Research Associate – Regulation and Governance

**Department:** Computer Science

**Hours of work:** Full Time / 37 hours a week

**Contract type:** Fixed-Term until 31 December 2022

**Salary:** £32,817 to £40,322 a year / Grade 6
Introduction

We are seeking a highly-motivated researcher to work as part of the Assuring Autonomy International Programme (AAIP) (https://www.york.ac.uk/assuring-autonomy/). The AAIP is an exciting £12 million initiative funded by Lloyd’s Register Foundation and the University of York to spearhead research in the safety of robotics and autonomous systems (RAS).

The primary purpose of the role is to develop, articulate and validate an ethically-informed approach to the regulation and governance (R&G) of autonomous systems which links to the technical frameworks being developed by the AAIP. This will include consideration of the imposition and distribution of risks vs benefits and the role of regulators where individuals may not be able to exercise choice over the risks to which they are exposed. The approach to R&G will be validated via interaction with domain-specific research projects in robotics and autonomous systems including the demonstrator projects linked to the AAIP. You will be expected to maintain currency in your initial academic discipline, linking the AAIP to advances in that subject.

You will be part of a vibrant and growing team and will collaborate with the other research staff in the programme, our experienced programme fellows, and our partner organisations in conducting the research, and in applying and validating the research outputs. In doing so you will play a key role in ensuring that the work of the programme has a substantial real-world impact.

Main purpose of the role

- To conduct research under the supervision of senior colleagues and to contribute to the production of research
- To assist in the identification and development of potential areas of research and the development of proposals for independent or collaborative research projects

Key responsibilities

(Role holders will be required to undertake some or all of the duties below)

- To develop and articulate a deeply reflective, conceptually-informed approach to the regulation and governance of autonomous systems, with an emphasis on the human context and human implications of the systems' design and deployment.
- To pursue research questions about legitimate and fair impositions and distributions of risks and benefits incurred by autonomous systems, particularly given conditions of uncertainty.
- To provide an honest, impartial, ethical perspective on domain-specific research projects in robotics and autonomous systems including AAIP demonstrator projects.
- To maintain currency in your initial academic discipline to inform the AAIP of advances in the field.
- To conduct individual and collaborative research projects, duties to include: analysis and interpretation of research data; use of appropriate research techniques and methods; writing up of research results and dissemination through publications, seminar and conference presentations and public engagement and outreach activities; contributing to the identification of possible new areas of research.
- To contribute to the preparation of research proposals and applications to external bodies.
• To undertake appropriate organisational and administrative activities connected to the research project, including conference organisation, and the development of promotional or educational material including website maintenance and development.

• To promote the Programme and support communications about our research, eg writing blog posts, webinars, film.

• To develop and initiate collaborative working internally and externally, duties to include: the building of internal contacts and participation in internal networks; collaboration with colleagues on joint projects as required; participation in and identification of external networks in order to share information and identify potential opportunities for collaboration and possible sources of funding; attendance at and contribution to relevant meetings.

• To provide guidance to other staff and students, as required, as well as coordinating the work of small research teams.

• To assist with undergraduate teaching in own area of expertise.
## Person specification

### Qualifications

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<th>Essential / Desirable</th>
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<tr>
<td>First degree in social sciences or philosophy</td>
<td>Essential</td>
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<td>PhD in social sciences or philosophy, or equivalent experience</td>
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### Knowledge

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<td>Knowledge in practical ethics to engage in high quality research</td>
<td>Essential</td>
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<td>Knowledge of a range of research techniques and methodologies</td>
<td>Essential</td>
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<td>Has research expertise in an area that will complement and enhance the department's research strategy and goals</td>
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<td>Knowledge in STEM (science, technology, engineering, and mathematics) sufficient to engage with researchers and practitioners in engineering and computer science</td>
<td>Essential</td>
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<td>Knowledge in Law as it applies to robotics and autonomous systems</td>
<td>Desirable</td>
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### Skills, abilities and competencies

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<td>Experience of working on practical ethics in industry or academia</td>
<td>Essential</td>
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<td>Experience of working with inter-disciplinary teams</td>
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<td>Highly developed communication skills to engage effectively with a wide-ranging audience, both orally and in writing, using a range of media</td>
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<td>Ability to write up research work for publication in high profile journals and engage in public dissemination</td>
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<td>Ability to develop research objectives, projects and proposals for own and joint research, with the assistance of a mentor if required</td>
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<td>Competency to conduct individual and collaborative research projects</td>
<td>Essential</td>
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<td>Competency to make presentations at conferences or exhibit work in other appropriate events</td>
<td>Essential</td>
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<td>Ability to identify sources of funding and contribute to the process of securing funds, with collaborators if required</td>
<td>Desirable</td>
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### Experience

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<td>Experience of carrying out both independent and collaborative research</td>
<td>Essential</td>
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<td>Experience of writing up research work for publication</td>
<td>Essential</td>
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<td>Personal attributes</td>
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<tr>
<td>Ability to work as part of a team and also to work independently using own initiative</td>
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<td>Attention to detail and commitment to high quality</td>
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<td>Collaborative ethos</td>
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<td>Ability and willingness to learn sufficient about robotics and autonomous systems to engage with the rest of the AAIP team and collaborators</td>
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<td>Interest in and enthusiasm for the subject matter of the project</td>
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<td>Positive attitude to colleagues and students</td>
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<td>Willingness to work proactively with colleagues in other work areas/institutions</td>
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<td>Ability to plan and prioritise own work in order to meet deadlines, including using initiative to plan research programmes</td>
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<td>Commitment to personal development and updating of knowledge and skills</td>
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<td>Willingness to travel in UK and overseas</td>
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