

# The Alan Turing Institute

## Programme 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 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. 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 Managers within the team, usually focussed on one research Programme or programme of activity, but who may provide programme management capabilities and support to other projects or activities from time to time as required. Programme 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. The postholder will be recruited initially into the role of Programme Manager to focus on the Data Centric Engineering (DCE) Programme.

### The Turing's Data Centric Engineering Programme

<https://www.turing.ac.uk/research/research-programmes/data-centric-engineering>

One of the Turing's longest-established and most substantial strategic 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.

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The Programme has generated over £60m 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, National Air Transport Services and Centre for Digital Built Britain.

Other important indicators of scale and impact include:

- Over 260 researchers have been engaged across DCE programme projects.
- Their research has generated 206 published papers and 46 software repositories have been developed;
- Academic and public engagement has been far-reaching, with 265 talks at national and international events, 70 engagements with policymakers and over 100 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

Programme Managers oversee and manage delivery of research projects within the designated programme/s, within funding parameters and to meet agreed delivery milestones and impact objectives.

The post holder plans, organises and communicates the start-up of individual projects and initiatives and is responsible for oversight of ongoing activities within the Programme. Funding may originate from Research Councils, external partners and sponsors, or Turing core funding.

Programme Managers report either to a Senior Programme Manager or the Director of Programme Management, and may have line management responsibility for one or more Research Project Managers.

Their relationships are broad and varied, spanning a diverse team of academic research and business staff within the Institute, together with researchers and operational and senior stakeholders within partner organisations (both university partners and funding partners).

This post holder will, manage the Institute's Data Centric Engineering programme, and coordinate interactions with the programme's strategic partner, Lloyds Register Foundation, as well as project partners, in collaboration with colleagues in Partnerships team. The Programme Manager role is responsible for facilitating smooth operational links between the partner universities and research institutes as well as close working within The Alan Turing Institute to deliver high-quality research projects, research programmes, and knowledge exchange in data science and AI.

The role will work closely with:

- The **Programme Director and Deputy Director**, who provide scientific leadership for the programme, and rely on programme management services.
- Senior Programme Managers, Programme Managers, Research Project Managers and researchers across Turing Programmes, especially with colleagues on programmes to which DCE is aligned.
- Researchers active within the programme.
- The functions in the COO's office, including Finance, HR and Recruitment, Legal, Training, Academic Engagement, Events, Communications.
- Partnerships team, who initiate and nurture non-academic partnerships, shape research projects with partners, negotiate collaborative research contracts, funding and data sharing arrangements.

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- Strategic and Project Partners/Funders, who are important stakeholders in post-award delivery and where the effective relationship management and timely reporting provided by Programme Management maximise the opportunity to grow and further build partnerships;
- Universities & other research employers, to formalise how researchers will be engaged and funded, working with local Research Offices or HR teams

## DUTIES AND AREAS OF RESPONSIBILITY

- Oversee the delivery of a programme of millions of pounds of data science and AI research, training and knowledge exchange programme initiatives, ensuring they are managed to business requirements, specification, time and budget.
- Provide support, advice, and challenge to the Programme Director and Deputy Director in the implementation of robust programme management processes and protocols.
- Ensure the programme complies with Institute policies and governance.
- Responsible for performance management and professional development of one or more Research Project Managers (where applicable).
- Work with the Programme Director and other colleagues to shape the programme strategy and set, implement, and regularly review programme objectives and activities, in alignment with the Institute's strategies.
- Foster, grow and develop the research community engaging with the programme through activities that meet the mutual needs of the programme and the research community.
- Manage the budget for the programme, which includes estimating proposal/project costs, forecasting, tracking actuals, and reconciliations.
- Highlight impact, outcomes, outputs of the programme and promote its successes with stakeholders. Monitor all activities, review risks, issues and progress, taking actions or escalating as necessary to ensure minimum impact on programme.
- Deliver regular updates and communications of programme information, highlighting risks and opportunities to stakeholders, internally and externally.
- Cultivate strong relationships with programme stakeholders.
- Line Management of the Research Project Manager associated to the DCE programme.

## Other duties

- Other duties within the scope and scale of the role, in response to business requirements and direction of the Line Manager and/or Director of Programme Management

**This role is a job share on a part time basis (50% / 0.5 FTE). This role will work alongside another Programme Manager, DCE also working on a part-time basis (50% / 0.5 FTE), to jointly complete the duties and responsibilities listed in the job description.**

Please note, due to the job share there will be a primary line manager that will complete the performance reviews for the Research Project Manager(s) that report to this role. There will also be a secondary line manager who will supervise the Research Project Manager(s) when the primary line manager is unavailable.

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

<p style="text-align: center;"><b>Skills and Requirements</b></p> <p style="text-align: center;">Post holders will be expected to demonstrate the following</p>	<p style="text-align: center;"><b>Essential (E)</b></p> <p style="text-align: center;"><b>Desirable (D)</b></p>	<p style="text-align: center;"><b>Tested at application(a)</b></p> <p style="text-align: center;"><b>Tested at interview (i)</b></p>
<b>Education/Qualification</b>		
Degree or equivalent level of professional qualifications and/or experience	E	a
Degree in a relevant subject or demonstrated interest in data science and artificial intelligence;	D	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, i
<b>Knowledge and Experience</b>		
Demonstrated project management and organisational skills	E	a, i
Significant experience managing multi-disciplinary projects, involving external and internal partners	E	a, i
Significant experience in managing large UKRI funding awards (or equivalent such awards e.g. EU grants) including understanding of the terms and conditions of such funding	D	a, i
Experience in monitoring and evaluating proposals;	D	a
Budget management and financial processes	E	a, i
Experience working with Finance on budget planning, reporting, reconciliations;	E	a, i
Experience negotiating, managing and monitoring contracts	E	a, i
Experience negotiating, managing and monitoring academic research funding and research contracts	E	a, i
Ability to work in uncertainty, and to map out risks/benefits of potential solutions to problems arising.	E	a, i
Structured and proactive approach to work, comfortable multi-tasking and able to re-prioritise as required.	E	a, i
Ability to renegotiate deadlines and deliverables appropriately and seeking advice as required to maintain stakeholder buy-in.	E	a, i
Experience of line management, and matrix management	E	a, i
Experience negotiating, for example in service contracts or within projects, resource management, contract requirements, milestones;	D	a, i
Experience with research governance structures and research ethics processes;	D	a, i
Experience in facilitating research using sensitive data, and information governance.	D	a, i
Previous experience in a similar role with evidence of success	D	a, i

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<b>Communication</b>		
Clear and effective communication skills, with and to a wide range of people and audiences at all levels (i.e. Academics, Scientists, Research Managers, and Administrators)	E	a, i
<b>Verbal Communication</b> Communicate more complex, specialist or conceptual information clearly and persuasively, presenting compelling arguments to influence and/or negotiate satisfactory outcomes. Communication methods are chosen to suit the audience needs and understanding and meaning is not compromised.	E	a, i
<b>Written and electronic communication</b> Explains complicated matters simply, tailors communication 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
<b>Team Development</b>		
Provides induction activities for new team members, acting as a 'buddy' or coach to facilitate integration into the team.	E	a, i
Produces and/or provides expert support and training in relation to specific tasks or work areas. Undertakes coaching/mentoring activities providing advice, guidance and feedback to help team members work more effectively.	E	a, i
Undertakes regular staff performance reviews and appraisals, setting clear (SMART) objectives. Evaluates performance, and deals with any performance issues, identifying appropriate developmental activity, where appropriate, to ensure individuals meet the needs and expectations of their role.	E	a, i
Plans and generates training and development opportunities to meet team members' current and future learning needs, evaluating outcomes and putting learning into practice.	D	a, i
<b>Service Delivery</b>		
Adapts services and systems to meet stakeholders' needs and identifies ways of improving standards. Learns from issues and takes action to resolve them.	E	a, i
<b>Decision-Making Processes and Outcomes</b>		
Makes decisions that have limited impact on immediate team/work area but may endure for some time. Considers the wider impact of decisions and assesses outcomes.	E	a, i
Makes strategic or operational decisions collaboratively as part of a team or committee, which have potential to impact on several areas or affect the broad working practices of the organisation for some time. Ensures that options are weighed and outcomes considered.	E	a, i
Provides detailed information and advice that influences business plans and longer-term planning, having anticipated and highlighted the issues that need to be taken into account.	E	a, i
<b>Teamwork and Motivation</b>		
Assesses and ensures appropriate resources and support are available to enable their team and individual members to achieve both team and individual objectives.	E	a, i
Ensures that all members of the team understand what is expected of them whilst delegating work fairly and according to individual ability.	E	a, i

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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
<b>Analysis and Research</b>		
Production and analysis of reports. Designs and uses data gathering and analytical methods appropriate for each investigation.	E	a, i
Recognises and accurately interprets patterns and trends. Understands when additional data is required and identifies appropriate sources. Produces reports that identify key issues and findings.	E	a, i
<b>Other Requirements</b>		
Commitment to meeting deadlines	E	I
Flexible attitude towards work	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](#)



**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. 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](mailto:recruitment@turing.ac.uk).

**CLOSING DATE FOR APPLICATIONS: Wednesday 15 December at 23:59**

## **TERMS AND CONDITIONS**

This part-time (50% / 0.5 FTE) post is offered on a Fixed-Term basis for 2 years. The annual salary for full-time hours is £47,000 - £50,000, pro-rata to part-time hours plus excellent benefits, including flexible working and family friendly policies, <https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits>

For this part-time post, hours will be semi-flexible, however at least 3 afternoons a week will be required. The current part-time Programme Manager, DCE post-holder will be working mornings across 5 days of the week and some overlapping working hours will therefore be required for communication between the two Programme Managers.

## **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).***