



Candidate Information

Position:	Research Fellow or Assistant
School/Department:	School of Electronics, Electrical Engineering and Computer Science
Reference:	22/110369
Closing Date:	Monday 9 January 2023
Salary:	£35,333 per annum (Research Fellow) £29,619 per annum (Research Assistant)
Anticipated Interview Date:	Friday 27 January 2023
Duration:	Fixed Term for 20 months, or available until 30 September 2024, whichever is sooner

JOB PURPOSE:

To perform research on programming models for high-performance and distributed computing and contribute to the research project "Asynchronous Scientific Continuous Computations Exploiting Disaggregation (ASCCED)".

MAJOR DUTIES:

1. Design, develop and refine a proof-of-concept model of computation and its associated programming model that delivers on the goals of the ASCCED project.
2. Undertake research under supervision within the ASCCED research project.
3. Carry out analyses, critical evaluations, and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research.
4. Produce high quality research outputs consistent with ASCCED project aims and commensurate with career stage. This activity will include collaborating and co-authoring research outputs with the project team.
5. In consultation with the project team, promote research milestones and outputs at national and international conferences and through social media.
6. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.

ESSENTIAL CRITERIA:

1. Research Assistant: Degree or higher qualification in computer science, electrical/electronic engineering, physics or related area.
Research Fellow: Normally have or be about to obtain a relevant PhD (areas of high-performance computing, computing systems).
2. Research Assistant: at least 1 year relevant research experience to include undertaking research into parallel programming.
Research Fellow: at least 3 year's relevant research experience to include:
 - Undertaking research in the area of high-performance / distributed / parallel computing
 - A proven track record of using experimental models to carry out analyses, critical evaluations, and interpretations of experimental data as relevant to the research project
 - Working effectively as part of a research team in the development and promotion of the research theme.
3. Strong publication record commensurate with stage of career.
4. Ability to contribute to broader management and administrative processes.
5. Contribute to the School's outreach programme by links with industry, community groups etc.
6. Willingness to undertake additional training in research methods and other related skills as required.
7. Practical problem solving skills, independence of thought and initiative.
8. Ability to communicate complex information effectively in oral and written format.
9. Ability to build relationships to develop internal and external networks.
10. Ability to assess and organise resources.

DESIRABLE CRITERIA:

1. Research experience in:
 - Skills in parallel (multi-/many-core) performance analysis and optimisation
 - The design and implementation of programming models for high-performance computing
 - Parallel event-based algorithms.
2. Skills in collaborative software development; applying good practice in research software development.