

## Academic Role Profile

<b>Job Title:</b>	Professor
<b>Responsible to:</b>	Head of Department or Faculty
<b>Responsible for:</b>	Research staff employed on programmes and awards directed by the post holder. May have supervisory responsibility for other staff.

<b>Job Summary and Purpose</b>
To develop and lead a significant programme of research in line with the Faculty's research strategy, attracting and securing significant research funds.
To provide academic leadership in undergraduate and postgraduate courses within area of expertise.

<b>Main Responsibilities/Activities</b>
<b>To develop the research activities of the Faculty and the University by:</b>
Leading a significant programme of research, sustaining an extensive track record of published research findings in appropriate, peer reviewed research journals and/or monographs to maintain and enhance expert reputation in own subject area.
Planning, co-ordinating and leading a significant programme of research in accordance with a specific project plan through a research team or a group of staff involved in research. Managing the financial and physical resources associated with the research activities. Supervising and guiding the work of staff and research and doctoral students on own specialist area.
Leading innovative research proposals and submitting funding bids, winning support for them and planning the research to be taken, as a self-contained item or as part of a broader programme. Obtaining and sustaining research, consultancy, and other additional funding
Seeking collaborative research opportunities with other members of Faculty staff and develop multidisciplinary research links with other parts of the University where appropriate.
Developing research activities which extend current thinking in the subject area, thereby enhancing the reputation of the Faculty and the University.
Maintaining an expert reputation in own subject area and providing appropriate guidance to staff and students
Engaging in external activities in accordance with the Faculty's research strategy at a national and international level. Such activities will include membership of committees of academic and professional bodies, external examining, editing journals and contribution to professional networks, national and international meetings, societies and bodies (including governmental ones).
Engaging in external activities in accordance with the Faculty's research strategy at a national and international level. Such activities will include contribution to professional networks, national and

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international meetings, societies and bodies (including governmental ones).

Attending appropriate national and international conferences for the purpose of disseminating research results.

Leading major funding bids which develop and sustain research support for the specialist area and advance the reputation of the Faculty and the University.

Sustaining and developing professional expertise and maintaining the requirements for registration with the appropriate body (*for academics with clinical links only*).

Contributing to the wider national and international academic community general life and work of the University through, for example, editing journals and refereeing papers.

### **To develop the teaching activities of the Faculty by:**

Providing academic leadership at undergraduate and/or postgraduate level, as appropriate, by leading the development of new teaching methods and designing programme units and taking responsibility for the quality of programme units.

Taking an active role in teaching at undergraduate and postgraduate level; planning, delivering and critically reviewing a range of teaching and assessment activities including lectures.

Setting/marketing programme work, practical sessions, supervisions, fieldwork and examinations according to own area of subject specialism, and providing appropriate feedback to students.

Taking part in activities such as validating and examining in relation to the University's associated institutions.

### **To engage in scholarship by:**

Continually updating knowledge and understanding in the field or specialism. Extending, transforming and applying knowledge acquired from scholarship to teaching, research and appropriate external activities.

### **To undertake pastoral care of students by:**

Using listening, interpersonal and pastoral care skills to deal with sensitive issues concerning students and provide support. Appreciating the needs of individual students and their circumstances. Acting as personal tutor and giving first line support. Taking responsibility for the initial resolution of all student issues within and outwith standard procedures, and ensuring that an appropriate framework is developed and used for pastoral care issues.

### **To contribute to the efficient management and administration of the Faculty, the University and the wider academic community by:**

Performing personal administrative duties throughout the Faculty and the University as are recognised by the University as properly within the remit of role of professor, such as research group leader and roles associate with teaching programmes, as allocated by the Head and contributing to the general life and work of the University.

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Advising, supervising and giving guidance to other staff. Taking overall responsibility for the welfare of staff drawing on specialist advice and support.

### Person Specification

#### The post holder must have:

A higher professional qualification, normally a doctoral degree or equivalent

Outstanding qualities and achievements in scholarship and research at a national and international level which have made a significant contribution to the advancement of their subject

Significant academic publication record

Evidence of leadership in research, including postgraduate research supervision

Teaching programmes, and/or internationally recognised textbooks.

Evidence of securing a significant amount of sustained research funding

Proven management and leadership qualities at a senior level

Proven administrative ability at a senior level

Evidence of contributions to conferences, professional meetings and societies at an international level and evidence of achievements in other external activities at an international level.

Evidence of high quality teaching at undergraduate and postgraduate level

### Relationships and Contacts

Professors are expected to accept invitations to serve on national and international bodies, including governmental bodies. They will also be expected to contribute to the University by taking on roles that enable the University to meet its administrative needs.

To attract research funding, a Professor will be expected to liaise with existing and potential sponsors.

Teaching and administrative duties will be allocated by the Head of Faculty, within the context of the teaching programmes agreed by the Faculty Learning and Teaching Committee

### Special Requirements

The post holder is expected to work outside normal office hours as necessary.

#### All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:

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- Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
- Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.

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<b>Job Title:</b>	Reader
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<b>Responsible to:</b>	Head of Faculty
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<b>Responsible for:</b>	Research and support staff employed on projects for which the post holder is Principal Investigator, and students on programmes and awards that are the responsibility of the post holder.
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<b>Job Summary and Purpose</b>
To make a significant contribution to the advancement of own specialist area which is recognised at national and international level. To undertake research in line with the Faculty's research strategy and to contribute to undergraduate and postgraduate teaching programmes.

<b>Main Responsibilities/Activities</b>
<b>To develop the research activities of the Faculty and the University (in collaboration with others in the discipline where appropriate) by:</b>  Demonstrating leadership in research, including postgraduate research supervision.  Planning, co-ordinating and leading research activities in accordance with a specific project plan through a research team or a group of staff involved in research. Managing the financial and physical resources associated with the research activities. Supervising and guiding the work of staff and research and doctoral students on own specialist area.  Leading innovative research proposals and submitting funding bids, winning support for them and planning the research to be taken, self-contained item or as part of a broader programme. Obtaining and sustaining research funding.  Sustaining an extensive track record of published research findings in high quality journals, or other media and at internationally recognised conferences.  Maintaining an expert reputation in own subject area and providing advice and guidance to staff and students.  Engaging in external academic activities in accordance with the Faculty's research strategy at a national level and international level. Such activities will include membership of committees of academic and professional bodies, external examining, editing journals and contribution to professional networks, national and international meetings, societies and bodies (including governmental bodies).  Sustaining and developing professional expertise and maintaining the requirements for registration with the appropriate body ( <i>for academics with clinical links only</i> ).  <b>To support the teaching activities of the Faculty by:</b>

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Leading/developing teaching methods, designing undergraduate and postgraduate programmes, pursuing new teaching approaches.

Teaching, training and supervising students (including research students), tutor industrial/professional training year students and external examining according to own area of subject specialism.

Setting/marketing programme work, practical sessions, supervisions, fieldwork and examinations according to own area of subject specialism.

Taking part in activities such as validating and examining in relation to the University's associated institutions.

**To engage in scholarship by:**

Continually updating knowledge and understanding in the field or specialism. Extending, transforming and applying knowledge acquired from scholarship to teaching, research and appropriate external activities.

**To undertake pastoral care of students by:**

Using listening, interpersonal and pastoral care skills to deal with sensitive issues concerning students and provide support. Appreciating the needs of individual students and their circumstances. Acting as personal tutor and giving first line support. Taking responsibility for dealing with referred issues for students within own educational programmes, and providing first line support for colleagues, referring them to sources of further help if required.

**To contribute to the efficient management and administration of the Faculty, the University and the wider academic community by:**

Performing personal administrative duties such as research group leader and roles associated with teaching programmes, as allocated by the Head of Faculty and contributing to the general life and work of the University.

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### Person Specification

It is essential that the post holder possesses a higher professional qualification, normally a doctoral degree

Demonstrated outstanding qualities and achievements in scholarship and research at a national and international level

Significant academic publication recorded in refereed journals

Evidence of leadership in research, including postgraduate research supervision

Evidence of a record of sustained research funding

Evidence contributions to conferences, professional meetings and societies at an international level and evidence of achievements in other external activities at an international level

Evidence of high quality teaching at undergraduate and postgraduate level

### Relationships and Contacts

The post holder will take a leading role in the setting of strategic objectives for their research theme. New appointees will be assigned a senior colleague to guide their development and aid their integration into the Faculty and into the University. Teaching and administrative duties will be allocated by the Head of Faculty, and will include roles related to both taught programmes and research activities across the Faculty.

### Special Requirements

To attend national and international conferences for the purpose of disseminating research results.  
To be able to participate in residential field work, in the UK or overseas, according to own area of subject specialism.

To lead major funding bids, which develop and sustain research support for the specialist area and advance the reputation of the Faculty and University.

The post holder is expected to work outside normal office hours as necessary.

### All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
  - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
  - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.

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### **Addendum**

This document provides additional information relating to both specific aspects of the post/Faculty and any post specific person specification criteria. The information contained within this document should always be read in conjunction with the accompanying generic Job Purpose.

<b>Job Title:</b>	Reader/Professor of Machine Learning and Artificial Intelligence
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### **Background Information/Relationships**

#### **Department of Computer Science (CS):**

The Department is part of a new School of Computer Science and Electronic Engineering with around 75 academics, 20 professional services staff, 25 technical support staff and 130 research fellows. The Department of Computer Science has 28.5 FTE academic staff, 5 associate staff, 5 professional services staff and about 700 students who are studying on a range of programmes from BSc and MSc. We have an MSc in Information Security and an MSc in Data Science. We offer two main routes of accreditation for our programmes: BCS and GCHQ. The Department also has three main strands of research: machine learning, cyber security, and distributed/networked systems. The Department is home to the Surrey Centre for Cyber Security, which is one of the 19 Academic Centres of Excellence in Security research recognised by NCSC and which is formed of two research groups: Secure Systems and Distributed and Networks Systems.

#### **Faculty:**

The University of Surrey is organised into three Faculties. The Faculty of Engineering and Physical Sciences (FEPS) which is made up of Schools and Departments including the Departments of Chemical and Process Engineering, Chemistry, Civil and Environmental Engineering, Computer Science, Electrical and Electronic Engineering, Mathematics, Mechanical Engineering Sciences and Physics alongside the Centre for Environment and Sustainability. All departments have a strong reputation for excellence in research and teaching, allied to a strong enterprise culture and an unrivalled record of graduate employment. Our members of academic staff are well respected, both nationally and internationally, amongst the many areas of academia and industry with which we interact.

#### **Relationships:**

The appointee will report to the Head of Department. S/he will establish working relationships with staff (including other academics, researchers, and support staff) and students in the Department in addition to staff in the wider Faculty and university, as appropriate. S/he will liaise with industry partners and external bodies informally and formally, as necessary.

### **Person Specification**

This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role. This is in addition to the criteria contained within the accompanying generic Job Purpose.

	<b>Essential/ Desirable</b>
A higher research degree (PhD)	E
World class research performance (incl. an exceptional and continuing publication record, and a proven and continuing strong track record of external research grant income generation)	E
A proven track record in academic leadership	E
A proven track record in successfully supervising PhD students	E

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Evidence of high-quality teaching	E
Evidence of scholarly contributions to conferences, professional meetings and societies at an international level, and evidence of achievements in other external activities at an international level	E
Excellent communication, inter-personal and networking skills	E
Demonstration of developing of industrial collaborations	E
Evidence of innovation in attracting external research income	D
Evidence of specifying research and impact strategies	D
Proven ability to present ideas to senior figures in industry and government	D
<b>Key Responsibilities</b>	
<p>This document is not designed to be a list of all tasks undertaken but an outline record of any faculty/post specific responsibilities (5 to 8 maximum). This should be read in conjunction with those contained within the accompanying generic Job Purpose.</p> <ul style="list-style-type: none"> <li>1. Develop and lead a research portfolio in machine learning and artificial intelligence</li> <li>2. Sustain an outstanding track record of publication of high-quality research findings in top-tier international conferences and journals</li> <li>3. Maintain an excellent level of research funding, leading and coordinating large multi-disciplinary or multi-Faculty bids involving collaborative groups</li> <li>4. Potentially take over the strategic leadership and headship of the NICE group</li> <li>5. Manage resource planning associated with research projects, including recruiting and supporting staff and postgraduate students</li> <li>6. Provide academic leadership at undergraduate and postgraduate level, taking an active role in planning and delivering teaching and assessment activities, fulfilling the roles of supervisor and personal tutor, and delivering pastoral care and support</li> <li>7. Enhance reputation in own subject area by engaging in external activities at national and international level such as contributions to professional networks, conferences, societies, professional and/or government bodies, and editing/refereeing journals and papers</li> <li>8. Perform administrative duties throughout the Centre/Department/Faculty/University, contributing to the general life and work of the University</li> </ul> <p><b>N.B. The above list is not exhaustive.</b></p>	