Title: Explainable Autonomous Agents

Type of award: PhD Research Studentship

Department: School of Computer Science

Scholarship Details: Minimum £22,106 p.a.

Duration: 3.5 years

Eligibility: Home (UK) and EU citizens who have confirmation of UK settlement or pre-settlement status under the EU Settlement Scheme

Start Date: From November 2023

PhD Topic Background/Description

We are excited to be able to offer a generously funded PhD studentship at the University of Bristol (UK) in close collaboration with industrial partner Airbus. The PhD will be located in close proximity to the Interactive Artificial Intelligence Centre for Doctoral Training (CDT), with opportunities for exposure to industry problems and supervisory support through the Airbus AI Research team nearby at Filton, Bristol. At this stage we are only considering highly qualified applicants meeting UKRI's home student requirements (see https://www.ukri.org/what-we-offer/developing-people-and-skills/esrc/funding-for-postgraduate-training-and-development/eligibility-for-studentship-funding/). Candidates should be available to start by 1st December 2023 at the latest.

The trustworthiness & acceptance of Artificial Intelligence (AI) in industry, depends largely upon humans being able to interpret and understand AI agents and their outputs. There is a growing need to address the trustworthiness of such AI approaches for autonomy-based use cases. The challenge of providing explainability in autonomous decision-making is an exciting and emerging research topic. Such explainable autonomous agent techniques aim to provide the means to understand how an autonomous agent behaves, its actions & plans, its reasoning process, and predicted outcomes with uncertainties - all necessary for AI developers, operators & certifiers to appropriately trust an agent in a given context.

The successful candidate will undertake use-inspired research on this topic, with an experience blending both industry and academia. The candidate will be primarily based at the University with access to research facilities and staff. Regular supervision will be provided by Airbus, with additional opportunities available for extended placements to gain a deeper understanding.

The closing date for applications is Monday 16th Oct 2023. Please contact us if you have any queries.

Candidate Requirements

Applicants must hold/achieve a minimum of a master’s degree (or international equivalent) in a relevant discipline. Applicants without a Masters qualification may be considered on an exceptional basis, provided
they hold a first-class undergraduate degree. Please note, acceptance will also depend on evidence of readiness to pursue a research degree.

If English is not your first language, you need to meet this profile level:

**Profile E**

Further information about [English language requirements and profile levels](#).

**Scholarship Details**

Stipend at the UKRI minimum stipend level (£18,622) plus industrial top up (£3,484). It will also cover tuition fees at the UK student rate. Funding is subject to eligibility status and confirmation of award.

To be treated as a home student, candidates must meet one of these criteria:

- be a UK national (meeting residency requirements)
- have settled status
- have pre-settled status (meeting residency requirements)
- have indefinite leave to remain or enter.

**Informal enquiries**

For questions about the research topic, please contact [Prof Peter Flach](mailto:) and [Mark Hall](mailto:).

For questions about eligibility and the application process please contact Engineering Postgraduate Research Admissions [admissions-engpgr@bristol.ac.uk](mailto:admissions-engpgr@bristol.ac.uk)

**Application Details**

To apply for this studentship, submit a PhD application using our [online application system](http://www.bristol.ac.uk/pg-howtoapply)

Please ensure that in the Funding section you tick “I would like to be considered for a funding award from the School of Computer Science” and specify the title of the scholarship in the “other” box below with the name of the supervisor.