

The Alan Turing Institute

Research Assistant – Government Spending and Public Health Data

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 PROGRAMME

We are looking to recruit a Research Assistant to construct a database of public health indicators and government expenditure to support the development of economic policy prioritisation tools in the context of health disparities.

Internationally, health equity is one of the United Nations Sustainable Development Goals, and recently the World Health Organisation Health Equity programme developed a [data platform](#) to focus policy action across the European region on health equity. This programme demonstrated that up to 80% of the variation in health outcomes between groups is determined by social and wider determinants of health - areas which span across governmental departments and budgets. Some countries have started to explore governmental budgets better aligned to health, for example "wellbeing budgets" in [New Zealand and Canada](#).

Within The Alan Turing Institute [AI for Science and Government programme](#), 'Shocks and Resilience' project we are seeking to understand the impact of public spending on public health outcomes across countries and regions. This new programme will draw on the analytic framework of Policy Priority Inference, created at the Turing's Public Policy Programme (<https://www.turing.ac.uk/research/research-projects/policy-priority-inference>).

ROLE PURPOSE

We are looking for an outstanding PhD student to join the team, with a strong background in data collection, pre-processing, and curation; and some experience in using natural language processing. Ideally, the candidate will have some knowledge on international public-health indicators and/or government expenditure data, and have a keen interest in health policy and equalities. Basic understanding of econometrics and network analysis is desirable.

This essential role will identify and collate international data sources for public health outcomes and governmental expenditure across different domains for health. These data could be constructed at the national level, and potentially for subnational entities of some countries if data were available. The successful candidate will be working closely with the Public Policy and Health and Medical Sciences programmes towards the development of economic policy prioritisation tools in the context of health disparities.

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The successful candidate will report to Prof. Alisha Davies, AI for Science and Government Health Theme Lead, and will be supervised by Dr Daniele Guariso, Research Associate, as well as Dr Omar A Guerrero, Head of Computational Social Science Research. Informal enquiries can be directed to Prof. Alisha Davies (adavies@turing.ac.uk).

DUTIES AND AREAS OF RESPONSIBILITY

- Identify and curate data sources that can be used to obtain indicators on public health outcomes across countries and regions.
- Identify and curate data sources that provide information on public expenditure across health dimensions or wellbeing in general across countries and regions.
- Create a linkage between the categories of the public health indicators and those from the public spending data.
- Validate such linkage and assemble a database.
- Contribute to and disseminate policy reports/research papers that detail research output and project case-studies.
- Become part of the broader research team and be expected to engage with the other researchers and/or the partners.

Other duties:

- Present, disseminate and explain our work at internal and external events hosted by Turing and/or the partners.
- Contribute to the life of the Institute and support its community.
- To undertake appropriate administration tasks.
- Support the research group in the design and development of the research programme.

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		
Skills and Requirements	Essential (E) Desirable (D)	Tested at application (a) Tested at interview (i)
Post holders will be expected to demonstrate the following:		
Education/Qualification		
Research Assistant level: Near completion of a PhD or equivalent level of professional qualification	E	A
Knowledge and Experience		
Solid experience in data collection using tools such as web scraping.	E	A/I
Expertise using computational tools to clean and pre-process large datasets.	E	A/I
Familiarity with natural language processing.	E	A/I
Familiarity with econometrics.	D	A/I
Familiarity with network analysis.	D	A/I
Experience working with public health data.	D	A/I
Experience working with government spending data.	D	A/I
Communication		
Excellent writing skills and proven ability to communicate complex, specialist or conceptual information/research findings clearly and persuasively to diverse audiences, including the ability to explain technical concepts to technical and non-technical audiences.	E	I
Ability to write research reports and papers in styles accessible to both academic and lay audiences.	D	I
Teamwork and Motivation		
A proven ability to collaborate successfully in a multidisciplinary environment and to manage delivery of projects.	E	A/I
Liaison and Networking		
Participates in networks within the organisation or externally to share knowledge and information in order to develop practice or help others learn.	E	A/I
Decision Making		
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
Analysis and Research		
Ability to organise working time, take the initiative, and carry out research independently, under the guidance of the PI	E	I
Excellent writing skills and a proven ability to communicate research findings to diverse audiences.	E	I
Ability to use own judgement to analyse and solve problems	E	I
Other Requirements		

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Commitment to EDI principles and to the Organisation values	E	I
Commitment to meeting deadlines	E	I
Flexible attitude towards work	E	I
The post holder may be required to travel within the UK and internationally.	D	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.

CLOSING DATE FOR APPLICATIONS: SEPTEMBER 6TH 2022 AT 23:59

TERMS AND CONDITIONS

This full time post is offered on a fixed term basis until 31st March 2023. The annual salary is £36,235 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.