

The Alan Turing Institute

RESEARCH APPLICATION MANAGER – DATA-CENTRIC ENGINEERING

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 has worked with the Lloyds Register Foundation (LRF), a global charity supporting research, innovation, and education in engineering for over six years. Through [this partnership](#), we have helped establish Data Centric Engineering (DCE) as a new field of research. This has achieved almost 400 publications; a new academic journal focussed on DCE and supported the development of a 3D printed bridge in Amsterdam and an underground farm in London.

The Alan Turing Institute will coordinate the work to consolidate and grow a global community of academia and industry specialists working in DCE. The project is composed of data scientists, engineers and practitioners who will help work across four pillars that will support the adoption of DCE innovations, creation of AI standards and regulation, improve skills and develop the community. The team will work closely with industry leaders, engineering bodies, academics and other stakeholders to facilitate the translation of DCE.

The [Tools, Practices and Systems](#) (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.

[The Turing Way](#), set within the Tools, Practices and Systems (TPS) programme 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 a **Research Application Manager** who will work to embed the expertise in the TPS, Turing Way, and broader open source communities, and ensure that the research outputs across the DCE programme are adopted successfully across multiple domains within academia, government, the charity sector and industry.

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

The Alan Turing Institute

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 strengthening existing stakeholder relationships and identifying new potential users of research outputs. This work aims to maximise the impact of the programme through pull-through to adoption and ensuring it leaves a lasting legacy on the ecosystem.

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. RAMs typically 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 to Dr Aida Mehonic, TPS Senior Researcher – Research Applications and will work closely with Jennifer Ding, Research Application Manager.

Duties And Areas Of Responsibility

- Drive the Institute's efforts to maximise the impact of the DCE programme. Ensure that the outputs of the research process are translated into appropriate real-world implementations and that they are used by stakeholders external to Turing. You will achieve this by engaging with prospective stakeholders, in close collaboration with the researchers and the Partnerships team.
- The means of real-world translation are likely to be highly varied across DCE, You will conduct some or all among the following:
 - Identify appropriate potential users of research outputs (in collaboration with, and as approved by, the project PIs).
 - Take ownership of the stakeholder engagement strategy.
 - Work closely with the research teams to represent and advocate for user needs.
 - Identify challenges that potential users have in deploying research outputs and co-create solutions as an active member of the research team.
 - Facilitate project scoping discussions between researchers and stakeholder organisations.
 - 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.
 - Connect with relevant open source communities to raise awareness of and get feedback on the DCE processes and infrastructure.
- Catalyse connections and collaboration between users 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.
- 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 DCE researchers and the Institute's [Research Engineering Group](#).

The Alan Turing Institute

- Work with Turing Communications team to promote achievements and capabilities in a way which is meaningful for stakeholders across relevant sectors.
- 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.

We note that job descriptions cannot be exhaustive, and the postholder may be required to undertake other duties, in response to business requirements and as part of a fast evolving organisation. Additional tasks will be broadly in line with the above key responsibilities, and all changes will be collaboratively defined as part of regular performance review opportunities. 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 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 equivalent level of industry experience. | D | A |
| 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 | A |
| 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 |
| Experience in: <ul style="list-style-type: none"> • Product management through a developmental lifecycle, • Research and/or development in data science, • Data engineering for reproducible analysis and/or deployment, • Community management (for instance, in open source), • Git for version control and Github or GitLab for project management. | 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 | | |

The Alan Turing Institute

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|
| 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. | E | A/I |
| 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 |
| Initiative and Problem Solving | | |
| Track record of excellent problem solving skills, ideally in settings which require multiple domain specialist cooperation. | 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 | E | I |
| 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 [Rules of the Game](#)

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. Please also include a 500 word writing sample about a data science tool or dataset that you recommend for others. If you have questions about the role or would like to apply using a different format, please contact them on 020 3862 3575 or 0203 862 3340, or email recruitment@turing.ac.uk.

CLOSING DATE FOR APPLICATIONS: 29 August 2022 at 23:59

TERMS AND CONDITIONS

This role is offered on a full time five-year, fixed term contract.

Location: the Alan Turing Institute, the British Library, 96 Euston Road, London

Salary: £49,025 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.

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.