

**Job Description**

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| Job Title: | Lecturer in Computer Science |
| Faculty/Department: | School of Engineering and Computer Science |
| Reporting to: | Head of School |
| Duration: | Continuing |
| Job Family: | Academic |
| Pay Band: | 7 |
| Benchmark Profile: | Teaching and Research Band 7 |
| DBS Disclosure requirement: | No |
| Vacancy Reference: | FS0316 |

**Details Specific to the Post**

**Background and Context**

The School of Engineering and Computer Science is internationally recognised as a centre for excellence in teaching and research. We have a thriving undergraduate and postgraduate provision, which is supported by friendly staff and state-of-the-art commercial and research facilities. The Computer Science subject group currently has 30 academic staff, more than 50 postgraduate students and around 780 undergraduate students. We offer a portfolio of undergraduate and taught postgraduate programmes in Computer Science, including specialisms in games programming, robotics and software engineering.

We have a strong reputation for the employability of our students and have well-established partnerships with companies such as Microsoft, Sony, Black Marble and Electronic Arts. We also work closely with local industry groups and our Local Enterprise Partnership. We have developed a self-sustaining commercial software development unit, Software Engineering Experience Development (Seed), which provides the opportunity for guaranteed industrial experience as part of our degrees as well as a commercial context for many projects.

Our vibrant and active research community is organised into four interacting groups and appointees would have the opportunity to join one or more of these groups.

* Virtual environments and human computer interaction
* Dependable Intelligent Systems
* Big data analytics
* Robotics and autonomous systems

Our key research directions span these research groups and are aligned with University strategic developments.

The University is now in an exciting period of improvement and investment in infrastructure and facilities. Computer Science is playing a pivotal role in this transformation, with the development of new programmes areas such as cybersecurity and robotics, and the development of innovative new research and teaching spaces. To support this growth of the School, we are seeking to appoint a dynamic and enthusiastic lecturer with a proven research track record to build critical mass in one of our key areas. We welcome applications from candidates with experience relevant to any of our research areas, but are particularly seeking those with a track record in cybersecurity, networking and privacy systems research to help grow an embryo group of academic staff working in this area and to help capitalize on enterprise opportunities.

The Department places a strong emphasis on computer programming and software development and many of our research activities are based around software developed within the department. We highly value student involvement in research and enterprise activities and in addition to regular networking events run to match students to local companies for placements we also run internship schemes of our own to encourage software development experience and to assist students along their pathways to employment in the computing industry or involvement with the research groups in postgraduate research.

### Specific Duties and Responsibilities of the post

This vacancy is for a full-time continuing lecturer in Computer Science. The post holder will contribute to research and teaching within the Department and have research interests that complement and extend our current strengths and research groups.

Specific duties are:

#### To obtain research funding and provide high quality outputs and publications in Computer Science or related disciplines.

* To develop and deliver undergraduate and taught postgraduate curricula.
* To support and mentor postgraduate research students in the development of their research careers.
* To play an active role in the life of the Department, by supporting activities around research, teaching, enterprise, student experience and widening participation.

Post holders will be given time and encouragement to develop their research further; initially receiving a reduced teaching load.

Internationally excellent research is expected of all academic colleagues in the Department. Recent appointments have built upon on existing strengths to create a strong REF submission.

In your covering letter please refer directly to the criteria, given in the person specification below. Applications are assessed by the selection panel according to these criteria.

**GENERIC JOB DESCRIPTION**

The job duties and responsibilities listed below are intended to describe the general nature of the role. The duties and responsibilities and the balance between the elements in the role may change or vary over time depending on the specific needs at a specific point in time or due to changing needs in the department. Candidates should note that there may not be an immediate requirement to carry out all the activities listed below.

### Overall Purpose of the Role

The standard academic role at the University includes a combination of teaching, research, scholarship and administration. While all roles will combine these areas of work, the relative weight of each will vary from level to level and over time for individual role holders.

This is typically the entry level post for an academic career and the duties and responsibilities are appropriate for the early stage academic. It is expected that role holders will be developing their skills and competencies in a way which will promote growth into the full academic role.

Newly appointed Teaching and Research staff at this level will teach as a member of a teaching team in a developing capacity within an established programme of study, with the support of a mentor as per induction procedures.

The role holder:

* Will develop research objectives and proposals for own or joint research and conduct individual and collaborative research projects.
* May oversee postgraduate students and act as a personal tutor for students within the department.

**Main Work Activities**

### Teaching and Learning

1. Teach in a variety of settings from small group tutorials to large lectures
2. Identify learning needs of students and define appropriate learning objectives
3. Ensure that content, methods of delivery and learning materials will meet the defined learning objectives
4. Develop own teaching materials, methods and approaches with guidance
5. Develop the skills of applying appropriate approaches to teaching
6. Seek ways of improving performance by reflecting on teaching design and delivery and obtaining and analysing feedback
7. Translate knowledge of advances in the subject area into the course of study
8. Select appropriate assessment instruments and criteria, assess the work and progress of students by reference to the criteria and provide constructive feedback to students
9. Supervise the work of students, provide advice on study skills and help them with learning problems

**Research**

* Identify and conduct own or joint areas of research
* Develop research objectives and proposals of own or joint research
* Write up research work for publication
* Continually update knowledge and understanding in field or specialism
* Prepare proposals and applications to external bodies, e.g. for funding and accreditation purposes
* Engage in continuous personal development
* Write and submit titles and abstracts for conference papers

**Relationships and Team working**

* Liaise with colleagues and students
* Build internal contacts and participate in internal networks for exchange of information and to form relationships for future collaboration, for example faculty committees
* Join external networks to share information and identify potential sources of funds
* Collaborate with academic colleagues on course development, curriculum changes and the development of research activity
* Attend and contribute to subject group meetings
* May be expected to act as Module leader
* Contribute to collaborative decision-making with colleagues on academic content, and on the assessment of students’ work
* Share responsibility in deciding how to deliver modules and assess students

### Additionally the post holder will be required to:

* Fulfil the employees’ duties described in the University’s health and safety policies and co-operate with the health and safety arrangements in place within the department. May be required to undertake specific health and safety roles on request e.g. Display screen equipment assessor, departmental safety officer, fire warden
* Show a commitment to diversity, equal opportunities and anti-discriminatory practices This includes undertaking mandatory equality and diversity training
* Comply with University regulations, policies and procedures
* Where a candidate cannot demonstrate experience of teaching and /or they do not already hold a Postgraduate Certificate in Academic Practice, they will be required to undertake a Postgraduate Certificate in Academic Practice if successful. Proven experience of teaching would include sufficient breadth or depth of specialist knowledge in the discipline and of teaching methods and techniques

**PERSON SPECIFICATION – Teaching and Research Band 7**

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| **Specification** | **Essential** | **Desirable** | **Examples Measured by** |
| **Education and Training**  Formal qualifications and relevant training | * A good degree and a PhD or equivalent in relevant discipline | * Recognised qualification in Higher Education teaching. * Recognised professional accreditation | Application |
| **Work Experience**  Ability to undertake duties of the post | **Evidence of:**   * Ability to teach effectively at undergraduate and postgraduate level in a variety of teaching modes * An emerging track record of high quality research output, with publications in high-impact factor journals * Research experience in relevant research themes * Supervision of undergraduate and postgraduate research projects | * Involvement in applying for research funding * Experience in developing new programmes | Application  Interview  Other |
| **Skills and Knowledge**  Includes abilities and intellect | **Evidence of:**   * An active contribution to University activities such as committees and research groups * An extensive knowledge and understanding of undergraduate and postgraduate Computer Science * An ability to communicate complex conceptual ideas to widely divergent audiences * Experience of teaching at undergraduate level | * A creative research vision for development, implementation and delivery of successful research projects | Application  Interview  Other |
| **Personal Qualities**  Includes any specific physical requirements of the post – (subject to the provisions of the Equality Act 2010) | **Evidence of:**   * A positive contribution to University activities and initiatives including open days, graduation ceremonies etc and expectation to undertake administrative activities * Working in an open and transparent way, providing information and communicating effectively with colleagues * Collaborative working, particularly on interdisciplinary projects * Continuous Professional Development |  | Interview  Other |