University of Sunderland

Role Profile

Part 1



Senior Lecturer	
Job Title:	Senior Lecturer
Reference No:	n/a
Reports to:	Principal Lecturer Team Leader
Responsible For:	n/a
Grade:	Grade F
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:	 Computer Science – technical areas such as Computer Vision, Programming, AI, Data Science, Database Systems, Robotics, IOT Games Development – Games Programming, VR/AR development, Asset Development, 3D modelling, Programming Cybersecurity and Digital Forensics – including Encryption, Hacking, Security, Data Recovery MSc – Data Science/Computer Science/Cybersecurity – including AI/ML, and frameworks and technologies such as Python, Tensorflow, Keras, Big Data To be actively involved in research and outreach activities that informs cutting-edge, high-quality teaching, and contribute to the administration and development of modules and programmes across the computer science portfolio and curriculum. To engage in activities including but not limited to providing technical, cutting-edge, high-quality teaching, undertake programme leadership roles and responsibilities.

Key Responsibilities and Accountabilities:

Faculty Specific:

- Actively contribute to the research activity of the school by undertaking high-quality collaborative research, raising the profile of research in the school and actively investigating external funding opportunities
- Represent the School/Faculty to raise the external profile by establishing close working relationships with regional and national computer science networks and employers so as to enhance the student experience
- Participate in internal networks/committees as appropriate, focusing on research collaboration opportunities across the University
- Contribute to the enhancement of quality in teaching, development of curricula and innovative teaching methods in the UG and PG curriculum
- To develop the subject knowledge of the UG and PG students
- Setting and marking student academic work, supervising student placements and student research, and providing timely feedback to students
- Provision of pastoral and academic support to students at all levels
- To be involved in reach out activities related to computer science
- To be involved in supporting TNE and Sunderland Online activities as appropriate
- You may be asked to perform other duties occasionally which are not included above, but which will be consistent with the role

Special **Circumstances:**

Liaison with our Campuses in London and Hong Kong as well as our Transnational Education (TNE) partners located globally.

Actively participate in Open Days and Student recruitment activities, some of which will take place during evenings and weekends.

Part 1 B:

Generic to all Senior Lecturer roles (Building on the demands of Lecturer):

Individuals carry out a range of duties and have responsibility taken from the following. Whilst it is not anticipated that all of the activities listed below will be covered by one individual, it is expected that over time all individuals will make a balanced contribution to the three areas of academic activity (research, teaching and learning and reach-out).

Academic Practice

- Design, plan, review and innovate in activities and materials that support student learning and deliver either across a range of modules or within a subject area.
- Use appropriate teaching, learning support and assessment methods.
- Supervise student projects and, where appropriate, field trips and placements.
- Identify areas where current provision is in need of revision or improvement.
- Contribute to the planning, design and development of objectives and material.
- Set, mark and assess work and examinations and provide feedback to students.
- Develop and implement personal research and reach-out plans.
- Conduct individual and/or collaborative research projects.
- Identify sources of funding and contribute to the process of securing funds and subsequently plan and deliver projects that are funded, as Co-Investigator or possibly as Principal Investigator.
- Extend, transform and apply knowledge acquired from scholarship and research to teaching and to reach-out activities.
- Write or contribute to publications or disseminate research and reach-out findings using other appropriate media such as presentations at conferences or exhibition of work in other appropriate events.

- Maintain knowledge and understanding at the forefront of the academic discipline and, if appropriate, also at the forefront of the relevant area of professional practice.
- Provide expert advice through subject area knowledge, understanding and know-how to students, researchers and other academic colleagues.

Communication

- Routinely communicate complex and conceptual ideas to those with limited knowledge and understanding as well as to peers using high level skills and a range of media.
- Encourage in others commitment to learn.

Liaison and Networking

- Participate in and develop external networks, for example to identify sources of funding, contribute to student recruitment, secure student placements, market the institution, facilitate reach-out, generate income, obtain consultancy projects, or build relationships for future activities.
- Engage in some external discipline-related responsibilities such as subject network activity, peer review, refereeing.

Managing People

- Engage in some supervisory or managerial responsibility for researchers, other grant-funded staff or research students and provide support for other staff in their own personal development activities including acting as mentor for colleagues with less experience and advising on personal development.
- Contribute to effective management of the Academic Area by performing duties outside of immediate academic practice, as agreed with the staff team leader or Associate Dean.

Teamwork

- Act as a responsible team member in Academic Area, School and University groups and develop productive working relationships with other members of staff.
- Collaborate with colleagues to identify and respond to students' needs.

Pastoral Care

- Could be expected to act as a module or personal tutor.
- Be responsible for the pastoral care of students within a specified area.

Initiative, Problem Solving and Decision Making

- Identify the need for developing the content or structure of modules with colleagues and make proposals on how this should be achieved.
- Develop ideas for generating income.
- Develop ideas and find ways of disseminating and applying the result of research and reach-out.
- Advise others on strategic issues such as student recruitment and marketing.
- Contribute to the accreditation of courses and quality assurance and enhancement processes.
- Contribute pro-actively to decision making within the academic staff team and possibly within the Academic Area.
- Comply with the University's expectation of an individual member of academic staff in relation to their own self-monitoring, continuing professional development.

Planning and Managing Resources

- As module leader or tutor, co-ordinate with others (such as support staff or academic colleagues) to ensure student needs and expectations are met.
- Manage personal tasks including planning and delivery of teaching, research student programmes, research projects and other projects.

Sensory, Physical and Emotional Demands

• Balance the pressures of teaching, research, reach-out, academic management/administrative demands and competing deadlines.

Work Environment

- Depending on area of work and level of training received, may be expected to conduct risk assessment and take responsibility for the health and safety of others.
- Adhere to academic governance, equality and diversity, relevant health and safety and risk management requirements.

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Role Profile

Part 2



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:

 Hold a PhD in Computer Science or related discipline or be enrolled on a PhD or have extensive equivalent research or teaching and learning experience.

Experience:

- Have a track record in pedagogy and teaching and learning, curriculum development / design.
- Practical experience in computer programming environments and in particular in relation to computer science technologies e.g. Al/machine learning, computer vision, simulation, networking, cyber security, games development, etc.
- Actively supporting own practice through internal and external networks and innovating in Teaching and Learning.
- Experience in computer science research, or evidence of the capacity to be research active.
- Subscribed to EPSRC UKRI and Faculty strategy aims, such as applied technologies in Computer Science including Robotics, Autonomous systems, Data Science, Machine Learning, Healthcare though AI.

Key Knowledge and Expertise:

- Demonstrable evidence of active continuous professional development.
- Active membership of relevant Computer Science related professional bodies.

Desirable

Qualifications and Professional Memberships:

- Higher Education teaching qualification (e.g. PG Cert / PCAP)
- Higher Education Academy Fellowship status (FHEA)

Experience:

- Experience of mentoring colleagues on new learning and teaching methods
- Experienced as an External Examiner at (an)other HEI(s).

- Ability to design, deliver, assess and revise teaching programmes.
- A proven track record of contributing to the overall success of own and wider academic departments.
- Have a track record in grant income and publications record.
- Engagement with external T&L networks.
- Be part of external research groups and networks.

Key Knowledge and Expertise:

- Working with external industry partners on topics such as Knowledge Exchange, Apprenticeships, Employability, student placement opportunities.
- Evidence of grant proposal writing, as PI or CoI on individual or collaborative bids.

Special Circumstances:

Achievement of HEA Fellowship

Senior Lecturers without Higher Education Academic Fellowship status will be expected to achieve Fellowship within two years of commencing their role.

Part 2B: Key Competencies

Competencies are assessed at the interview/selection testing stage

Key Knowledge and Expertise (generic):

- Possess sufficient breadth or depth of specialist knowledge in the discipline to develop teaching, reach-out and research programmes.
- Able to make informed judgments on complex issues in specialist fields, often in the absence of complete data.
- Possess the qualities and transferable skills necessary for the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.
- Skills in managing and motivating staff (as appropriate) and in project management.

Analysis and Research:

- Gathers data rigorously and conducts robust analysis, questioning assumptions and existing knowledge.
- Develops hypotheses and concepts to explain data, events and phenomena.
- Reports findings to wider community and is able to withstand challenge by relying on evidence gathered and processes used for analysis.

Communication:

Oral

- Summarises and interprets complex, conceptual and special matters to aid others' understanding and aimed at their needs.
- Uses appropriate styles and arguments to influence and negotiate satisfactory outcomes.
- Monitors understanding of others, develops approach and takes corrective action if required.

Written

- Conveys information of a complex, conceptual and specialist nature using a range of styles and media selected to meet the needs of others.
- Presents complex information in formats appropriate to non-specialists without comprising meaning.

 Monitors the reactions of others and takes appropriate steps to remedy any miscommunications.

Decision Making:

Independent decisions

- Considers wider impact of decisions, assesses possible outcomes and their likelihood.
- Uses judgment to make decisions with limited or ambiguous data and takes account of multiple factors.
- Distinguishes between the need to make a decision, when to defer and when not to take a decision.

Collaborative decisions

- Helps others to explore options that initially appear to be inappropriate or unfeasible and recognise when a decision is or is not needed.
- Enables others to contribute to decisions.
- Ensures that options are weighed, outcomes identified and chances of success considered.
- Challenges decisions, appropriately to ensure consideration and processes are robust.

Provision of advice

- Anticipates and highlights issues that need to be taken into account.
- Outlines possible impacting factors, assessing their degree of influence on the choice of options.
- Ensures previous learning is included.

Liaison and Networking

Liaison

- Ensures that accurate information is passed on to the most appropriate people in a timely fashion to improve working practices.
- Co-ordinates own effort with that of others so the work is completed effectively in line with team objectives.
- Promotes a positive image of the Institution.

Participation in networks

- Works across team boundaries to build and strengthen working relationships.
- Shares information and ideas to help others develop their practice.
- Is involved in networks to pursue a shared interest as a requirement of the role.

Building internal networks

- Leads and builds role related external networks to enhance the work of the Institution.
- Actively seeks to build productive relationships between external bodies to benefit the Institution.

Pastoral Care and Welfare:

- Calms and reassures those in distress.
- Deals with difficult situations or confidential matters, according to policy and procedures.
- Involves others or refers elsewhere for assistance if the situation becomes more complex and if additional help or information is required.

Planning and Organising Resources

- Actively seeks information to support planning and prioritisation of work.
- Ensures that time and resources are used effectively to their maximum

efficiency.

- Checks and reports on progress and achievement against plans to key parties.
- Develops plans to take account of problems, delays and new priorities.
- Co-ordinates the work of others to improve performance and use of resources.
- Involves other areas appropriately and co-ordinates effort and resources so performance standards and shared objectives are achieved.
- Reviews performance and uses experience to make improvements to planning and organisation.

Service Delivery:

- Adapts services and systems to meet customers' needs and identifies ways
 of improving standards.
- Learns from complaints and takes action to resolve them.
- Collates feedback and views from customers and keeps up-to-date with market trends to inform service development and make changes.
- Actively promotes services.

Teaching and Learning Support:

- Contributes to the long term planning and development of learning programmes.
- Continuously reviews areas identified for improvement and develops content and delivery methods, learning support and assessment mechanisms.
- Mentors other staff outside the immediate work team.
- Reflects on own and others practice and develops insights into the learning process.

Date Completed:

May 2022