

# 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. Our work is interdisciplinary, with machine learning engineers, NLP experts, data scientist and social scientists collaborating across different projects.

The Online Safety Team is a new part of The Turing's Public Policy Programme. It provides objective, evidence-driven insight into the technical, social, empirical and ethical aspects of online safety, supporting the work of public servants (particularly policymakers and regulators), informing civic discourse and extending academic knowledge. High-priority topics include online hate, personal attacks, extremism, misinformation and disinformation. We have three main workstreams:

1. Data-centric Artificial Intelligence for online safety
2. Building an Online Harms Observatory
3. Policymaking for online safety

### 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 Dr. Bertie Vidgen, Head of Online Safety. They will have opportunities to engage with stakeholders in the Department for Digital, Culture, Media and Sport, Ofcom and others.

### DUTIES AND AREAS OF RESPONSIBILITY

The successful candidate will:

- Collect, store and wrangle data from social media platforms, primarily through APIs.
- Work in Azure to develop and manage data infrastructure.

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- Analyse social media data, identifying key trends and insights. This will involve use of basic and advanced statistical techniques, time series analysis and metrics. Depending on the successful candidate's skillset, it could also involve network analysis and Natural Language Processing.
- Develop and host a dashboard/interface to visualize key insights in real-time.
- Work using a range of programming languages, including Python, SQL and shell scripts.
- Liaise with Turing staff and external stakeholders to drive use of the dashboard. This may include giving live demonstrations.
- Identify opportunities for improving the dashboard and encouraging wider uptake.

Please note that job descriptions cannot be exhaustive, and the postholder 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

<b>Skills and Requirements</b> Post holders will be expected to demonstrate the following	Essential (E)  Desirable (D)	Tested at application(A)  Tested at interview (I)
<b>Education/Qualification</b>		
Masters-level degree or higher in computer science, engineering, data science, statistics or a related-discipline.	E	A
<b>Knowledge and Experience</b>		
Strong experience in Python	E	A
Experience working with social media data	E	A
Experience working with cloud hosted databases to develop data pipelines	E	A
Experience working with Azure	D	A
Experience and understanding of other programming languages, such as SQL, shell scripts and R.	D	A
Experience curating datasets from unstructured data (e.g. social media data)	D	A
Experience in data visualisation, such as developing interactive visualizations or a dashboard.	D	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
Interest in online safety, policymaking or social scientific research.	D	A
<b>Communication</b>		
Excellent written and verbal communication skills including the ability to present complex or technical information.	E	A, I
<b>Initiative and Problem Solving</b>		
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
<b>Analysis and Research</b>		
Ability to organise working time, take the initiative, and carry out research independently, under the guidance of the PI.	E	I

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Ability to adopt appropriate data analysis methods for the purpose, and produce simple reports to present the findings.	E	A, I
<b>Decision Making</b>		
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
<b>Team Development</b>		
Undertakes coaching/mentoring activities providing advice, guidance and feedback to help team members work more effectively.	E	A, I
Ability to collaborate successfully with colleagues in a multidisciplinary environment and to manage delivery of projects.	E	I
Ability to support and demonstrate routine procedures to new team members.	D	I
<b>Other Requirements</b>		
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

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## 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.

### 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. If you have questions about the role or would like to apply using a different format, please contact us on 020 3970 2148 or 0203 862 3340, or email [recruitment@turing.ac.uk](mailto:recruitment@turing.ac.uk).

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## TERMS AND CONDITIONS

This full-time post is offered on a fixed term basis for 2 years. The annual salary range 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.

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).***