on the UK Government security vetting website.

The Alan Turing Institute

DUTIES AND AREAS OF RESPONSIBILITY

- Support the development of a unique and world-class applied research group at The Alan Turing Institute
- Assist ARG leads to pursue high-quality collaborative research and help translate complex user requirements into potential technical solutions
- Attend frequent partner engagements (in-person at partner sites and virtually)
- Participate in the development of internal and external partnerships. This might include building relationships for future activities or exploring the sharing of outputs with relevant stakeholders.
- Contribute to the running of initiatives such as the ATI/MoD [CyberFirst](#) summer school
- Ensure compliance with the secure handling of data and health and safety in all aspects of 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.

The Alan Turing Institute

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		
A Masters degree or equivalent experience in cyber security, machine learning or a related discipline.	E	A
A willingness to undergo the SC/DV process once in-post if not already held.	E	A
Knowledge and Experience		
General cybersecurity or machine learning knowledge.	E	A I
Experience in delivering applied research.	E	A I
Experience of working in a team and interacting within a team of researchers.	E	A I
Able to collaborate with experts across teams and domains.	D	A I
Ability to organise working time, take initiative and carry out research independently.	E	A I
Experience in some of the following languages: Python, C, C++, C#, SQL, JavaScript, HTML, Java, Kotlin, Rust, Go and Pandas.	E	A I
Prior experience developing software in a scientific computing context, ideally in Python and including familiarity with packages like Pandas, Numpy and Matplotlib.	E	A I
Experience in development suites, systems and versioning products (e.g., Git, IDEs, Linux)	E	A I
Communication		
Excellent communication and presentation skills.	E	I
Adapts the style of communication to the audience to ensure understanding.	E	I
Project Delivery		
Adapts services and systems to meet stakeholders' needs and identifies ways of improving standards.	E	I
Committed to working proactively to achieve project goals and deadlines.	E	I
Initiative and Problem Solving		
Use judgement to analyse and solve problems and take action to prevent recurrence of problems.	E	I
Considers possible solutions to identify those which offer wider benefits and obtain evidence to support thinking.	D	I
Analysis & Research		
Identify and use a range of standard sources to gather and analyse routine data and produce reports that can be interpreted by others.	E	I
Other Requirements		
Commitment to EDI principles and to the Organisation values	E	I

The Alan Turing Institute

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: Wednesday 15th February at 23:59

TERMS AND CONDITIONS

This full time post is offered on a fixed term basis. The role is funded for two years with potential for extension if sufficient value is demonstrated. The annual salary is £38,236 plus excellent benefits, including flexible working and family friendly policies, <https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits>

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.