## The Alan Turing Institute

### RESEARCH APPLICATION MANAGER - DATA-DRIVEN CLIMATE-TECH x2

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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.

## **Data-Driven ClimateTech Programme**

The climate emergency is intensifying. Globally, \$60 billion of early stage capital has been invested into startups contributing to tackling the net zero challenge. "The analysis shows the urgency of the opportunity, and gap to close, to support and scale innovative technologies and business models to address the climate crisis," comments Celine Herweijer, global leader, Innovation & Sustainability, PwC UK. "Climate tech is a new frontier in venture investing for the 2020s. Some of the technologies and solutions critical to enabling this transformation are proven and need rapid commercialisation, which is why venture capital is key. It will not need trillions invested in startups to make a difference. But for the trickier technologies and markets it will need targeted support, including from governments, to make it through research and development, and the early stages beyond which capital increasingly is lining up."

The first of its kind at the Institute, this programme is being launched to support the formation and growth of new companies in Data-Driven and Al ClimateTech. The Institute will provide its independent, scholarly and expert help to entrepreneurs and would-be entrepreneurs in ClimateTech.

The <u>Tools</u>, <u>Practices and Systems</u> (TPS) programme at the Turing represents a cross-cutting set of initiatives which seek to build open source infrastructure that is accessible to all, and to empower a global, decentralised network of people who connect data with domain experts.

<u>The Turing Way</u> is an open source community-driven guide to reproducible, ethical, inclusive and collaborative data science. The project goal is to provide all the information that data scientists in academia, industry, government and the third sector need at the start of their projects to ensure that they are easy to reproduce and reuse at the end.

We are recruiting two Research Application Managers who will work to embed the expertise in the TPS, Turing Way, and broader open source and modelling communities across ClimateTech startups, to ensure that the Turing support to entrepreneurs delivers FAIR (findable, accessible, interoperable and reusable) outputs that are greater than the sum of their parts.

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**Role Purpose** 

A Research Application Manager (RAM) at the Turing builds and nurtures the connections with users of research outputs and brings back the user perspective to researchers and research engineers. We anticipate that the postholder will need to embody core values of legacy, adaptability, and collaboration, in addition to their commitment to equity and inclusion principles as described in the Turing's Values (see below).

RAMs work in a dedicated team focused on ensuring that research outputs such as open source tools, protocols, and modelling frameworks are used successfully and sustainably by external stakeholders. As part of this broad mandate, the postholder will work on initiating new links between ClimateTech startups and the research community.

This is a new team at the Institute and the postholder will need to be someone who takes the initiative and thrives when given a large degree of autonomy and flexibility. The role has considerable similarity to that of a product manager in a tech firm, but with significant adjustments to update it for the research context. The skills required are likely a combination of technical acumen and service delivery experience. RAMs will work on multiple projects concurrently, and each project will be different in different ways. The postholder will need to understand how their adaptability is a strength that will inspire team members, without undermining a determined perseverance on delivering useful outputs.

There is significant scope for the postholder to develop new skills and grow in the role. We do not expect applicants to necessarily be highly experienced and already have all the skills that are vital for success. We do however expect the postholder to be prepared to learn at pace. We are also enthusiastic about people who have a background as open source community managers as they are experts in distributed, decentralised collaboration. As contributing members of The Turing Way project, all RAMs will have the opportunity to learn or develop technical software engineering and data management skills, and will be expected to share their expertise in project design and effective communication to diverse stakeholders.

The postholder will report into Dr Aida Mehonic, TPS Senior Researcher – Research Applications, and work closely with Dr Kirstie Whitaker, Programme Director for Tools, Practices and Systems, and the ClimateTech theme leads, who are yet to be appointed.

## **Duties And Areas Of Responsibility**

- Drive the Institute's efforts to maximise the impact of academic research across the wider ecosystem. Ensure that the outputs of research, from anywhere, are translated into real-world implementations that address the climate emergency with action.
- The means of real-world translation are likely to be highly varied across ClimateTech, as the startups in this sector are varied. You will conduct some or all among the following:
  - Identify potential research applicable to ClimateTech solutions developed by startups (in collaboration with, and as approved by, the Theme Leads).
  - Work closely with teams within ClimateTech startups to understand their needs at the appropriate level of technical and infrastructure detail to ascertain whether particular research outputs could be useful in their product or workflow.
  - Facilitate project scoping discussions between researchers, ClimateTech startups, and data stewards.
  - Work closely with ClimateTech theme leads to represent user needs and constraints in what should become an effective feedback loop.
  - Identify challenges that ClimateTech entrepreneurs have in deploying tools built by the research community and co-create solutions as an active member.
  - Promote the sustainable use of research outputs by facilitating high-quality analysis, modelling and reporting documentation, and training materials, in collaboration with researchers, developers and domain experts.
  - Reach out to and sustainably communicate with open source communities to raise awareness of and get feedback on tools being built for ClimateTech entrepreneurs.
- Catalyse connections and collaboration between entrepreneurs and researchers. This could come in the form of synchronous regular meetings or it could occur asynchronously, for example, through active engagement on distributed communication channels such as Slack and the maintenance of public and private GitHub repositories to documented ongoing work within the projects and Themes.

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- Be an active community member of *The Turing Way* project. This may include writing new content, reviewing existing chapters, or giving presentations about the project to new audiences. We expect all RAMs to attend regular co-working sessions and participate in discussions on research best practices across a project lifecycle.
- Build connections between ClimateTech entrepreneurs and the Institute's Research Engineering Group.
- Work with the Turing Communications team to promote achievements and capabilities to the wider ecosystem, highlighting significant advances in the UK in ClimateTech.
- Communicate technical topics to colleagues and external partners by preparing and presenting reports, blog
  posts, organising and delivering presentations, and taking an active role in meetings and discussions.
   Communications may be synchronous or asynchronous, remote or in person, and must be prepared at the
  appropriate granularity of detail for the audience.
- Publish as a lead or co-author peer-reviewed research articles, open source training curricula, and/or perspective, opinion and commentary articles, as appropriate. This responsibility will be defined to be aligned with the successful candidate's personal career goals, through collaborative discussion when they are in post.
- Contribute to the research aims and challenges of the Tools, Practices and Systems programme, and those of the Turing Institute more broadly. Share the responsibility of embedding our ethical values in research processes and outputs, and promoting equitable and inclusive co-creation of data intensive projects.

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.

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PERSON SPECIFICATION		
	Essential (E)	Tested at application(A)
Skills and Requirements	Desirable (D)	Tested at interview (I)
Post holders will be expected to demonstrate the following		
Education/Qualification		
PhD or equivalent level of industry experience.	D	Α
Hold a Bachelor's degree or a Master's Degree in a discipline which provides a good basis for understanding statistics, data science and programming.	E	А
Knowledge and Experience		
Experience in stakeholder engagement, for instance, experience working with consortium partners, research collaborators, delivery partners, or clients.	E	A/I
Experience with basic coding skills in any programming language.	E	A/I
<ul> <li>Product management through a developmental lifecycle,</li> <li>Research and/or development in data science,</li> <li>Data engineering for reproducible analysis and/or deployment,</li> <li>Community management (for instance, in open source),</li> <li>Git for version control and Github or GitLab for project management.</li> </ul>	D	A/I
Knowledge of, or interest in learning about, reproducible research	E	I
Track record of delivering value for your organisation or stakeholder by making use of data science, data visualisation or software engineering.	D	A/I
Communication		
Outstanding communication skills, both oral and written	E	A/I
Routinely explains complicated matters simply, tailors delivery methods/media to suit the audience's needs and ensure understanding. Uses appropriate styles and arguments to influence and negotiate satisfactory outcomes. Presents complex information in formats appropriate to audiences without compromising meaning.	E	A/I
Teamwork and Motivation		
Leads, oversees and monitors progress of key deliverables and timescales through probation/appraisal and takes appropriate action to deal with any issues or problems.	E	A/I
Liaison and Networking		
Collaborates with others to meet deadlines and joint objectives by ensuring dissemination of information in the right format to the right people at the right time. Builds relationships and contacts to facilitate future exchange of information.	Е	A/I

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Leads and develops internal networks, such as working groups or committees in order to deliver collaborative and cross functional projects or initiatives.	E	I.
Decision Making		
Works with others to make collaborative decisions that may be operational or strategic and impact immediate team or work area only.	E	I:
Recommends and advises on available options for decisions that affect operational processes, taking into account any risks.	E	I
Planning and Organising		
Manages time and resources effectively; routinely monitoring and reviewing progress to ensure effective working of self and others.	E	A/I
Analysis and Research		
Designs and uses data gathering and analytical methods appropriate for each investigation.	E	I
Produces reports that identify key issues and findings. Recognises and accurately interprets patterns and trends.	E	I
Other Requirements		
Commitment to meeting deadlines	Е	I
Commitment to EDI principles and to the Organisation values	E	1

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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 <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 them on 020 3970 2148, or email recruitment@turing.ac.uk.

**CLOSING DATE FOR APPLICATIONS: 30 January 2022 at 23:59** 

### **TERMS AND CONDITIONS**

This full-time post is offered on a 2-year, fixed term contract basis. The annual salary is £46,700, plus excellent benefits, including flexible working and family friendly policies, <a href="https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits">https://www.turing.ac.uk/work-turing/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 te1am 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 <a href="mailto:HR@turing.ac.uk">HR@turing.ac.uk</a>.