

# The Alan Turing Institute

## Research Assistant

### THE ALAN TURING INSTITUTE

The Alan Turing Institute (the Turing) is the national centre for data science and artificial intelligence, established in 2015 with the mission to make great leaps in transformational data science research that will have positive real-world impacts.

The Institute has cross-disciplinarity at its core; we bring researchers in mathematics and theoretical computer science, statistics and machine learning, algorithms for data analytics and distributed computing, computational social science and data ethics, software engineers and industry partners, to work together in an open and collaborative environment with a shared goal to generate world-class research in data science and artificial intelligence.

The Institute is motivated by driving impact, both through theoretical development and application to real-world problems. In our first year, we have identified six priority domains to focus our translational research: data-centric engineering; defence and security; urban analytics; computing technology; financial services; and health, with artificial intelligence informing work across the Institute.

We have attracted strategic partnerships with a broad range of data science users including the Lloyd's Register Foundation, Intel, the UK Government Defence and Security sector and HSBC. We have already announced a collaboration with the Office of National Statistics (ONS) Data Science Campus and are actively developing partnerships with other government departments.

Our researchers are motivated by driving impact, both through theoretical development and application to real-world problems. In our first year we have identified eight challenge areas to focus our translational research:

- Fostering Government Innovation;
- Supercharging research in science and humanities;
- Designing computers for the next generation of algorithms;
- Making algorithmic systems fair, transparent and ethical;
- Shining a light on our economy;
- Managing security in an insecure world;
- Delivering safer, smarter engineering;
- Revolutionising Healthcare.

We invite you to join us as we grow our research community, supporting our goal to develop the next generation of data science leaders, shape the public conversation, and push the boundaries of this new science for the public good.

The Institute is headquartered at The British Library, and brings together researchers from a range of disciplines – mathematics, statistics, computer science, engineering and social sciences, – from thirteen leading universities and industry partners.

### THE ROLE

As a Research Assistant (RA) you will work closely with PIs and project teams on projects across applied areas of data science and artificial intelligence. We are looking for those who have a clearly

indicated interest in Health, Urban Analytics, Complex Engineering Systems, and Policy (including the research priorities of government departments, such as the Home Office or Ministry of Justice).

We welcome candidates who want to work in a strong developmental role in which they will be learning on the job and have time to develop skills in data science and artificial intelligence. Where they would like to, they will be encouraged to carry out a PhD in addition to their role as a Research Assistant, on a part-time basis, supported by the Institute.

## **PERSON SPECIFICATION**

The successful candidate will have:

### **ESSENTIAL**

Candidates must be able to demonstrate, through examples, the below capabilities:

- A Master's degree or equivalent professional experience in a field with significant use of both computer programming and advanced statistical or numerical methods.
- Interpersonal skills relevant to working as part of a multi-disciplinary team and communicating with stakeholders in academia, the public sector, and industry.
- Ability to work flexibly, prioritising tasks to meet deadlines and maintaining a high standard of accuracy and attention to detail.
- Demonstrated enthusiasm and ability to rapidly assimilate new computational and mathematical ideas and techniques on the job, at a more than superficial level, and apply them successfully.
- Excellent written and verbal communication skills.
- Ability to lead one's own work independently, including planning and execution, and to collaborate productively as part of a team.

### **DESIRABLE**

- Experience in the visual representation of quantitative data, the authoring of research papers or technical reports, and giving presentations on technical subjects.
- Experience working with confidential and sensitive data for research.
- Exposure to mixed or qualitative research methods.
- Evidence of extensive reading and understanding of topics in one or more of the research challenges of interest to the Institute.

## **CONTRACT TYPE**

Fixed term up until 2023 for part time for those pursuing a part-time PhD, with possibility for extension (funding permitting); fixed term up until 2021 for full time, with possibility for extension (funding permitting).

## **APPLICATION PROCEDURE**

### **Application**

Along with a CV and covering letter, please submit a research output to support your application, for us to read before the interview. This might be a link to a selected research or technical paper, a technical blog post or a chapter of a thesis or dissertation, but we particularly encourage applicants to submit a link to a public version control tool such as GitHub containing an example analysis script or research software library they have made a significant contribution to. You will be asked questions on this output as part of the interview.

### **Interview**

Candidates will be expected to, as part of their interview:

- Prepare a presentation on what you would bring to a project in one of the four areas (health, urban analytics, complex systems engineering, and policy).
- Answer a challenging question on data analysis for research, using a whiteboard and pen to sketch their understanding of a proposed data challenge.

## HOW TO APPLY

If you are interested in this opportunity, please send your CV, with contact details for your referees and a covering letter to [jobs@turing.ac.uk](mailto:jobs@turing.ac.uk) We encourage applications from those who are able to commence the post in October 2018 or as soon as possible thereafter If you have questions or would like to discuss the role further with a member of the Institute's HR Team, please contact them on 0203 862 3375 or email [jobs@turing.ac.uk](mailto:jobs@turing.ac.uk).

**CLOSING DATE:** Rolling recruitment. Applications reviewed regularly

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.

***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).***