

# **Candidate Information**

Position: School/Department: Reference: Closing Date: Salary: Research Fellow , EEECS School of Electronics, Electrical Engineering and Computer Science 18/106796 Tuesday 23 October 2018 £33,199 - £39,610 per annum (potential to progress to £43,266 per annum through sustained exceptional contribution)

## JOB PURPOSE:

### MAJOR DUTIES:

- 1. Undertake a specific role in the relevant research project under supervision.
- 2. Take responsibility for and lead parts of the planned research.
- 3. Plan and execute research actions to meet the project goals.
- 4. Plan and develop an area of personal research and expertise in an area related to the post.
- 5. Design, develop and refine experimental system software, and conduct research experiments with this software in order to obtain reliable data.
- 6. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to experimental computing systems research.
- 7. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- 8. Contribute to dissemination of research findings for publication in national and international journals and presentations at international conferences.
- 9. Assist grant holder in the preparation of funding proposals and applications to external bodies.
- 10. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget.
- 11. Carry out occasional undergraduate (final year, MEng) project supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
- 12. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

#### **Planning and Organising:**

- 1. Plan for project deliverables in timescales ranging from three to twelve 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. Configure, install and upgrade experimental computing facilities, including servers, networking equipment and storage systems, along with the necessary software libraries.
- 2. Ensure research resources are used in an effective and efficient manner.
- 3. 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 in the research group, the ECIT Institute, the School of EEECS and other faculties in Queen's University Belfast to build research collaborations.
- 2. Join external international networks such as HiPEAC, ETP4HPC, and PRACE for training and sharing information and ideas.

## **ESSENTIAL CRITERIA:**

- 1. Must have or be about to obtain a relevant PhD in Computer Science, Computer Engineering, or a related field.
- 2. At least 3 years of research experience in low-level programming.
- 3. Ability to contribute to research management and administrative processes.
- 4. Ability to 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.
- Ability to communicate complex information clearly.
  Ability to build contacts and participate in internal and external networks.
- 7. Demonstrable intellectual ability.
- 8. Ability to assess and organise resources.
- 9. Ability to travel and present at international conferences and meetings.

## DESIRABLE CRITERIA:

- 1. Experience in development or extension of operating systems, hypervisors, programming language implementation, compilers or runtime systems.
- 2. Experience in EU or RCUK projects, in particular in project task management and reporting through periodic deliverables. Experience working with external industrial or academic partners.
- 3. Experience in working in collaborative software development and/or managing software development teams.
- 4. Experience in producing timely technical documentation on research projects (deliverables, reports).
- 5. Experience with presentations of research outputs in conferences, workshops, or seminars.