JOB DESCRIPTION

Job Title:	LECTURER (L) in Computing / Computer Science (multiple areas)	Grade:	AC2
Department:	School of Computing and Mathematical Sciences	Date of Job Evaluation:	Feb 2022
Role reports to:	Head of School of Computing and Mathematical Sciences		
Direct Reports	N/A		
Indirect Reports:	Programme Leaders		
Other Key contacts:	School Management Team, Faculty administration, School partner institutions		
This role profile is non-contractual and provided for guidance. It will be updated and amended from time to time in accordance with the changing needs of the University and the requirements of the job.			

PURPOSE OF ROLE:

To conduct high quality research and teaching on undergraduate and postgraduate programmes in Computing / Computer Science expertise areas, including in:

(i)   Software Engineering / Software Engineering Management
Areas covered include specialist knowledge regarding full software engineering lifecycle, traditional and contemporary software engineering methods and methodologies, e.g., agile development on a practical level, traditional and agile methods and frameworks, UML, OO programming etc.

(ii)   Algorithms and Data Structures.
Areas covered include specialist knowledge regarding data structures such as single and double linked lists, hash tables and functions, collision avoidance etc. Trees used for sorting and searching including rebalancing. Nature of algorithms: including complexity, completeness, measures of efficiency.

(iii)   Operating Systems
Areas covered include server and mobile OS, concurrency / synchronisation; threading and parallel CPU scheduling; distributed and network OS, covering Windows, UNIX, Linux, Android, iOS.

(iv) Programming Paradigms

Areas covered Include OOP and functional programming and relevant areas; indicative languages Python, Java, JavaScript, Scala, Kotlin, C++/C#, Erlang, Scheme, Clojure, Go, Rust, Ruby, Swift, etc.

(v) Web Development and Programming

Areas covered include Web and App development, Programming Languages (Python, Java, JavaScript, C#/C++, Swift, Kotlin, PHP/MYSQL, HTML/CSS and HTML Forms; Client/ Server interaction - HTTP Client-side scripting; CSS frameworks; Server-side PHP PDO programming; CSS frameworks; Relational databases; Relational databases Accessibility and user-testing; Programming tools and techniques (OOAD, OO). Sound technical experience with Agile, SCRUM, XP, KANBAN, SharePoint/Content Management etc.

(vi) Human-Computer Interaction and User Interface Design

Areas covered include but not limited to HCI/UID, Content Management Tools, UML/UI design, Agile, SCRUM, RUP, XP etc.) and Research Methods. Sound technical experience with SharePoint and other Content Management Systems as well as ability to document requirements using different methods, e.g., BPMN, User Stories, UML etc.

(vii) Database Management, Big Data and Data Analytics

Areas covered include Databases, Data Mining, Big Data, Data Analytics, Database Management and Administration, Relational Databases. Sound technical experience with Scrum, Power BI, and Tableau, MySQL, OOAD, UML, RDBMS, PHP/MYSQL, Oracle, NoSQL, Data Warehousing, BI & Visualisation, Graph Databases as well as ability to document requirements using different methods, e.g., BPMN, User Stories, and UML preferred.

The role will focus on delivering high quality education in a variety of formats ads well as research and enterprise activities, whilst ensuring the modules adhere to the criteria for British Computing Society accreditation. The person appointed will be expected to:

- Contribute to the delivery of existing teaching, course development, and to participate in the research carried out in the School.

- Contribute more widely to the design and delivery of teaching activities, reflecting the successfully candidate's own subject specialism appropriate for the needs of a diverse student body; across the range of courses offered by the School.

- Be involved with research and scholarship as evidenced by publications,

research bids, participation in technical programme committees (TPCs) of reputable conferences, journal editorial board memberships, or similar.

Engage in research and professional practice across the subject area and contribute to the research profile of the School and to the UoA 11 REF submission of the School.

You will be assigned/associated to one of the following career pathways:

1. Knowledge Exchange and Enterprise
2. Research
3. Teaching and Scholarship

For more details, please refer to https://www.gre.ac.uk/hr/academic-framework and links within.

KEY ACCOUNTABILITIES:

Team Specific:

- Contribute to the delivery of high quality, innovative and effective teaching and new teaching initiatives, including inclusive approaches to setting and marking assessment.
- Work proactively on specific research topics aligned to your own and the School's research interests.
  Lead on personal and academic tutoring of undergraduates.
- Lead and support others in the design and develop of new courses/modules demonstrating excellent curriculum design.
- Contribute to curriculum development within the School.
- Contribute to the delivery of external accreditation activity.
- Contribute to the integration of enterprise work/research and scholarship and activities into teaching or professional training materials.
- Participate in the delivery of new courses, including CPD and degree apprenticeships, integrating enterprise, innovation or external engagement activities.
- Contribute to subject, professional and/or pedagogical research leading to the publication and/or dissemination of original work.
- Contribute to the development of funding bids for the acquisition of internal and external resources to fund research, enterprise or teaching projects.
- Contribute to the continuous improvement of the student experience or Lead courses/modules effectively including adopting a responsive approach to students.
- Effective cross working with Professional Services to support students.
- Contribute to relationship management and engagement with key external bodies for teaching at a regional and national level; the national or regional public/cultural sectors/business, industry/professional bodies in relation to teaching, research or enterprise.
- Maintain effective, high quality and productive working relationships with

professional bodies and employers.

- Supervise undergraduate and postgraduate students.
- Work with other academics and contribute to the development of new courses, programmes and learning experiences in the School's discipline areas, developing the subject area and sharing best practice across the Faculty and University.
- Work with other academics and the administrative teams to deliver excellent student care and support student success and employability.
- Contribute to the general academic administrative work of the School and Faculty.

Generic:

- Assist the Management Team in achieving the School's KPIs.
- Contribute to the School's plans, activities and efficient working practices
- Participate in visit to secondary schools, local community groups, public engagements and related activity.
- Demonstrate a commitment to equality, diversity and inclusion through teaching practice and / or engagement with University initiatives
- Contribute to peer review and School-based teaching development activities
- Promote your work and represent your discipline and the work of the University internally and externally, and take a proactive approach to ethical, good practice

Managing Self

- Develop expertise in inquiry/research-informed teaching with an increasing degree of autonomy.
- Keep abreast of developments within the field and seek continuous improvement of own professional practice.
- Actively participate in established professional development framework activities.
- Behave in a manner which reflects the University values and creates a positive environment for work and study.
- Maintain a high standard of student engagement and satisfaction.
- Seek to maximise the learning outcomes of students.

Core Requirements

- Adhere to and promote the University's policies on Equality and Diversity and Information Security. Ensure compliance with Health and Safety regulations and Data Protection legislation.
- Support and promote the University's Sustainability policies, including the Carbon Management Plan, and carry out duties in a resource efficient way, recognising the shared responsibility of minimising the university's negative environmental impacts wherever possible.

Additional Requirements:

Any other duties commensurate with the post and grade as agreed with the Head of School and the PVC of the Faculty.

KEY PERFORMANCE INDICATORS:

Performance Indicators will be established in consultation with the Head of School as part of the post-holder's annual Appraisal and Professional Development Review.

KEY RELATIONSHIPS (Internal & External):

School Management Team, Faculty administration, School partner institutions.

PERSON SPECIFICATION	
Essential	**Desirable**

Essential

Experience
- Contribution to course Curriculum development and delivery at undergraduate and/or postgraduate level in fields of Computer Science / Computing: Software Engineering, Programming Research, Functional Programming, Web Development, Databases, HCI or related fields.
- Track record of high-quality publications
- Conducting high quality, innovative and effective teaching on undergraduate and/or postgraduate programmes
- Leading courses/modules effectively including adopting a responsive approach to students
- Contributing to subject, professional and/or pedagogical research and other scholarly activities in your area of expertise (as outlined under "Purpose of the Role") and related areas.
- Student care and pastoral provision.

Skills
- Good Computing / Computer Science skills commensurate with the State-of-the-Art in your area of expertise.
- Ability to engaged with and respond to student feedback.
- Outstanding organisational, IT communication and interpersonal skills.

Qualifications

- PhD in Computing, Computer Science or related field **OR** substantial industry experience with appropriate professional qualification.

Desirable

Experience
- Postgraduate teaching /supervision
- Creating professional/community partnerships
- Ability to teach across disciplines
- Leading on external accreditation activity
- Designing and leading significant teaching and assessment activity
- Initiating the development of Research bids

Skills
- Individual and /or collaborative income generation.
- Application for research funding and other bids.
- Experience of collaborative research projects, including Task/Work Package management
- Individual and/or collaborative consultancy work.

Qualifications

- Professional qualification in relevant areas where applicable.
- Teaching Qualification

Personal attributes	
• We are looking for people who can help us deliver the [values](#) of the University of Greenwich: Excellence, Determination, Inclusivity, Ambition and Creativity	