

Candidate Information

Position: Lecturer/Senior Lecturer/Reader in Software Engineering
School/Department: School of Electronics, Electrical Engineering and Computer Science
Reference: 21/109183
Closing Date: Monday 4 October 2021
Salary: Lecturer: £37,467 - £51,799 per annum Senior Lecturer: £53,348 - £61,818 per annum Reader: £60,022 - £65,573 per annum
Anticipated Interview Date: Week commencing 8 November 2021

JOB PURPOSE:

The post holder will develop, lead and sustain research of international standard in Software Engineering; deliver an excellent student experience via research led teaching and assessment; project supervision and curriculum design at undergraduate and postgraduate levels. You will grow the School's software engineering taught programmes (e.g., the undergraduate BSc/BEng Software Engineering and the postgraduate taught MSc Software Development) and participate in School management and organisation.

For appointment at Reader level you will have an outstanding track record of national and international distinction and leadership in research, including publications, income, and awards, bringing external recognition and distinction to yourself and the University.

At the School of Electronics, Electrical Engineering, to support you in your career you will in addition to working alongside truly excellent academics benefit from the infrastructure investment of a purpose built Software Studio to support teaching, research and outreach.

MAIN ACTIVITIES/RESPONSIBILITIES:

1. Research

- To lead and undertake research in one or more of the following research areas: Software engineering for cloud, fog and edge computing; Software engineering for AI / ML systems; Human-centric software engineering. Research should be of a quality that is internationally excellent in terms of output, originality, significance, and rigour.
- Supervise relevant research programmes within the School's research structures individually and as part of a team.
- Regularly publish research in international peer reviewed journals or archival conferences (e.g., IEEE & ACM) in the subject area, with a high majority of publications in the top-quartile of venues in the subject area and a significant number of publications in the top-decile, depending on career stage.
- Source and secure external funding from the relevant funding bodies to ensure continued growth. Demonstrate a sustained stream of funding from national or international bodies over the career period (Senior Lecturer/Reader), or potential to attract external funding, including individual fellowships (Lecturer).
- To work as part of a team to undertake innovative, ambitious impactful research programmes.
- Demonstrate tangible research impact (Senior Lecturer/Reader) or potential for research impact, both within the academic discipline (e.g., citation impact) and beyond the academic discipline (e.g., economic, or societal impact).
- Where appropriate, explore opportunities to exploit research through the appropriate commercialisation vehicle e.g., spin-out company, licensing deals, knowledge transfer partnership, contract research etc.
- Build and lead an active team of high-quality post-graduate research students, research assistants and post-docs (Senior Lecturer/Reader) or demonstrate ability to engage, mentor and develop post-graduate or post-doctoral researchers (Lecturer).
- Develop and maintain an excellent international research profile, evidence by peer reviews of research output quality, impact, conference organisation, engagement with professional bodies (Senior Lecturer/Reader) that will strengthen the reputation of the School.

2. Teaching

- Develop the teaching activities of the School by pursuing new and innovative teaching approaches taking the responsibility for the quality of course units and delivering a range of teaching and assessment activities at undergraduate and/or postgraduate level within computer science, including lectures, setting/marking coursework, and practicals.
- Supervise undergraduate and postgraduate taught students in practical and project-based work as appropriate to the relevant courses of study.
- Help to develop and enhance appropriate teaching approaches and contribute to curriculum development, including the development of innovative, relevant, and highly marketable postgraduate teaching programmes.
- Contribute to student recruitment (including Open Days etc.) and student support mechanisms e.g., Personal Tutor Scheme.
- Contribute to the School's internationalisation efforts with a view to attract a significantly higher number of international students to the School, across all School programs.
- Lead major elements of programme development, including new course structures and curricula (Senior Lecturer/Reader).
- As required manage major teaching administrative functions such as accreditation and quality enhancement (Senior Lecturer/Reader).
- Deliver more challenging modules e.g., specialist MEng or MSc modules (Senior Lecturer/Reader).

3. Citizenship

- Contribute to the School's outreach and internationalisation strategies by developing external links.
- Act as internal and external examiner for undergraduate and postgraduate students and programmes (Senior Lecturer/Reader).
- Carry out designated School administrative duties including, for example, committee work, working group leadership or course administration.
- Demonstrate experience in administration and leadership roles.
- Demonstrate leadership ability via strong contribution to existing School activities or new initiatives that help the School achieve its key objectives.
- Contribute to the senior management activities of the School by taking on appropriate roles such as Director of Education, Module/Year/Programme Co-ordinator or other recognised official University roles (Senior Lecturer/Reader).
- Act as mentor or appraiser to colleagues advising on their personal development and ensuring that they are meeting the standards required (Senior Lecturer).
- Contribute to relevant professional bodies; engage in consultancy for industry and community organisations (Senior Lecturer/Reader).
- Active participation in and support of the Personal Development Review (PDR) process.

ESSENTIAL CRITERIA:

1. *PhD in Computer Science, Computer Engineering, or closely related discipline.
2. *High quality research (commensurate with career stage) in Software Engineering for Cloud, Fog and Edge computing; Software Engineering for AI/ML systems; or human centric software engineering, as evidenced by verifiable involvement in the generation of milestone papers in leading conferences and journals, noteworthy demonstrators or internationally leading capability or major funding initiatives.
3. *Evidence of independent contribution in research projects and outputs and potential to establish an independent sustainable research program.
4. *Candidates at Reader level are expected to demonstrate an internationally excellent research standing and ability to lead research initiatives.
5. *A strong track record of research income earned via competitive means of funding as Principal Investigators (for candidates at Senior Lecturer/Reader), or evidence of potential to secure research income (for candidates at the Lecturer grade).
6. *Ability to form and manage a sizeable research group, including a track record of post-graduate student and post-doctoral staff supervision (for candidates at the Senior Lecturer/Reader grade).
7. *Teaching experience commensurate with career stage, this can include, but is not limited to, undergraduate or postgraduate teaching, assessment, and/or industrial training activities.
8. *For candidates at the grade of Senior Lecturer / Reader, a strong track record of leadership, demonstrated as evidence of major initiatives that significantly improved education, research or administrative processes.
9. A record of collaboration with and links to industry, or other activities aiming at achieving broader societal and economic impact. (for Senior Lecturer/Reader Grade).
10. 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 (for Senior Lecturer/Reader grade).

11. Excellent oral communication and presentation skills, with sufficiently developed English Language skills to deliver Undergraduate and Postgraduate education.
12. Ability to provide effective leadership (at a more strategic level (for Senior Lecturer/Reader).
13. Understanding of resource management processes and skills to apply them effectively.
14. Commitment to academic research and high quality teaching that fosters a positive learning environment for students.
15. Commitment to personal and professional development.

DESIRABLE CRITERIA:

1. *Completed PGCHET (or equivalent) with HEA membership.
2. *Significant research expertise in relevant areas depending on academic position.
3. *Significant research measures of esteem in relevant areas depending on academic position.
4. *Strong peer reviews of teaching.
5. *Teaching awards.
6. *Demonstrable record of enhancing teaching activities by pursuing new and innovative teaching approaches, in turn enhancing the student experience.
7. Contribution to a wider range of community outreach programmes/initiatives in designing and delivering innovative new programmes.
8. Measurable societal and economic impact, in particular contribution to industry roadmaps and technology transfer to industry, with associated evidence (Lecturer).

Additional Information:

Please demonstrate (by providing a clear and unambiguous statements) how your qualifications, skills and experience meet the essential and, if appropriate, desirable criteria which are outlined in the Job Details. In particular, should any criteria be marked with an asterisk, you should clearly demonstrate how you meet this criteria as they will be used at shortlisting stage.