## Senior Research Fellow/Leading Researcher, Arts and Humanities

## THE ALAN TURING INSTITUTE

There has never been a more significant time to work in data science and Al. 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 Data Science for Science and Humanities programme works alongside researchers from all disciplines across the Turing's university partner network, including with arts and cultural organisations, to make effective use of state of the art methods in artificial intelligence and data science.

Our aim is to contribute to the Institute's mission – to make great leaps in data science and artificial intelligence research in order to change the world for the better. There is a powerful argument why the creative industries and AI – two key strengths for the UK – should be considered as part of the same sector. Not only is creative content always advancing and adapting, challenging the boundaries and forms of media, communications and social exchange, but it is also increasingly digital, algorithmic and complex. A joined-up approach to research excellence in AI and the creative industries can build on UK strengths to extend our leading global position in each domain. In recent years the Turing has been developing a number of activities and relationships with stakeholders in the creative and cultural sectors. There is increasing demand for the Institute to respond to the sector's need for innovation by ensuring that a wide range of organisations and practitioners use of modern computational data science and AI methods to push forward the boundaries of their domain areas. The Turing is uniquely positioned to provide a nexus of AI activity in Arts and Humanities building on the existing work that has been developed in collaboration with its partners through research programmes, interest groups and transversal activities.

## **ROLE PURPOSE**

The Alan Turing Institute's Data Science for Science programme is looking to second an Academic Lead to work on research that applies data science and Al methods in the Arts and Humanities domain. We are looking for people who will significantly grow the research activity at The Alan Turing Institute, in collaboration with our partner organisations, and gain external funding to underpin this activity. Candidates will be experts in data science and artificial intelligence with experience in working in an interdisciplinary setting, within the context of Arts and Humanities. Areas of interest include, but are not limited to:

- Digital Humanities
- Computational Linguistics
- Cultural Heritage
- Computer Vision

- History of Science and Technology
- Creative AI
- Al Explainability
- Digital Media

## **DUTIES AND AREAS OF RESPONSIBILITY**

- Working closely with the Arts, Humanities and Cultural heritage Steering Group, Research Engineering Group, TIGs, major projects...
- Consolidating existing expertise and interests at Turing, building community, and developing a vision for the key strategic interventions that humanities research can make in partnership with data science and AI
- To conduct outstanding, creative and innovative research in Data Science for the Arts and Humanities, and to develop internationally-significant outcomes through high-impact publications and partnerships.
- To develop Collaborations with key partners (e.g. from Universities, Museums, Cultural Centres, charities, industry and government agencies);
- To obtain external funding bids to underpin and grow the research activity in this area at The Alan Turing Institute.
- Represent the Turing to key stakeholders, such as funding agencies, and government;
- Disseminate research to both academic and non-academic audiences (including public engagement);
- To play a role in advancing the Turing's Data Science for Science and Humanities programme.
- Some teaching/training may be required as part of collaboration work.

Please note that job descriptions cannot be exhaustive, and the post-holder 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.

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			
A PhD or equivalent experience in a relevant field	Е	а	
Communication			
Excellent communication, negotiation and influencing skills at all levels	Е	ai	
Able to present complex information in an audience-appropriate format	E	a ,i	
Analysis and Research			
Reports findings to wider community and is able to withstand challenge by relying on evidence gathered and processes used for analysis.			
Collects evidence across the broad Data Science for Arts and Humanities landscaoe to support future strategy.	Е	i	
Expert in data gathering and analysis, able to develop hypotheses to explain results and confidently present findings			
Project Management & Project Delivery			
Experience of making recommendations to contribute to strategic planning.	Е	i	
Be aware of external factors impacting on workload and monitor resourcing requirements to continuously provide a quality service	Е	i	
Decision Making			
Ability to make strategic or operational decisions collaboratively as part of a team	Е	i	
Teamwork and Motivation			
Ability to lead a large project with responsibility for developing and communicating action plans and objectives linked to organisational strategy	Е	i	
Experience of managing workforce and/or financial planning in response to current and future needs for the area/department/project.	Е	i	
Knowledge and Experience			
Substantial postdoctoral experience in a relevant field	E	а	
Expertise in state-of-the-art methods in data science and computational intelligence applied to the arts and humanities	Е	а	
Research excellence in applications across a broad range within these fields	Е	а	
Track record of obtaining funding for multi-disciplinary research, including at the intersection of Al/Data Science and Arts and Humanities	Е	а	
Outstanding publication record	Е	а	
Track record of engaging with partners from different domains of expertise	E	а	

Is committed to professional development of their own career and acts as mentor for others	D	i
Can form research consortia and secure research funding / budgets / resources from research councils or industry	D	а
Is an excellent communicator and networker within and outside the research community (creating networks)	D	i
Is able to create an innovative and creative environment for research	D	i
Fluency in one or more modern programming languages used in research in data science and artificial intelligence	D	а
An understanding of the importance of good practices for producing reliable software and reproducible analyses, such as version control, issue tracking, automated testing, package management and literate analysis tools	D	i
Other Requirements	1	
Commitment to EDI principles and to the Organisation values	E	i

## **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 <u>EDI Principles</u> and Our Values.



## **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 via email recruitment@turing.ac.uk.

CLOSING DATE FOR APPLICATIONS: 05 December 2021 at 23:59

## **TERMS AND CONDITIONS**

This post offered on apart time 0.5 fixed term basis until 31 March 2023. Competitive salary plus excellent benefits, including flexible working and family friendly policies, <a href="https://www.turing.ac.uk/workturing/why-work-turing/employee-benefits">https://www.turing.ac.uk/workturing/employee-benefits</a>

## **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 teal 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 <u>HR@turing.ac.uk</u>.