University of Sunderland
Role Profile
Part 1

lifechanging · **University of Sunderland**

Associate Professor in Computer Science

Job Title:	Associate Professor (Research) in Computer Science
Reference No:	n/a
Reports to:	Associate Head of School / Head of School
Responsible For:	n/a
Grade:	Grade G
Working Hours:	37 hours per week for nominal purposes
Faculty/Service:	Faculty of Technology, School of Computer Science
Location:	Sunderland Campus
Main Purpose of Role:	To make a substantial contribution of the aims of the University, as presented in the University Strategic Plan, through the enhancement of the University's public reputation as a centre for academic excellence. To undertake a full and active role in the life of the University, enhancing its public reputation as a centre of research, enterprise and innovation and learning and teaching. To provide effective academic leadership through the close co-operation with academic colleagues both internal and external to the University. To align research technically to the focus of the faculty, and specifically the School of Computer Science, including Cyber Security, Computer Science, AI and Machine Learning. To support the teaching and learning of Data Science related provision at Postgraduate level, fostering a research-led culture within the curriculum.
Key Responsibilities and Accountabilities:	**Generic Responsibilities** • Be returned in the Research Excellence Framework (REF), producing high quality research output normally with at least one output of international quality per academic year and at least five over a REF period. • Lead or contribute to research projects that demonstrate REF impact. • Contribute to applications for and securing research income from such bodies as the research councils, charitable and scientific foundations, commercial enterprises, government and other sponsors. • Provide or support academic leadership through close cooperation with academic colleagues both internal and external to the University. • Assist colleagues in the University to develop their research, scholarly activity and education through such means as joint publications and the provision of expert advice through subject area knowledge. • Supervise postgraduate research students. • Undertake activities indicative of professional esteem e.g. chairing external

networks, journal editing, peer review activities or presenting key note talks.

- Contribute to University, Faculty or school governance and/or research development research strategies by defining research objectives and questions.

- Be included in the University's Expert Register and be available to represent the University and their area of expertise in the media and in other contexts.

- Represent the University on appropriate regionally and nationally recognised bodies.

- Contribute to the successful development of the University and its communities through institutional citizenship and participation in activities that promote academic success.

- Teach undergraduate and postgraduate students to the highest professional standard.

- Perform other duties as the Academic Dean or Deputy Vice-Chancellor (Academic) may from time to time determine.

Faculty / Departmental Specific Responsibilities:

- Contribute on a sustained basis in learning and teaching where appropriate for the discipline.

- Support the design of new and current programmes appropriate to the discipline ensuring research-informed curriculum (UG) and research-led curriculum (PG).

- Successful and sustained performance in significant administrative roles, e.g. chairing boards where required, school PGR officer

- Manage research activities and / or supervise other research staff.

- Provide expert advice to staff, students and collaborators, both within the discipline and across other subject areas.

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Role Profile
Part 2

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Part 2A: Essential and Desirable Criteria

These criteria are assessed at the short listing stage.

The essential criteria must be met in order to be eligible for interview.

Essential

Qualifications and Professional Memberships:

- A PhD in Computer Science, Data Science or related discipline.

- A proven record of substantial contribution to the aims of the University as presented in the University Strategic Plan and a demonstrable ability to enhance the University's public reputation as a centre for research.

Significant measurable achievements in the following criteria:

- Research:
A recognised academic scholar, making significant contributions to the furtherance of knowledge and its application to society through appropriate forms of dissemination and engagement.

Essential (Faculty / Department Specific):

- An international track record / reputation.

- A strong knowledge of a relevant subject area such as Artificial Intelligence, Data Science, Computer Science or related area.

Essential (Knowledge and Experience):

Research Activity and Leadership

- A track record of peer-reviewed publications (and/or other forms of public output) of international quality.

- Effective contribution to a research unit or research team.

- Successful contribution to the delivery of individual or group research projects.

- Track record of achieving external funding from bodies such as government, third sector foundations or industry.

- Track record of doctoral supervision.

Research Environment and Impact

- Active engagement in consultancy and/or community activities.

- Contributed to the organisation of research conferences, symposia or other public events related to research.

Professional Esteem

	• Refereeing for funding agencies, conferences, journals or learned bodies. • Invited presentations at national and international conferences or other events. • Representation of the University externally.
	Desirable (Generic): • Instigated research networks and other collaborative activities, including with external partners. • Introducing scholarship in a new research area, involving colleagues and/or external partners. • Contribution to PGR student developmental opportunities, within the Faculty and/or across the University. • Experience as an editor for national/international journals. • Active membership of a relevant professional body. • Contribution to the national/international research environment, policy landscape and/or practice.
	Desirable (Faculty/ Department Specific): • HEA Fellow or Senior Fellow accreditation. • Ability to design, deliver, assess, and revise teaching programmes. • Experience in developing appropriate approaches to learning and teaching and advising colleagues.

Part 2B: Key Competencies

Competencies are assessed at the interview/selection testing stage	**Research and Academic Leadership** • Stimulates new knowledge and considers multiple perspectives. • Has an excellent understanding of strategic direction and intellectual developments of a research area. • Contributes to the integrity and future vibrancy of the research area. • Recognises the value of alternative research paradigms and is able to work in, and support others working in, an inter-disciplinary way. • Creates and /or employs relevant research methodologies. • Is a role model; shares results; creating opportunity for others. • Nurtures talent; mentors and develops skilled researchers. • Inspires communities of international researchers and exercises international influence
	Analytical and Critical Thinking • Has well developed analytical abilities with knowledge of a range of methods. • Applies understanding across disciplines/research areas/agendas and beyond academia. • Is a creative critical thinker, acknowledged nationally and internationally. • Stimulates critical thinking at discipline/research area and policy levels. • Creates evaluation processes and evaluates progress, impact and outcomes for national/international organisations and/or projects. • Leads a research agenda by making major contributions to understanding. • Asks the pertinent questions and designs projects that challenge traditional

thinking in general and progress research themes.
- Continuously seeks ways to improve own performance and that of less experienced researchers and/or team/department/institution.

Creativity, Insight and Innovation

- Anticipates cutting-edge questions.
- Encourages challenge and inspires curiosity.
- Makes connections between previously unrelated issues.
- Influences and stimulates the intellectual agenda for the discipline/research area.
- Goes beyond recognising to realise the potential of ideas. Drives and delivers innovative research projects.
- Encourages, inspires and works with others; actively seeks collaborations for inter-disciplinary research.
- Pioneering and takes intellectual risks appropriately.

Personal Qualities

- Sets expectations and standard of conduct.
- Advises all staff and contributes to institutional and disciplinary policy/practice.
- Engages and encourages the development of well-being in academic and non-academic colleagues.

Collaborating and Networking

- Actively creates and champions opportunities for others within and outside academia. Is responsive to collaborative opportunities across disciplines/research areas and with non-academic organisations.
- Is globally renowned; becomes international authority and leading speaker on own focal topic and related areas.
- Actively champions the reputation of the discipline/research area and own institution.
- Has influential connections with significant bodies and organisations; has high impact on society through academic and non-academic bodies and organisations
- Involves people in decision making and leadership roles, promoting their autonomy.

Engagement and Impact

- Leads teaching programmes and their evaluation/quality assurance Procedures.
- Pursues opportunities to develop research-informed teaching. Actively encourages and promotes a culture that links research and teaching.
- Mentors supervisors of postgraduate researchers.

Date Completed:	May 2022