Candidate Information

Position: Lecturer/Senior Lecturer in Programming Languages & Compilers
School/Department: School Office (Elect, Elect Eng & Comp Sci)
Reference: 24/111540
Closing Date: Monday 26 February 2024
Salary: £41,331 - £68,194 per annum.
Anticipated Interview Date: Week commencing 25 March 2024

JOB PURPOSE:

This role requires a computer scientist or computer engineer to undertake advanced research in Programming Languages & Compilers, develop and contribute to our ambitious research agenda and lead University-wide efforts to establish Queen's as an international leader in programming language, compiler and computing systems research and its application to address global challenges. The post holder is expected to undertake world class innovation, mission-led research programmes, complimenting your research and 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 ongoing investment in the area via Belfast Regional City Deal (BRCD).

MAJOR DUTIES:

Teaching:

1. To contribute to the design delivery and improvement of Computer Science curricula.
2. 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.
3. To undertake initiatives to improve the overall student experience, by new methods of assessment, feedback, and student engagement.
4. To supervise undergraduate and postgraduate taught students in practical and project-based work as appropriate to the relevant courses of study.
5. To contribute to student recruitment and student support mechanism.

Research:

1. To lead and undertake a research programme in programming language and compiler research, and contribute to secure substantial external funding and develop large, income-generating collaborative and interdisciplinary research activities
2. To publish in peer-reviewed national or international journals and conferences in the field of programming languages & compilers.
3. To engage in knowledge transfer and innovation activity and to deliver research impact.
4. Where appropriate to engage with regional and national Government initiatives in the space of Computing Systems, notably the UK industrial strategy and UKRI initiatives.
5. To contribute to the strategic growth and mission of school and research institutes.
6. To engage, mentor and develop postgraduate or post-doctoral researchers.

Administration/Contribution to the Community:

1. To contribute to the outreach and internationalisation of the School of Electronics, Electrical Engineering and Computer Science (EEECS) at Queen's University Belfast by developing external links.
2. To carry out designated administrative duties including, for example, committee work, working group leadership or course administration.
3. To participate in and support of the Personal Development Review (PDR) process.

ESSENTIAL CRITERIA:

1. A PhD in Computer Science, Computer Engineering, Electronic Engineering (or similar discipline).
2. Demonstrate postdoctoral research experience in a relevant area, including but not limited to programming languages and compilers for multicore, distributed, reconfigurable or other architectures, program reliability, verification and security, concurrency, synchronization and memory management, cost and performance estimation, design space exploration, domain-specific systems and distributed systems.
3. Record of high-quality publication of excellent research outputs in Computing Systems commensurate with stage of career.
4. Evidence of independent contribution in research projects and outputs and potential to establish an independent sustainable research program.
5. Evidence of contribution of research income generation.
6. Evidence of contribution to national and international collaborations.
7. At Senior Lecturer level - evidence of successful supervision/mentoring of PhD students and/or Research staff.
8. Evidence of teaching experience include but not limited to undergraduate and postgraduate level teaching, assessment and/or industrial training activities.
9. At Senior Lecturer level evidence of acting in a leadership role regarding teaching activities.
10. Ability to contribute to School or University administrative tasks and to engage in activities that are of service to the wider discipline.
11. Evidence of ability to contribute to community/outreach, public engagement, or impact-related activities.
12. At Senior Lecturer level there should be evidence of successful contribution to administration and service to the discipline.
13. Ability to communicate effectively (in English) complex information to a variety of audiences.
14. A commitment to creating an inclusive and supportive academic environment enhancing equality, diversity, and supporting early career academics.
15. Ability to work in a team to deliver high quality teaching and research.

DESIRABLE CRITERIA:
1. Completed a Postgraduate Certificate in Higher Education Teaching (or equivalent) qualification.
2. Successful coordination of major research consortia based in the UK, EU, or internationally.
3. Successful enhancement or creation of undergraduate or postgraduate programmes in Computer Science, Computing Systems, or cross-cutting themes.
4. Experience of participation in Government / Industry advisory groups, funding panels.