CANDIDATE BRIEF

Research Fellow in Artificial Intelligence for Digital Democracy, Faculty of Engineering and Physical Sciences

Salary: Grade 7 (£41,064 – £48,822 p.a.) Due to funding restrictions, an appointment will not be made higher than £43,482 p.a.

Reporting to: Professor Evangelos Pournaras

Reference: EPSCP1175

Closing date: Sunday 21 September 2025

Fixed-term (starting from 01 November 2025 until 31 October 2026 - to complete specific time limited work)

Location: Leeds main campus (with scope for hybrid working)

We are open to discussing flexible working arrangements

Research Fellow in Artificial Intelligence for Digital Democracy,
School of Computer Science.

Are you a researcher looking for your first challenge? Are you excited to explore the opportunities and risks of artificial intelligence on democratic and collective decision-making processes? Do you want to advance your career in by joining the Trustworthy Distributed Intelligence Lab to work in one of the UK's leading research-intensive universities with industrial collaborations?

Overview of the Role

You will have a PhD or be a PhD candidate who has already submitted your thesis prior to starting the position, with a research track record on artificial intelligence, data science and computational social science, and a vivid interest on digital democracy, in particular, the areas of computational social choice (voting methods), deliberation and collective decision making. You will know how to work with data, in particular, collecting and analysing AI-assisted human choices and deliberation data. You will be excited to explore the opportunities and risks of large language models for AI assistance of human decision making, while you will be capable to apply machine learning and computational algorithms of social choice.

This post is associated with following projects:

- *Embedding EDI in the Distribution of Research Funding: An AI-assisted Collective Intelligence Approach*, AI for Collective Intelligence Hub
- *Digitally-assisted Collective Governance of Smart City Commons (ARTIO)*, UKRI Future Leaders Fellowship

Main duties and responsibilities

- Develop and apply AI algorithms for ethically-aligned decision support, including fair allocation of resources such as public funds, informed by computational social choice;
- Pre-process, analyse, and visualize data using statistical methods and machine learning algorithms;

- Modelling and building of ontologies and knowledge bases to characterize and measure the impact of collective decisions (voting outcomes), including their alignment to Equality, Diversity and Inclusion values;
- Design online choice experiments with human subjects to test AI-assistance interventions in different experimental conditions with the aim to collect high-quality novel data aligned to research ethics and data management standards of University of Leeds;
- Write high-quality software code and documentation for the developed solutions, develop software demonstrators and outreach material to disseminate research to the broader public;
- Support the project activities, including meetings organization and participation, communication, reporting and dissemination of project results;
- Develop and support collaborations with industry to explore pathways to impact and knowledge exchange;
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own research;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

Qualifications and skills

Essential

- A PhD (or have submitted your thesis before taking up the role) in artificial intelligence or a closely allied discipline;
- A strong background in data science and machine learning algorithms;
- Knowledge of modelling intelligent multi-agent systems, in the context of generative agentic AI and large language models, reinforcement learning, optimization, game theory, social choice, or other relevant context;
- Experience with applying artificial intelligence to computational social science problems and socio-technical systems, with demonstratable capacity to conduct inter-disciplinary research;
- Experience or strong interest on digital democracy, in particular, problems of collective decision making, voting and deliberation grounded on computational social science;
- Experience or strong interest on problems related to fair collective decision making and resource allocation, including ethically-aligned and trustworthy AI for decision support;
- Experience with writing open-source software code and documentation;
- Good time management and planning skills, with the ability to meet tight deadlines and manage competing demands effectively without close support;
- A developing track record of peer-reviewed, publications in international journals and conferences venues;
- Excellent communication skills both written and verbal, and the ability to communicate your research at national and international conferences;
- A proven ability to work well both independently and in a team;
- A strong commitment to your own continuous professional development.

Desirable:

- Experience of pursuing external funding to support research;
- Experience with designing online human experimentation and data collection, via, for instance, Prolific or human experimentation labs.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23:59** (UK time) on the advertised [closing date](#).

Contact information

To explore the post further or for any queries you may have, please contact:

[Professor Evangelos Pournaras](#), Professor of Trustworthy Distributed Intelligence
Tel: +44 (0)113 343 4810
Email: E.Pournaras@leeds.ac.uk

Additional information

Faculty and School Information
Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Computer Science](#).

Working at Leeds
We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

A diverse workforce
As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN Silver Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Information for disabled candidates
Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our How to Apply information page or by getting in touch by emailing HR via hr@leeds.ac.uk.

Criminal Record Information
Rehabilitation of Offenders Act 1974
A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information page.

Salary Requirements of the Skilled Worker Visa Route
Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information, please visit the Government's Skilled Worker visa page.

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit the Government's page, Apply for the Global Talent visa.