

Candidate Information

Position: Doctoral Fellows, Computer Science

School/Department: School Office (Elect, Elect Eng & Comp Sci)

Reference: 20/108396

Closing Date: Tuesday 10 November 2020
Salary: £33,797 - £35,845 per annum
Anticipated Interview Date: Wednesday 2 December 2020

Duration: Two Years

JOB PURPOSE:

To support the delivery of high-quality Computer Science teaching, at undergraduate and postgraduate level, with specific emphasis on the development of online digital learning platforms and undertake research activities within Computer Science (in areas of artificial intelligence, data analysis and cyber security (software).

MAJOR DUTIES:

Teaching:

- 1. Communicate complex and conceptual ideas to students as well as to peers using high level skills and a range of media.
- Support the design and delivery of teaching and assessment activities, for established and new modules, within the school.
 This will include design and delivery of lectures and practical sessions, setting and marking of assessment and return of constructive feedback to students.
- 3. Support the supervision of undergraduate and postgraduate student projects.
- 4. Seek ways of improving student performance and experience, specifically through the promotion of digital tools and techniques, by reflecting on teaching and assessment design and delivery by obtaining and analysing feedback. Promotion of these findings will be disseminated through the Schools Education Committees and wider within the School community.

Research:

- 1. Undertake research in a relevant field of Computer Science that is of a quality that is recognised as being internationally excellent in terms of originality, significance and rigour, both at an individual level and as part of a larger team.
- 2. Publish research in relevant leading international peer reviewed journals etc. and relevant internationally leading conferences.

Administration/Contribution to the Community:

- 1. Contribute to the School's outreach strategy by supporting events with local schools.
- 2. When appropriate, provide pastoral care for students within own area to ensure that all issues are dealt with in a timely, sympathetic and effective manner.
- 3. Be responsible for the record–keeping associated with teaching and the preparation of teaching materials.
- 4. Be a member of the School's Examination Board.

Planning and Organising:

- 1. Plan and manage own teaching and tutorials as agreed with Head of School/mentor.
- 2. Support the design/update of modules in line with School's teaching strategy.
- 3. Plan and prepare research papers to meet publication deadlines.
- 4. Support the preparation of research proposals for submission for external funding.

Resource Management Responsibilities:

- 1. Use teaching and research resources, laboratories and workshops as required.
- 2. Co-manage, where appropriate, with grant holder external funding relating to research project.
- 3. Act as mentor for students.

Internal and External Relationships:

- 1. As part of the wider impact agenda, be pro-active in developing external links with industry and key government agencies
- 2. Collaborate with other staff within the wider School.
- 3. Involved in developing links or joining external networks to share information and ideas.

ESSENTIAL CRITERIA:

- 1. A minimum of a 2:1 Honours degree (or equivalent) in Computer Science, specifically, areas relating to artificial intelligence, data analysis and cyber security (software) or closely related discipline.
- 2. Hold or about to obtain a PhD in Computer Science, specifically, areas relating to artificial intelligence, data analysis and cyber security (software) or closely related discipline.
- 3. Publication record in peer reviewed/referred journals or invited presentations that are REF returnable at international level commensurate with stage of career.
- 4. Evidence of high-quality research in a relevant field of Computer Science commensurate with stage of academic career. Specifically, in areas of artificial intelligence, data analysis and cyber security (software).
- Demonstrable ability to support the delivery of modules through innovative teaching and assessment methods within the School's Computer Science education portfolio, especially within the areas of artificial intelligence, data analysis and cyber security (software)
- 6. Ability to contribute to broad management and administrative processes at a level commensurate with stage in career.
- 7. Ability to advance the research and teaching strategies of the School and strengthen national and international networks.
- 8. Must demonstrate evidence of ability to communicate and present academic and research material clearly and effectively to students, academic colleagues, industry and to other collaborators.
- 9. The person appointed should be reliable, dependable and be willing, and able, to collaborate productively both within the School.
- 10. Evidence of good interpersonal skills.
- 11. The ability to work as part of a team and to contribute to team objectives.
- 12. Willingness to attend contract/professional meetings and conferences nationally and internationally as required.

DESIRABLE CRITERIA:

- 1. Associate Fellow of the Higher Education Academy.
- 2. Ability to propose and carry out novel research work.
- 3. Ability to attract funding, as part of a team, at a level commensurate with stage in career.
- 4. Ability to contribute to the innovative teaching of Computer Science through digital learning for our education provision.
- 5. Relevant teaching experience and evidence of appropriate student satisfaction at a level commensurate with stage in career.