

# The Alan Turing Institute

## RESEARCH PROJECT MANAGER for 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

#### Programme Management

The Alan Turing Institute has ten Programmes of scientific research in key areas of AI and data science, each led by a Programme Director. There are also a small number of significant programmes of activity which sit across several research Programmes.

This role sits within the Institute's Programme Management directorate, which is responsible for the management and delivery of these programmes in support of the senior academic Programme Directors and Principal Investigators. The team oversees millions of pounds of data science and AI research, training and knowledge exchange programme initiatives in these programmes, ensuring they are managed to business requirements, specification, time and budget.

There are a number of Programme and Research Project Managers within the team, usually focussed on one research Programme or programme of activity, but who may provide programme and project management capabilities and support to other projects or activities from time to time as required. Programme managers and Research Project Managers are not permanently attached to programmes and may be moved to other research programmes in-line with business needs, and may have the opportunity to support other programmes, both ad-hoc or more formally.

#### Research Programme: Data Centric Engineering (DCE)

One of the Turing's longest-established programmes, DCE is built upon strong foundations and continues to pursue an ambitious vision to unite world-leading academic institutions and major industrial partners to address new challenges in data-centric engineering. It is achieving this through a focus on Grand Challenges, which include:

- Resilient and robust infrastructure, such as railways, power plants and supply chains, where predictive modelling is applied to optimise safe operation;
- Monitoring of complex engineering systems to operate old and new infrastructure and vital systems in smarter and safer ways;
- Data-driven engineering design under uncertainty to address fundamental questions of optimal data collection and design optimisation in uncertain environments.

The Programme has generated over £83m of funding in its five year history. It has a strategic partnership with Lloyds Register Foundation and significant project partnerships which include Transport for London, Network Rail, Rolls-Royce, NATS and the Centre for Digital Built Britain. Other important indicators of scale and impact include:

- Over 300 researchers have been engaged across DCE programme projects;
- Their research has generated 377 published papers and 91 software repositories have been developed;
- Academic and public engagement has been far-reaching, with 424 talks at national and international events, 114 engagements with policymakers and over 270 media articles;
- Research activities are delivered at The Alan Turing Institute and at a wide range of partner universities and research institutes (including the 13 Turing University Partners).

## **ROLE PURPOSE**

A Research Project Manager at the Turing coordinates the implementation and delivery of advanced data science, AI and modelling research projects, and research engineering innovations in data, software and collaborative practices. The Alan Turing Institute is looking to appoint a Research Project Manager to coordinate and support work across the DCE programme. The Research Project Manager will play a central role in assisting with the overall facilitation of delivery of projects across the programme, supporting the Programme Manager to ensure activity is delivered to requirements, specification, time and budget. We anticipate that the postholder will need to embody the values of *reliability*, *collaboration* and *initiative* in addition to their commitment to Equality, Diversity and Inclusion as described in the Turing's EDI Principles and Values (below).

The post holder will work with the programme's scientific leadership, academic researchers, and industry and funding partners to coordinate each research project under the programme from concept to implementation.

The postholder will coordinate the programme's collaborations with the science research community; this will involve organising meetings and workshops that bring together academics and policy makers. The postholder will be instrumental in ensuring that the programme runs smoothly and delivers on its ambitious aims.

The Research Project Manager will need to liaise closely with Institute research and operations staff, in London, at university and research centre partners, to perform their duties. There will be scope for them to take initiative in the management of small projects in other areas that may also be required, subject to business needs.

The role reports to the Programme Manager for Data-Centric Engineering.

## **DUTIES AND AREAS OF RESPONSIBILITY**

### ***Research project management and delivery***

- Coordinate and oversee the delivery of research projects. This will involve:
  - Working with the research teams to outline the resource requirements for each project, to support them and the Partnerships team in applying for funding (if needed), to agree on clear milestones for each project, and to ensure that any deliverables are completed on schedule.
  - Working with Turing's finance team and Programme Manager to draw up detailed financial plans for each project, and to combine project budgets and analyse monthly financial statements, to manage POs and invoicing.
  - Working with the Turing's legal and governance teams to ensure that relevant contractual and legal agreements and processes are in place and followed, including for data sharing and ethical considerations.
  - Providing regular updates to the Institute's leadership and key stakeholders on the progress of each project.
  - Working alongside the communications team to disseminate information about the programme and findings of projects where appropriate.
- Coordinate some of the programme's events, training, and knowledge exchange initiatives. This will involve:

- Working alongside researchers, the programme's leadership and colleagues from across the Institute to identify a suitable format for each initiative, to shape agendas, create guest lists, to brief participants and to publicise the initiative distributed.
- Maintain up-to-date records that enable effective monitoring, control and evaluation of the programme's research initiatives.
- Coordinate the creation of the monthly DCE newsletter
- Produce and collate regular reports on activity to internal and external partners and funders.

### ***Programme operations and resources management***

- With the Programme Manager, coordinate the delivery of strong programme governance. This will involve:
  - Ensuring that project, partnership and programme governance structures are in place, and managing implementation including meeting arrangements and minute taking;
  - Developing, writing, and editing reports and presentations for the Institute's senior leaders, Board of Trustees, and funders, which outline the programme's progress and initiatives;
  - Maintaining programme documentation on risks and issues and contributing to programme planning.
- Resource planning and financial analysis for the programme. This will involve assisting in the preparation of the programme's budget and finance reports, anticipating future staffing and operational needs, and working with Partnership Development colleagues to identify potential funding sources.
- Working with the researchers, and Recruitment and HR team as appropriate to manage the recruitment of additional programme researchers..

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**

<b>Skills and Requirements</b>  Post holders will be expected to demonstrate the following	<b>Essential (E)</b>	<b>Tested at application(a)</b>
	<b>Desirable (D)</b>	<b>Tested at interview (i)</b>
<b>Education/Qualification</b>		
Degree or equivalent level of professional qualifications and/or experience	E	A
Formal training in one or more project management processes (Scrum, Lean, Agile, Prince II, etc.) as well as familiarity with project management tools and software.	D	A
<b>Knowledge and Experience</b>		
Strong project management and organisational skills: the ability to plan, execute, and keep on schedule numerous projects in an organised fashion.	E	A/I
Budget management and general financial processes	E	A/I
The ability to form and maintain relationships with a wide range of people at all levels	E	A/I
Experience in research project management in an academic environment.	D	A
Experience in managing complex research projects involving internal and external partners.	D	A/I
Experience of contractual agreements for research (collaboration, funding etc.)	D	A / I
Demonstrable interest or experience in data-driven research or data centric engineering	D	A/I
Experience in facilitating research with sensitive data, information governance processes, and research ethics	D	A/I
<b>Communication</b>		
Clear and effective communication skills (oral and written) with the ability to adapt style to suit a wide range of people and audiences at all levels	E	A/I
<b>Project Management &amp; Project Delivery</b>		
Accurate and up to date knowledge of Research Project Management in an Academic environment with internal and external stakeholders	D	A/I
Adapts services and systems to meet customers' needs and identifies ways of improving standards. Learns from complaints and takes action to resolve them.	E	A/I
Proactive approach to managing stakeholders and identifying opportunities for collaboration.	E	A/I
<b>Teamwork and Motivation</b>		
Experience working within and across teams to deliver results	E	A/I

Strong interpersonal skills: the ability to form and maintain relationships with a wide range of people at all levels.	E	A / I
<b>Decision Making</b>		
Independently make decisions which impact themselves or immediate team members. Escalate decisions where appropriate.	E	A/I
Recommend and advise on available options for decisions that affect operational processes, taking into account any risks.	E	A/I
Work with others to make collaborative decisions that may be operational or strategic and impact immediate team or work area only	E	A/I
<b>Planning and Organising</b>		
Strong multi-tasking skills: the ability to balance competing priorities with minimal direction while maintaining a high standard of accuracy and attention to detail.	E	A/I
<b>Initiative and Problem Solving</b>		
Uses judgement to analyse and solve problems, and take action to prevent recurrence of problems.	E	A/I
Consider possible solutions to identify those which offer wider benefits, and obtain evidence to support thinking.	E	A/I
<b>Analysis and Research</b>		
Strong analytical skills: the ability to define, measure, and track key metrics for each project.	E	A/I
<b>Other Requirements</b>		
Commitment to meeting deadlines	E	A/I
Flexible attitude towards work	E	A/I
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 [EDI Principles](#) 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 020 3862 3546 or email [recruitment@turing.ac.uk](mailto:recruitment@turing.ac.uk).

## TERMS AND CONDITIONS

This full time post is offered on a fixed term basis to the end of May 2023 due to the post holder taking on an acting up opportunity until that date. The annual salary is £36,236-£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.

We are committed to building a diverse community and would like our leadership team 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 [HR@turing.ac.uk](mailto:HR@turing.ac.uk).***