

Candidate Information

Position:	Research Fellow in Wireless Communications and Machine Learning
School/Department:	Centre for Data Science and Scalable Computing
Reference:	20/108202
Closing Date:	Monday 30 March 2020
Salary:	£33,797 to £40,322 per annum
Anticipated Interview Date:	Thursday 9 April 2020
Duration:	Until 31 December 2020

JOB PURPOSE:

This post is available until 31 December 2020 as part of a Newton Fund project to develop an early-warning system prioritized climate-change sensitive disease and disaster communications.

The appointee will be expected to undertake research into the investigation and development of solutions in the area of Wireless Communication, Machine Learning and to be an active member of the research project/team to ensure the success of the project.

The project is available as soon as practical with an end date of 31 December 2020 and will be conducted at Institute of Electronics, Communications and Information Technology (ECIT), School of Electronics, Electrical Engineering and Computer Science (EEECS).

MAJOR DUTIES:

1. Undertake research into the design of wireless communications, machine learning. Especially, this research involves the disaster communications and disaster-related disease.
2. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to the research areas.
3. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
4. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
5. Assist grant holder in the preparation of funding proposals and applications to external bodies.
6. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
7. Carry out occasional undergraduate supervision, demonstrating duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
8. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

Planning and Organising:

1. Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
2. Plan for the use of research resources, laboratories and workshops where appropriate.
3. Plan own day-to day activity within framework of the agreed research programme.
4. Plan up to a year in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
5. Coordinate and liaise with other members of the research group over work progress.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner.

2. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise on a regular basis with colleagues and students.
2. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
3. Liaise on a regular basis with partners from the project.
4. Join external networks to share information and ideas.
5. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. *Hold a PhD in Electronics, Electrical Engineering, Computer Science or closely related discipline.
2. *Have 3 years' experience with a demonstrable background in Wireless Communications, Disaster Communications, Machine Learning and Optimizations.
3. Ability to contribute to broader management and administrative processes.
4. Contribute to the School's outreach programme by links with industry, community groups etc.
5. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
6. Ability to communicate complex information clearly.
7. Ability to build contacts and participate in internal and external networks.
8. Ability to assess and organise resources.

DESIRABLE CRITERIA:

1. One or more of the following:
 - Evidence of contribution to successful research grant applications
 - Evidence of potential to supervise research students
 - Have background in big data analysis
 - Good math background