

# The Alan Turing Institute

## Research Assistant, Machine Learning and Bayesian Statistics

### 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 ROLE

The Research Assistant will join a large group of researchers in Machine Learning and Bayesian Statistics from the Warwick Machine Learning Group, currently based at The Alan Turing Institute. The role is supporting a partnership between The Institute and Cervest Ltd on multiresolution multitask learning over remote sensing data sources. The Research Assistant, Machine Learning and Bayesian Statistics will conduct research in this area under the supervision of Dr. Theo Damoulas and in collaboration with the research group at The Institute and Cervest's engineering and science teams. The role involves methodological machine learning development, code development and application to Cervest's data and domain.

### DUTIES AND RESPONSIBILITIES

- Conduct research in machine learning (ML) and Bayesian statistics
- Implement ML methodology and extend existing codebases
- Apply to large scale datasets in collaboration with Engineers
- Participate in weekly meetings and report progress and outputs

### PERSON SPECIFICATION

The successful candidate will have:

#### ESSENTIAL

- A BSc 1<sup>st</sup> or 2.1 class degree in Computer Science, Data Science or Statistics
- Good knowledge of Machine Learning and Probabilistic modelling

- Good knowledge of Bayesian Statistics and sampling algorithms
- Very good knowledge of Python and one additional programming language
- Excellent communication skills and collaborative attitude

#### DESIRABLE

- Masters degree in CS/Stats/Math/Eng
- Knowledge of Bayesian nonparametrics
- Knowledge of Bayesian deep learning
- Knowledge of Deep learning with ANNs
- Knowledge of C/C++/C#/R

#### 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, covering letter and contact details for your referees. If you have questions about the role or would like to apply using a different format, please contact them on 020 3862 3575 or email [recruitment@turing.ac.uk](mailto:recruitment@turing.ac.uk).

**CLOSING DATE FOR APPLICATIONS: 14 July 2020**

#### TERMS AND CONDITIONS

This full-time post is offered on a fixed term basis for a period of twelve months. The annual Salary for this post is £34,000 plus excellent benefits, including flexible working and family friendly policies, <https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits>

This job description is written at a specific time and is subject to change as the demands of the Institute and the role develop. The role requires flexibility and adaptability and the post holder needs to be aware that they may be asked to perform tasks and be given responsibilities not detailed in this job description.

#### 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, gender reassignment, marital and civil partnership status, pregnancy, religion or belief or sexual orientation. Reasonable adjustments to the interview process can also be made for any candidates with a disability.

***Please note all offers of employment are subject to continuous eligibility 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).***