



#### Further Information: HR7.

Job title	Research Assistant/Associate in Ethics and Safety of Artificial Intelligence Systems in the Public Sector (Fixed Term)
Grade	5/7
Salary range	Research Assistant: £32,296 - £34,866 Research Associate: £36,924 - £45,163
Staff Group	Research
Department / Institution	Department of Engineering

# **Role-specific information**

## **Role Summary**

An exciting opportunity exists for a Research Assistant or Associate in the Department of Engineering, to work on the project: "Guiding the boots on the ground: Advancing ethically informed socio-technical safety of AI systems in the public sector" funded by the EPSRC [UKRI852] under the Systemic AI Safety Grants programme by the AI Safety Institute.

This project addresses the question: "How can local authorities in the UK be equipped to effectively govern the integration of socio-technical ethical and safety principles into the deployment of AI systems informing urban-scale decisions?" Local authorities (LAs) are critical public sector actors at the forefront of deploying AI systems in society. Examining how they practically (struggle to) adopt AI is relevant for generating insights about how to equip them to mitigate urban-scale AI-related risks and harms. Using mixed methods, the project will: analyse existing government publications on the safe, responsible, and ethical public sector use of AI; evaluate LAs' awareness of these documents and their perceived relevance to urban planning; and examine case studies of how LAs apply GenAI and LLM systems for urban planning.

As a Research Assistant/Associate, you will contribute your knowledge to conduct research within the scope of the project and inform its execution. You will play a key role in expanding the existing research work and collaborations with a thematic focus on systemic safety and ethics in the context of public sector administration, in particular related to urban planning. You will work with the interdisciplinary project team and industry collaborators to develop novel practical insights about understandings of systemic safety, and to inform how that could be achieved in the public sector. You will also contribute to developing evidence-based public sector-oriented and academic outputs from research findings. It is expected that the

successful candidate will carry out research both independently and collaboratively as part of the team. Experience in using mixed methods research, and knowledge of wider ethical and safety issues that public sector bodies need to navigate within the broader context of public administration are strongly desirable. Experience in sociotechnical studies, designing and analysing data from quantitative surveys, and conducting case studies using qualitative methods is desirable.

The key responsibilities and duties are: developing the research vision into executable tasks that feed into the project's overarching aim through mixed research methods; developing original research into a socio-technical governance framework; producing high-quality research and industry-facing outputs; developing and maintaining strategic project networks with members of the team; and coordinating the organisation of research activities (e.g., designing and rolling out survey, workshops with project participants).

The project is highly interdisciplinary and is supported by academics in different fields including engineering, project management, computer science and AI ethics, and public sector collaborators such as the Society for Innovation, Technology and Modernisation, and the Local Government Association. You are expected to work closely with colleagues, as well as digitalisation leaders and practitioners from the public and private sector and civil society organisations.

Appointment at the Research Associate level is dependent on having a PhD as well as relevant postdoctoral experience (and/or equivalent professional experience). Those who have submitted but not yet received their PhD will be appointed at the Research Assistant level, which will be amended to Research Associate once the PhD has been awarded.

Applicants who wish to work either full-time or part-time will be considered.

## Key Responsibilities

	esearch vision into executable tasks that feed into the hing aim through mixed (quantitative and qualitative)	20%	
Conduct excellent and original research on the ethical and safe use of Al the public sector through mixed methods, and produce high-quality research on public sector-oriented outcomes through empirical and desktop research outcomes.			
Develop a guideline for practitioners, and a journal publication from research evidence on socio-technical systemic safety.		20%	
Developing and maintaining strategic project networks with members of the team; and coordinating and delivering research activities (e.g., survey design and roll-out, workshops with project participants, and case studies).		20%	
Location	Department of Engineering, Civil Engineering Building, 7a JJ		

Location	Department of Engineering, Civil Engineering Building, 7a JJ Thompson Avenue, Cambridge, CB3 0FA.
Working pattern	Full-time or Part-time (consideration may also be given to a job share).

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Hours of Work	There are no conditions relating to hours and times of work, but you are expected to work such hours and days as are reasonably necessary for the proper performance of your duties. Your times of work should be agreed between you and your head of institution, or his/her nominee.
Length of appointment	9 months or until 4 February 2026, whichever comes earlier.
Limited funding	This post is funded by the EPSRC [UKRI852] under the Systemic AI Safety Grants programme by the AI Safety Institute, which is a non-central source/ research grant or contract and, in the event that this funding should cease, the post may be at risk of redundancy. In the first instance, the funding supporting the post is for 9 months or until 4 February 2026 whichever comes earlier and the head of department, or his/her nominee, will keep the role holder informed of the funding situation.
Probation period	3 months.
Annual leave	Full-time employees are entitled to annual paid leave of 6.6 weeks (or 41 days for those working full-time), inclusive of public holidays (pro-rata for part-time staff). The period for calculating entitlement to holiday leave in any particular year is the academic year i.e. 1 October to 30 September.
Pension eligibility	You will automatically become a member of the Universities Superannuation Scheme (USS) on commencement of employment.
	Please note that it is not possible to opt out of the scheme until you have received certain specified information about the pension scheme and this will be sent to you shortly after you have been paid for the first time.
	Pension scheme details are available on our web pages at: <u>http://www.pensions.admin.cam.ac.uk/</u> . Information about the legal requirement for the University to automatically enrol its eligible jobholders into a qualifying workplace pension scheme is available on our web pages at: <u>http://www.pensions.admin.cam.ac.uk/auto-enrolment-</u> <u>workplace-pensions</u> .
Retirement age	The University does not operate a retirement age for research staff. Further details are available in the University Retirement Policy on our web pages at <u>http://www.hr.admin.cam.ac.uk/policies-</u> <u>procedures/retirement-policy/statement-policy</u> .

## Person Profile

This section details the knowledge, skills and experience we require for the role.

Education & qualifications	Research Associate: PhD level qualification, and research and/or have equivalent professional experience in Public Administration or Public Sector Management, Systemic Safety, Ethics, Decision Science, Urban Studies or related disciplines. Research Assistant: close to obtaining a PhD, and/or have
	equivalent professional experience in in Public Administration or Public Sector Management, Systemic Safety, Ethics, Decision Science, Urban Studies or related disciplines.
Specialist knowledge & skills	Knowledge of ethical and safety issues in the public sector/public administration, how public sector bodies navigate ethical and safety concerns, and experience in conducting mixed methods (qualitative and quantitative) research (essential).
	Research interests in socio-technical studies, governance frameworks and AI systems in the public sector (desirable).
Interpersonal & communication skills	Excellent communication and writing skills, including the ability to communicate complex technical knowledge effectively with a wide range of stakeholders including technical experts and lay people (essential).
	Demonstrated ability to work independently as well as part of a team (essential).
Relevant experience	Experience in quantitative and qualitative research design, methods and analysis (essential).
	Experience in undertaking interdisciplinary research at the nexus of systemic safety, ethics and public sector administration / decision making (essential).
	Experience in working in an interdisciplinary team (desirable).
Additional requirements	N/A

## Terms and Conditions

#### **Pre-employment Check Requirements**

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it. If you need further information, you may find the Right to Work page within

the 'Applying for a job' section of the University's Job Opportunities pages helpful (please see <u>http://www.jobs.cam.ac.uk/right/have/</u>).

#### **Application Process**

To submit an application for this vacancy, please click on the link in the 'Apply online' section of the advert published on the University's Job Opportunities pages. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

Please ensure that you upload your Curriculum Vitae (CV), including any publications, a covering letter describing how you meet the essential and desirable criteria, and the contact of two referees in the Upload section of the online application. If you upload any additional documents which have not been requested, we will not be able to consider these as part of your application.

If you have any questions about this vacancy, please contact Dr Kwadwo Oti-Sarpong (<u>ko363@cam.ac.uk</u>) for queries of a technical nature related to the role or Jessica Krishan (<u>ik909@cam.ac.uk</u>) for questions on the application process.

Anticipated date for interview: as soon as possible after the closing date with the exact date and time to be confirmed.

## **General Information**

## The University of Cambridge

The University of Cambridge is one of the world's oldest and most successful Universities, with an outstanding reputation for academic achievement and research. It was ranked first in the 2011 QS World University Rankings and its graduates have won more Nobel Prizes than any other university in the world. The University comprises more than 150 departments, faculties, schools and other institutions, plus a central administration and 31 independent and autonomous colleges.

The University and the Colleges are linked in a complex historical relationship. The Colleges are self-governing, separate legal entities which appoint their own staff. They admit students, provide student accommodation and deliver small group teaching (supervisions). The University awards degrees and its faculties and departments provide lectures and seminars for students, determine the syllabi for teaching and conduct research.

There is much more information about the University at <u>http://www.cam.ac.uk/univ/works/index.html</u> which we hope you will find helpful.

#### Department of Engineering

The Department of Engineering is the largest department in the University of Cambridge, representing approximately 10% of the University's activities by the majority of common metrics, and is one of Europe's largest integrated engineering departments. It achieves the highest standards in both research and teaching. Its international reputation attracts the best students, academics, sponsors and partners from around the world.

The Department seeks to benefit society by creating world-leading engineering knowledge that fosters sustainability, prosperity and resilience. We share this knowledge and transfer it to industry through publication, teaching, collaboration, licensing and entrepreneurship. By integrating engineering disciplines in one department, we can address major challenges and develop complete solutions, serving as an international hub for engineering excellence.

The Centre for Smart Infrastructure and Construction's (CSIC) key objective is to develop robust and innovative solutions to meet challenges in the infrastructure and construction industry and to accelerate and enable knowledge transfer and exploitation of these emerging technologies.

#### What the University can offer you

One of our core values at the University of Cambridge is to recognise and reward our staff as our greatest asset. We realise that it's our people who have built our outstanding reputation and that we will only maintain our leading position in the academic world by continuing to attract and retain talented and motivated people. If you choose to come and work with us, you will find that we offer:

• **Excellent benefits** – You will be eligible for a wide range of competitive benefits and services, including numerous discounts on shopping, health care, financial services and public transport. We also offer defined benefits pension schemes and tax-efficient bicycle, car lease and charity-giving schemes.

We will help you balance your home and work life by providing you with generous annual leave entitlement and procedures for requesting a career break or flexible working arrangements if you need them. You will also have access to a range of well-being support services, including in-house Occupational Health and Counselling services. If you have childcare responsibilities, you may also benefit from the enhanced maternity/adoption pay, two nurseries and a holiday play scheme that we provide.

We are keen to welcome new employees from other parts of the UK and other countries to Cambridge. If you will be relocating to Cambridge on a centrally funded appointment of two years or more, you may be eligible for our relocation expenses scheme. The University Accommodation Service will also be available to help you find suitable rented accommodation and to provide advice on renting arrangements and local facilities, if required. In addition, certain academic and academic-related appointments are eligible for the Shared Equity Scheme which offers financial assistance with the purchase of living accommodation. You may find the pages at <u>www.internationalstaff.ac.uk</u> helpful in planning a relocation.

• A welcoming and inclusive environment - We will help you settle into your new role and working environment through a central University induction event, local induction activities and our online induction package. Where appropriate to your role, you will have a probation period to provide a supportive framework for reviewing your progress and discussing your training and development needs.

If you are relocating to Cambridge, you and your family will be welcome to attend the Newcomers and Visiting Scholars Group, which provides an opportunity to find out more about Cambridge and meet other people new to the area.

- Extensive development opportunities The encouragement of career development for staff is one of the University's core values. We put this into practice through various services and initiatives, including:
  - A wide-range of training courses and online learning packages.
  - The Staff Review and Development (SRD) Scheme, which is designed to enhance work effectiveness and facilitate career development post-probation.
  - Leave for career and personal development, including long-term study leave for assistant staff and sabbatical leave for academic staff.
  - The CareerStart@Cam programme, which supports assistant staff roles without higher education qualifications to develop their skills, experience and qualifications. Assistant staff may also apply for financial assistance for study which results in a qualification.
  - Reduced staff fees for University of Cambridge graduate courses.
  - The opportunity to attend lectures and seminars held by University departments and institutions.
  - Policies and processes dedicated to the career development of researchers and the implementation of the principles of the Concordat, which have led to the University being recognised with an HR Excellence in Research Award by the European Commission.

You can find further details of the benefits, services and opportunities we offer can be found in our CAMBens Employee Benefits web pages at <a href="http://www.admin.cam.ac.uk/offices/hr/staff/benefits/">http://www.admin.cam.ac.uk/offices/hr/staff/benefits/</a>. A range of information about living and working in Cambridge is also available to you within the University's web pages at <a href="http://www.jobs.cam.ac.uk/">http://www.admin.cam.ac.uk/offices/hr/staff/benefits/</a>. A range of information about living and working in Cambridge is also available to you within the University's web pages at <a href="http://www.jobs.cam.ac.uk/">http://www.jobs.cam.ac.uk/</a> and <a href="http://www.admin.cam.ac.uk/">http://www.admin.cam.ac.uk/</a> and <a href="http://www.admin.cam.ac.uk/">http://www.admin.cam.ac.uk/</a> fices/hr/staff/.

## Equality of Opportunity at the University

We are committed to a proactive approach to equality, which includes supporting and encouraging all under-represented groups, promoting an inclusive culture and valuing diversity. We make selection decisions based on personal merit and an objective assessment against the criteria required for the post. We do not treat job applicants or members of staff less favourably than one another on the grounds of sex (including gender reassignment), marital or parental status, race, ethnic or national origin, colour, disability (including HIV status), sexual orientation, religion, age or socio-economic factors.

We have various diversity networks to help us progress equality; these include the Women's Staff Network, the Disabled Staff Network, the Black and Minority Ethnic Staff Network and the Lesbian, Gay, Bisexual and Transgender Staff Network. In addition, we were ranked in the top 100 employers for lesbian, gay and bisexual (LGB) staff in Stonewall's Workplace Equality Index 2013 and we hold an Athena SWAN silver award at organisation level for promoting women in Science, Technology, Engineering and Medicine.

The Department is committed to promoting gender equality as part of a landscape of encouraging diversity, tolerance and a culture of mutual support. The dedicated Diversity Committee oversees equality, diversity and inclusion related activities in the Department, and holds regular events to promote Engineering to under-represented groups. The Department was first granted an Athena SWAN Silver Award in 2017, which was renewed in September 2020 to recognise the Department's ongoing commitment to advancing the careers of women in STEMM. The Department of Engineering continues to make excellent progress towards achieving gender balance amongst its staff and students. More information on the Athena SWAN Charter can be found here.

## Information if you have a Disability

The University welcomes applications from individuals with disabilities and we are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so, and, if successful, to assist them during their employment. Information for disabled applicants is available at <a href="http://www.admin.cam.ac.uk/offices/hr/staff/disabled/">http://www.admin.cam.ac.uk/offices/hr/staff/disabled/</a>.

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you prefer to discuss any special arrangements connected with a disability, please contact, Jessica Krishan, who is responsible for recruitment to this position, on +44 (0)1223 746976 or by email on <u>csic-admin@eng.cam.ac.uk</u>. Alternatively, you may contact the HR Business Manager responsible for the department you are applying to via <u>hrenquiries@admin.cam.ac.uk</u>.