

The Alan Turing Institute

Data Scientist, Online Harms

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.

THE PUBLIC POLICY PROGRAMME

The Public Policy research programme works alongside policy makers to explore how data-driven public service provision and policy innovation might help to solve long running societal problems. We also work hand-in-hand with public sector organisations and citizens to develop practice-based ethical standards for the responsible development and use of data science and AI. Our dynamic group has co-produced—with the Office for AI and the Government Digital Service—the UK Government's official public sector guide for designing and implementing ethical and safe AI. We have also co-authored—with the Information Commissioner's Office—the first guidance ever released by a UK regulator on explaining AI-assisted decisions.

In addition to our work with government and regulators, we carry out interdisciplinary academic research in the area of AI ethics and governance as well as AI and society. Our research projects rely entirely on public funding, and they include a review of the ethics of machine learning (ML) in children's social care; an exploration of the relationship of notions of AI, human agency, privacy and trust in intercultural and global contexts; an investigation into how to build grassroots data rights charters through deliberative democracy; an examination of the role of responsible data management in criminal justice applications of AI; and an analysis of the interpretability needs of AI systems in the financial services sector.

ROLE PURPOSE

The successful candidate will work on the development of a dashboard for the Online Harms Observatory. They will be responsible for collecting, wrangling and storing data; analysing the data and identifying key insights; creating and hosting the dashboard interface; and applying analytical tools (such as abusive content classifiers).

The successful candidate will report to Professor Helen Margetts and will work closely with Dr. Bertie Vidgen. They will have opportunities to engage with stakeholders in the Department for Digital, Culture, Media and Sport (DCMS) and to present the dashboard to Turing partners.

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DUTIES AND AREAS OF RESPONSIBILITY

The successful candidate will:

- Collect data from social media platforms, primarily through APIs.
- Analyse social media data, identifying key trends and insights. This will involve use of basic and advanced statistical techniques, time series analysis and metrics.
- Identify and implement key measurement and content classification tools, such as classifiers for abusive content.
- Create and host a dashboard/interface to visualize the key insights in real-time.
- Work using a range of programming languages, including Python, R, SQL and shell scripts.
- Liaise with Turing staff and DCMS stakeholders to drive use of the dashboard. This may include giving live demonstrations.

Other duties

- Identify opportunities for improving the dashboard and encouraging wider uptake.

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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		
Masters-level degree or higher in computer science, engineering, data science, statistics or a related-discipline.	E	A
Knowledge and Experience		
Previous experience in a data scientist role using programming languages such as Python, R, SQL and shell scripts.	E	A
Experience working with social media data, such as collecting, analysing and storing/managing social media streams.	E	A
Experience in data visualisation, such as developing interactive visualizations or a dashboard.	E	A
Experience in implementing statistical models and analysing large volumes of data.	D	A
Experience in developing and/or applying computational and AI classification tools (e.g., deep learning to detect certain types of online content).	D	A
Experience in cloud computing and developing data infrastructures.	D	A
Interest in online harms, policymaking or social scientific research.	D	A
Communication		
Excellent written and verbal communication skills including the ability to present complex or technical information.	E	A, I
Liaison and Networking		
Ability to collaborate successfully with colleagues in a multidisciplinary environment and to manage delivery of projects.	E	I
Initiative and Problem Solving		
Ability to use own judgement to analyse and solve problems.	E	A, I
Independently makes decisions which are low risk and that mainly affect themselves or a small number of people and are guided by regulation and practice.	E	A, I

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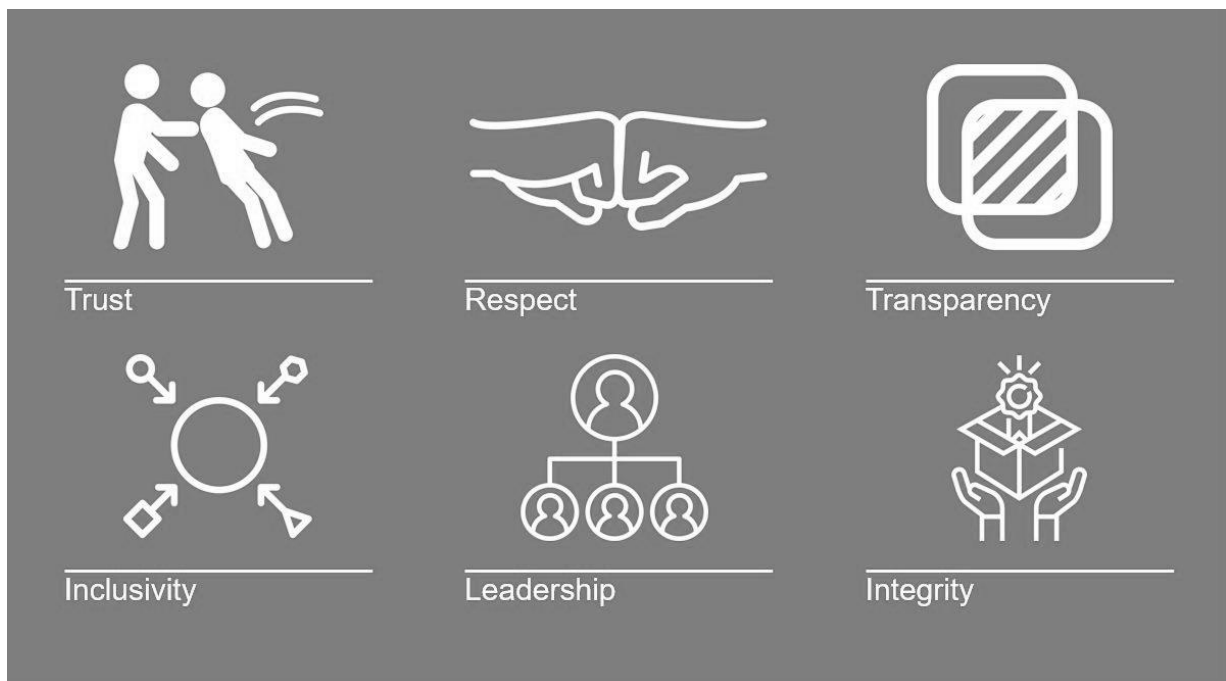
Analysis and Research		
Ability to organise working time, take the initiative, and carry out research independently, under the guidance of the PI.	E	I
Team Development		
Undertakes coaching/mentoring activities providing advice, guidance and feedback to help team members work more effectively.	E	A, I
Contributes to the induction of new staff, may act as a “buddy” or explain routine procedures.	D	I
Other Requirements		
Commitment to meeting deadlines	E	I
Supports other team members in their duties.	E	A
Commitment to EDI principles and to the Organisation values	E	I

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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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

You will need to register on the applicant portal and complete the application form including your CV, covering letter that outlines how you meet the job specifications and a code sample from previous work (the code must be human-readable, such as an html output or markdown doc. A github link with a short readme explaining the project is sufficient). If you have questions about the role or would like to apply using a different format, please contact them on 0203 862 3340, or email recruitment@turing.ac.uk.

CLOSING DATE FOR APPLICATIONS: Sunday 13th June 2021 23:59.

TERMS AND CONDITIONS

This full time post is offered on a fixed term basis for 2 years with the possibility for a further extension (funding permitting). The annual salary is £35,000-£41,000, 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.