

# **Candidate Information**

**Position:** Academic Positions - Computer Science: Lecturer/Senior Lecturer/Reader/Professor

School/Department: School of Electronics, Electrical Engineering and Computer Science

**Reference:** 20/108500

Closing Date: Thursday 7 January 2021

Anticipated Interview Date: Wednesday 3, Friday 5 & Tuesday 9 February 2021.

#### Job Purpose:

To undertake research within the School of Electronics, Electrical Engineering and Computer Science with a focus to develop areas of computer science appropriate to the School's Research Strategy, within the areas of Artificial Intelligence, Software Engineering and Cyber Security (Software). Successful candidates will also teach undergraduate and postgraduate students in the School, and the role holder will contribute to the School administration/outreach activity, specifically developing links with a range of international and local industry partners.

## Main Activities / Responsibilities

#### Research:

- 1. To lead and undertake research in line with the School's Research Strategy that is of a quality that is internationally excellent in terms of originality, significance and rigour.
- 2. Supervise relevant research programmes within the School's research structures individually and as part of a team.
- 3. 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.
- 4. 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/Professor), or potential to attract external funding, including individual fellowships (Lecturer).
- 5. To work as part of a team to undertake innovative, ambitious impactful research programmes.
- 6. Demonstrate and enhance relevant measures of esteem that will strengthen the international reputation of the School.
- 7. Demonstrate tangible research impact (Senior Lecturer/Reader/Professor) 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).
- 8. 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.
- 9. Build and lead an active team of high-quality post-graduate research students, research assistants and post-docs (Senior Lecturer/Reader/Professor) or demonstrate ability to engage, mentor and develop post-graduate or post-doctoral researchers (Lecturer).
- 10. 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/Professor).

## Teaching:

- 1. 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 including lectures, setting/marking coursework, and practicals according to own area of subject specialism.
- 2. Supervise undergraduate and postgraduate taught students in practical and project-based work as appropriate to the relevant courses of study.
- 3. Contribute to the development and enhancement of quality teaching within the school or faculty, ensuring that course design and delivery comply with the appropriate benchmarks and regulations and are highly marketable.
- 4. Contribute to student recruitment (including Open Days etc.) and student support mechanisms e.g. Personal Tutor Scheme.

- 5. 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.
- 6. Lead major elements of programme development, including new course structures and curricula (Senior Lecturer/Reader/Professor).
- 7. As required manage major teaching administrative functions such as accreditation and quality enhancement (Senior Lecturer/Reader/Professor).
- 8. Deliver more challenging modules e.g. specialist MEng or Masters modules (Senior Lecturer/Reader/Professor).

#### Citizenship:

- 1. Contribute to the School's outreach and internationalisation strategies by developing external links.
- 2. Act as internal and external examiner for undergraduate and postgraduate students and programmes (Senior Lecturer/Reader/Professor).
- 3. Carry out designated School administrative duties including, for example, committee work, working group leadership or course administration.
- 4. Demonstrate experience in administration and leadership roles (Senior Lecturer/Reader/Professor).
- 5. Demonstrate leadership ability via strong contribution to existing School activities or new initiatives that help the School achieve its key objectives.
- 6. 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/Professor).
- 7. Act as mentor or appraiser to colleagues advising on their personal development and ensuring that they are meeting the standards required (Senior Lecturer/Reader/Professor).
- 8. Contribute to relevant professional bodies; engage in consultancy for industry and community organisations (Senior Lecturer/Reader/Professor).
- 9. Active participation in and support of the Personal Development Review (PDR) process.

## **Essential Criteria:**

- 1. PhD (SL/R/P) or (L) about to obtain a PhD in Computer Science, or closely related discipline.
- 2. High quality research (commensurate with career stage) in Artificial Intelligence, Software Engineering or Cyber Security (Software) as evidenced by verifiable involvement in the generation of milestone papers in leading conferences and journals, noteworthy demonstrators, internationally leading capability, major funding initiatives. Evidence of independent contribution in research projects and outputs and potential to establish an independent sustainable research program.
- 3. Candidates at Professorial level are expected to be internationally leading authorities within their subject specialism and demonstrate ability to provide strategic research leadership at the national and international level.
- 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 Professor grade), 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 or Professor Grade).
- 7. Teaching experience commensurate with career stage, including undergraduate or postgraduate teaching, project supervision, assessment and feedback experience.
- 8. For candidates at the grade of Senior Lecturer, Reader, or Professor, a strong track record of leadership, demonstrated as evidence of major initiatives that significantly improved education, research or administrative processes.
- 9. Contribution to a wider range of community outreach programmes/initiatives in designing and delivering innovative new programmes.
- 10. A record of collaboration with and links to industry, or other activities aiming at achieving broader societal and economic impact.
- 11. 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.
- 12. Ability to communicate complex information effectively.
- 13. Involvement in productive external collaboration.
- 14. Ability to provide effective leadership (at a more strategic level for Senior Lecturer/Reader/Professor).
- 15. Understanding of resource management processes and skills to apply them effectively.
- 16. \*Clearly identify the academic level you are applying for (Lecturer/Senior Lecturer/Reader/Professor) on your cover letter.

# **Desirable Criteria:**

- 1. Completed PGCHET (or equivalent) with HEA membership.
- 2. Significant research expertise in relevant areas depending on academic position.
- 3. Strong teaching evaluations or peer reviews of teaching.
- 4. Teaching awards.
- 5. Measurable societal and economic impact, in particular contribution to industry roadmaps and technology transfer to industry, with associated evidence.