The Alan Turing Institute

Senior Systems Designer PETs

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 Senior Systems Designer - Privacy Enhancing Technologies, will work for a funded program of research, for new digital identity systems, based at the Alan Turing Institute.This role will oversee the technical and architectural systems design work of the PDRAs' working on the projects in-line with stakeholders requirements.

DUTIES AND RESPONSIBILITIES

ID-as-a-Service is an emerging requirement in many modern societies across the developed and developing world. New techniques for deployment at scale promise to improve the assurance of users' rights to access to various digital and physical resources, vastly more easily, cheaply and quickly. The post holder will:

- Research into existing and new tools and techniques to support ID-as-a-service, that meets goals for privacy for users, and does not lead to unintended consequences.
- Influence the design of future identity systems around the world - there are many pressures on the design of such systems, and the role should prove fascinating.

PERSON SPECIFICATION

The successful candidate will have:

ESSENTIAL

- A PhD in Computer Science, or a related discipline.

- Experience of or aptitude for rigorous computer system and security design, implementation, measurement and evaluation, including experiment design, data capture, and data analysis.

This may have been gained in commercial or industrial settings as well as through production of academic papers.

- Good to substantial Knowledge of Privacy Enhancing Technologies capabilities and limitations is essential, especially basic privacy technologies, but also newer technologies, e.g. secure enclaves, distributed ledger tech, differential privacy, and secure multi-party computations (for example).
- Specific experience with design of digital identity systems including newer ideas in self-sovereign systems and distributed and decentralised systems would be a bonus.
- Ability to communicate clearly in English, in both written and spoken forms.
- Experience of working independently and in medium to large-scale teams, on collaborative and interdisciplinary research projects with academic and industrial partners. Dealing with users in the real world will be very important.
- Evidence of an excellent publication record, commensurate with level of experience. Candidates from outside academia may be able to evidence this by providing examples of technical writing or system design and implementation, published or distributed through channels other than academic conferences and journals, e.g., blog posts and/or software repositories.

DESIRABLE

- Familiarity with data science techniques and applications, including machine learning and statistics.
- Other language skills may be an asset.
- The post holder may be required to travel within the UK and internationally.

TERMS AND CONDITIONS

This full-time post is offered on a fixed term contract until 2022, with possibility for extension (funding permitting).starting as soon as possible. Happy to Talk Flexible Working

The salary range offered for this role is £50,000 A competitive benefits package is also available (https://www.turing.ac.uk/work-turing/why-work-turing/employee-benefits).

APPLICATION PROCEDURE

If you are interested in this opportunity, please click the apply button below. You will need to register on the applicant's portal and complete the application form including your CV, covering letter and contact details for your referees.

Along with a CV and covering letter, please submit a research output to support your application, for us to read before the interview. This might be a link to a selected research or technical paper, a technical blog post or a chapter of a thesis or dissertation, but we particularly encourage applicants to submit a link to a public version control tool such as GitHub containing an example analysis script or research software library you have made a significant contribution to.

If you have questions or would like to discuss the role further with a member of the Institute's HR Team, please contact them on 0203 862 3394 or 020 3862 3357, or email recruitment@turing.ac.uk. If you would like to submit your application in a different format, please email recruitment@turing.ac.uk.

Applicants who would like to receive this advert in an alternative format or who are unable to apply online should, please email recruitment@turing.ac.uk.

Secondments from University partners are welcome.

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, religion or belief or sexual orientation.

Reasonable adjustments are available to support candidates through the application and interview process.