

# The Alan Turing Institute

## Community Manager – AI for Science and Government

### 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

[AI for Science and Government](#) (ASG) at the Alan Turing Institute is a major integrated research programme with a goal to deploy AI and data science in priority areas to support the UK economy. ASG was initiated in 2018 with a £38.8M investment from the UK government's [strategic priorities fund](#).

ASG supports a range of ongoing projects in different domain areas including applications within the Criminal Justice System, Health, Data Science for Science, Engineering, and Urban Analytics.

In addition to these themes, ASG researchers are also working on three large, recently initiated, cross-theme projects that focus on:

- [Ecosystems of Digital Twins](#): combining methodology from Engineering and Urban Analytics to develop integrated systems of digital twins.
- [Shocks and Resilience](#): improving policy-making by linking healthcare and economic data and models, preparing for future shocks and making government more resilient.
- [Environment and Sustainability](#): linking heterogeneous environmental data and models to help assess the widespread impact of climate change, from arctic sea ice loss to food security.

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](#) 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 Community Manager** who will work to produce important ASG outputs (detailed below) and embed the expertise in the TPS, Turing Way, and broader open source and modelling communities in ASG projects to ensure that this £38.8 million investment delivers FAIR (findable, accessible, interoperable and reusable) outputs that are greater than the sum of their parts.

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## ROLE PURPOSE

The ASG Community Manager will create, nurture and protect the conditions required for successful technical communication across the diverse and distributed ASG projects. We anticipate that the postholder will need to embody core values of *stewardship*, *compassion*, and *collaboration*, in addition to their commitment to equity and inclusion as described in the Turing's "Rules of the Game" (see below).

The postholder must enjoy writing about complex topics for a broad audience. The teams within ASG are currently working to consolidate their diverse ongoing research projects across all themes and cross-theme projects. In the next two years we will produce a series of influential white papers (and other outputs) that draw upon ASG research to address key issues for policy-makers and other stakeholders on the future of AI in science and government. The ASG Community Manager will play a central role in developing new and maintaining existing connections between the six ASG Themes and the three Cross-Theme Projects. As a steward of their community, the ASG Community Manager will see how individual pieces fit together as a whole. They will facilitate the collective writing and co-creation of the white paper reports by all members of the ASG community. The postholder will possess the communication, motivation and collaboration skills required to bring the community together in this endeavour and distil a coherent ASG vision from its many domain specific projects.

The ASG Programme can only achieve - and communicate - its ambitious goals if it is delivered by domain experts working together. The ideal candidate for the ASG Community Manager will treat all members of the ASG Programme with compassion. They will support people to share and promote the skills that they already have, understand the experiences of people from a range of diverse backgrounds, and identify what they need to effectively work together. They will identify areas of implicit knowledge and expertise within the ASG research community and make this information explicit. Their writing for the white papers will also need to be customised to different audiences to address their particular needs and challenges.

The ASG Community Manager will collaborate with experts in the Turing community and beyond. They will be an active contributor to *The Turing Way*, acting as a bi-directional conduit to implement best practices for reproducible, ethical, inclusive and collaborative data science. We do not expect the applicants to already have all the skills within the scope of *The Turing Way* project. Rather that they will develop new expertise and grow in the role. They will also participate in the Tools, Practices and Systems community, particularly in the development of responsible research and innovation practices. We expect that success in the role will also require close collaboration with other communities across The Alan Turing Institute.

The postholder will work closely with Dr Kirstie Whitaker, Tools, Practices and Systems Programme Lead, Prof Ben MacArthur, ASG Programme Director, Prof Jon Rowe, ASG Programme Chair, Dr Allaine Cerwonka, Associate Director for ASG, Harriet McCann, ASG Research Project Manager, Dr Malvika Sharan, *The Turing Way* Community Manager and Dr Aida Mehonic, ASG Research Application Manager. Dr Kirstie Whitaker will be their line manager.

## DUTIES AND AREAS OF RESPONSIBILITY

- Coordinate and facilitate the production of a series of community-written ASG white papers that distill important principles from the range of ASG research and collectively articulate the ASG vision to stakeholders including policy makers in national and local governments, domain expert practitioners such as clinicians or engineers, and members of the public.
- Foster communities of researchers across ASG, with a particular focus on growing the links between the six ASG Themes and the three Cross-Theme Projects.
- Catalyse connections and collaboration between researchers working on different Themes. 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 document the ongoing work within the projects and Themes.
- Be an active community member of *The Turing Way* project. This may include identifying gaps in the current material, writing new content, reviewing existing chapters, giving presentations about the project to new audiences, welcoming members of your own project communities to join *The Turing Way*, and contributing to the design of governance and decision making processes. Our vision is to build an interconnected web of open

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source communities in applied data science. We expect all community managers within the TPS Programme to attend regular co-working sessions and participate in discussions on research best practices across a project lifecycle.

- Foster a community of postdoctoral researchers across ASG. Implement practices - as defined in *The Turing Way*, and beyond - to ensure these team members demonstrate the highest standards of reproducible, ethical, inclusive and collaborative data science in their work. Some - but not all - of these practices include:
  - Onboard and welcome new community members. This will likely include running 1:1 inductions and continuously updating documentation to ensure that resources remain easy to find for new starters and existing team members alike.
  - Design, organise and facilitate innovative, inclusive events - remote and in person - for a broad range of community members and collaborators. These can range from small group focused meetings, through team 'coffee chats' to build community, informal mentorship and training, to collaborative contribution events such as hackathons, documentation sprints, or design scoping workshops.
  - Review code, analysis, visualisation and infrastructure process documentation. Support community members to participate in collaborative review using pull requests (GitHub) or merge requests (GitLab). This will likely require proactive 'just in time' trainings in using version control using git, and project management in public or private GitHub repositories, as appropriate.
  - 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.
  - Curate and finalise regular newsletter updates to capture impact stories, showcase community member contributions, and share progress for both internal and external audiences.
- 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.

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## PERSON SPECIFICATION

<b>Skills and Requirements</b>  Post holders will be expected to demonstrate the following	<b>Essential (E)</b>  <b>Desirable (D)</b>	<b>Tested at application(A)</b>  <b>Tested at interview (I)</b>
<b>Education/Qualification</b>		
PhD or equivalent level of industry experience.	D	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
<b>Knowledge and Experience</b>		
Experience in: <ul style="list-style-type: none"> <li>• Basic coding skills in any programming language.</li> <li>• Git for version control and Github or GitLab for project management.</li> <li>• An understanding of the importance of good practices for producing reliable software and reproducible analyses (e.g. version control, issue tracking, automated testing, package management, literate analysis tools such as Jupyter and Rmarkdown).</li> <li>• Experience managing, structuring and analysing research data.</li> </ul>	E	A/I
Experience in: <ul style="list-style-type: none"> <li>• Open research, open source software, participatory and community-led co-creation or team science.</li> <li>• Contributing to, maintaining and/or leading open source research software projects.</li> </ul>	D	A/I
Knowledge of, or interest in learning about: <ul style="list-style-type: none"> <li>• Facilitating research using sensitive health data, or other sensitive data, including an understanding of information governance requirements.</li> </ul>	D	A/I
Track record of <u>any combination</u> of: <ul style="list-style-type: none"> <li>• Publishing articles, FAIR data sets, and/or open source software libraries for an academic audience.</li> <li>• Publishing articles, blog posts, for a general audience.</li> <li>• Publishing white papers or policy briefings for an audience of decision makers in government, industry or the charity sector.</li> </ul>	E	A/I
<b>Communication</b>		
Outstanding communication skills, both oral and written.	E	A/I
<b>Teamwork and Motivation</b>		
Works as a proactive and collaborative member of the community team. Proactively looks for issues or problems, and escalates accordingly.	E	A/I
<b>Liaison and Networking</b>		
Networks with others with shared interests, collaborating on projects and strengthening future relations.	E	A/I
<b>Project Delivery or Project Management</b>		
Promptly deals with requests related to process improvement and supports the Community with aspects of project management.	E	A/I
<b>Decision Making</b>		
Ability to guide others by presenting options and choices to inform their decision making.	D	I
<b>Planning and Organising</b>		
Suggests ways of improving working practice and use of resources. Creates realistic plans to effectively manage own workload, prioritising work to meet personal and team objectives.	E	I

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<b>Initiative and Problem Solving</b>		
Considers possible solutions to identify those which offer wider benefits. Obtains evidence to support thinking.	E	A/I
<b>Analysis and Research</b>		
Gathers data rigorously and conducts robust analysis, questioning assumptions and existing knowledge. Reports findings to wider community and is able to withstand challenge by relying on evidence gathered and processes used for analysis.	E	A/I
<b>Other Requirements</b>		
Commitment to meeting deadlines	E	A/I
Commitment to EDI principles and to the Organisation values	E	I

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## EQUALITY, DIVERSITY AND INCLUSION

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](#)



**Respect** – We treat everyone with respect, dignity and kindness and acknowledge the experiences, skills and contributions of others.

**Trust** - We communicate openly and honestly to support an environment where we have trust in each other.

**Transparency** – We seek to ensure that everyone understands the how and the why of our decisions and actions. We take on board to feedback when those decisions are challenged.

**Inclusivity** – We are committed to continuously learning how to be more inclusive by listening to those facing barriers.

**Leadership** – We recognise creating an inclusive, diverse and equitable institute requires leadership from all. We stand up and speak out when change is needed.

**Integrity** – We recognise that how we work is as important as our outputs and seek to exemplify best practice in all our decisions.

## 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 include an appendix in your cover letter a 500 word writing sample on a data science tool that is being used - in your opinion - to change the world for the better. Please include an explanation of your target audience (not part of the word limit). 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](mailto:recruitment@turing.ac.uk).

**CLOSING DATE FOR APPLICATIONS: 1<sup>st</sup> August 2021 at 23.59, depending on the number of applications we reserve the right to close the ad early.**

## **TERMS AND CONDITIONS**

This full time post post is offered on a fixed term basis until March 2023. The annual salary is £37,000-£42,000 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](mailto:HR@turing.ac.uk).***