The Alan Turing Institute

Machine Learning in Finance Research Associate

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 400 researchers and a talented business team.

THE ROLE

The Alan Turing Institute is looking to build on existing research success in Machine Learning in Finance.

The adoption of machine learning and artificial intelligence methods in the financial services industry is opening the door to more robust data-driven decision processes, a better understanding of needs of their customers and, if used appropriately, will ultimately result in more resilient and trustworthy financial systems. However, there are also challenges such as algorithmic fairness, explainability, and the need for very high degrees of accuracy.

We welcome candidates with a PhD or entering the writing up stage of their thesis with publications in the application of machine learning. The successful candidate will help us deliver successful activity including:

- Addressing the key challenges of adopting machine learning techniques in the financial services industry by relying on transparent, reliable, and reproducible research
- Promotion of best practices for the use of machine learning tools for all areas of finance including the sell and buy side, risk management, data privacy, wholesale and retail banking
- Facilitating the swift transition of academic research outputs into practical solutions by creating collaborative projects with industry partners and a talent pool of researchers at Turing

The successful candidate will be looking to answer questions that will help advance scientific thinking on how we can render algorithms more readily accountable.

DUTIES AND RESPONSIBILITIES

- Conduct research on Machine Learning in Finance, in collaboration with Turing researchers
- Liaise with industry partners to gain an understanding of industry challenges and specific use cases
- Produce thought leadership publications for the Machine Learning in Finance theme
- Teaching may be required as part of collaboration work

PERSON SPECIFICATION

The successful candidate will have:

ESSENTIAL

- PhD or publication record showing equivalent experience
- Familiarity with Machine Learning methods in Finance
- Demonstrated enthusiasm and ability to rapidly assimilate new computational and mathematical ideas and techniques on the job, at a more than superficial level, and apply them successfully.
- Excellent written and verbal communication skills, including experience in the visual representation of quantitative data, the authoring of research papers or technical reports, and giving presentations or classes on technical subjects.
- Ability to work independently, including planning and execution, and to collaborate productively as part of a team

DESIRABLE

- Experience with practical applications of Machine Learning to financial use cases, and/or experience working with a financial services organisation (banking, insurance, asset management)

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 0203 862 3394 or email jobs@turing.ac.uk.

CLOSING DATE FOR APPLICATIONS:

TERMS AND CONDITIONS

This full-time post is offered on a fixed-term contract for a period of 24 months starting or as soon after that as possible. Salary £34,000-41,000(dependent on skills and experience) plus excellent benefits. 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, 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. Happy to talk flexible working.

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***.***