

## **Job Summary**

**Job Title:** Lecturer in AI

### **Overview**

Northern Ireland needs to avail itself of the considerable potential offered by artificial intelligence and data science by exploiting state-of-the-art algorithms and technology developments. Queen's University Belfast and the School of Electronics, Electrical Engineering and Computer Science (EEECs) in particular, is at the very centre of developing an ecosystem around AI. The School provides a vibrant, stimulating, and collaborative environment with strong partnerships with global industry and world-class facilities for research excellence and new collaborations.

We are uniquely positioned within the Higher Education Sector with established facilities, including the creation of the new £58 million Global Innovation Institute (GII) which will host more than 550 researchers and become a nexus for multidisciplinary co-innovation between researchers and industry in our digital future. It builds upon the existing £37 million investment which houses the Centre for Secure Information Technologies, the Centre for Wireless Innovation and the Centre for Data Science and Scalable Computing.

The post will benefit from investments in creating a new AI Collaboration Centre which provides a route for engagement with companies in collaborative research in exciting new emerging applications, the NI-HPC Centre which is a UK Tier-2 National High-Performance Computing facility focused on accelerating AI-based computing and potential and exposure to advanced research offered by the University's Turing Development Award.

The unprecedented development and growth of the School make it a particularly exciting time to join us, and explore the emerging opportunities alongside truly excellent academics, shaping a better world together.

### **ABOUT THE ROLE:**

Queen's University Belfast is looking for a computer scientist specialising in Artificial Intelligence to undertake advanced research in AI, to develop and contribute to our ambitious research agenda and lead University-wide efforts to establish Queen's as an international leader in AI research, and the application of this research to address global challenges. The post holder is expected to undertake world class innovation, mission-led research programmes that complement their research, along with contributing to excellent student experience via research-led teaching and assessment. The post holder will also contribute to administration or outreach activities, specifically capitalising on the major opportunities available in this area by the recently announced UK Industrial Strategy, the UKRI, many European and Global initiatives and the ongoing investment in the GII and the ACII.

### **Research**

- To lead and undertake research programmes in Artificial Intelligence, and contribute to secure external funding and develop income-generating collaborative and interdisciplinary research activities
- To publish in peer-reviewed national or international journals and conferences in the field of Artificial Intelligence
- To engage in knowledge transfer and innovation activity and to deliver research impact

- Where appropriate to engage with regional and national Government initiatives in the space of Artificial Intelligence, notably the UK industrial strategy and UKRI initiatives
- To contribute to the strategic growth and mission of ECIT and the School of EECS
- To engage, mentor and develop postgraduate or post-doctoral researchers

### **Education**

- To contribute to the design delivery and improvement of Artificial Intelligence content in the Computer Science curricula
- To contribute to the School's efforts to develop new teaching delivery methods, including but not limited to new blended learning and research-led teaching methods
- To undertake initiatives to improve the overall student experience, by new methods of assessment, feedback, and student engagement
- To supervise undergraduate and postgraduate taught students in practical and project-based work as appropriate to the relevant courses of study
- To contribute to student recruitment and student support mechanism

### **Leadership and Citizenship**

- To contribute to the School of EECS and ECIT's outreach and internationalisation strategies by developing external links
- To carry out designated CSIT, ECIT and School administrative duties including, for example, committee work, working group leadership or course administration.
- To participate in and support of the Personal Development Review (PDR) process

### **Person Specification:**

The appointed person will have an outstanding track record in AI and the drive and ability to make more possible. Their personal values and work ethic will reflect ours - integrity, collaboration, ambition, respect, and the pursuit of excellence. For us to be right for you, you will be someone who thrives in a team environment and has a passion for developing and mentoring the potential of others. We will share a common objective of pursuing research excellence and developing the skills for future generations as part of a local community aspiring to shape AI development globally. Applications will be required to demonstrate the following:

#### **Essential**

#### **Education and Qualifications**

- A PhD in Computer Engineering/Computer Science (or similar discipline)

#### **Experience**

#### **Research**

- Three years postdoctoral research experience in Artificial Intelligence
- High quality publication of excellent research outputs in Artificial Intelligence
- Evidence of independent contribution to research projects and outputs and potential to establish an independent sustainable research program
- Evidence of contribution of research income generation

- Evidence of contribution to national and/or international collaborations

#### **Education**

- Evidence of teaching experience including, but not limited to, undergraduate and postgraduate level teaching, assessment and/or industrial training activities

#### **Leadership and Impact**

- Proven ability to plan and deliver a programme of research and develop techniques, sources of funding and/or proven skills in coaching and developing others in best practice techniques
- Evidence of social engagement and outreach activities

#### **Personal Qualities**

- Ability to communicate effectively complex information to a variety of audiences
- A commitment to creating an inclusive and supportive academic environment enhancing equality, diversity, and supporting early career academics

#### **Desirable**

##### **Education and Qualifications**

- Completed PGCHET (or equivalent) with HEA membership

##### **Experience**

##### **Research**

- Research expertise in relevant areas of AI including but not limited to: AI for Biomedical Data Science; Computer Vision; Natural Language Processing; and Knowledge Engineering
- Successful coordination of major research consortia based in the UK, EU, or internationally
- Significant research measures of esteem in relevant areas depending on academic position

##### **Education**

- Successful enhancement or creation of undergraduate or postgraduate programmes in Computer Science, Artificial Intelligence, or cross-cutting themes
- Strong peer-reviews of teaching
- Teaching awards