Job Summary

Job Title: Lecturer in Computing Systems

Overview

Northern Ireland needs to avail 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 and computational challenges relevant to big data phenomena. 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 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:

A computer scientist in Computing Systems to undertake advanced research on Computing Systems, develop and contribute to our ambitious research agenda and lead University-wide efforts to establish Queen's as an international leader in computing systems 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 and complementing your 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, UKRI, many European and Global initiatives and the ongoing investment in the GII and the ACII.

Research

- To lead and undertake research programme in Computing Systems, and contribute to secure substantial external funding and develop large, income-generating collaborative and interdisciplinary research activities
- To publish in peer-reviewed national or international journals and conferences in the field of Computing Systems
- 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 Computing Systems, notably the UK industrial strategy and UKRI initiatives
- To contribute to the strategic growth and mission of ECIT and the School of EEECS
- To engage, mentor and develop postgraduate or post-doctoral researchers

Education

- To contribute to the design delivery and improvement of Computing Systems 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 EEECS 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 Computing Systems 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 Computing Systems 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 Computing Systems.
- High quality publication of excellent research outputs in Computing Systems
- Evidence of independent contribution in 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 international collaborations

Education

- Evidence of teaching experience include 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 depending on academic position, as follows: Edge Computing, Cyber-Physical Systems, and High Performance Computing.
- 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, Computing Systems, or cross-cutting themes
- Strong Peer-reviews of teaching
- Teaching awards

Leadership and Impact

- Experience of participation in Government / Industry advisory groups, funding panels