



Candidate Information

Position:	Research Software Engineer
School/Department:	Administration Support
Reference:	20/108231
Closing Date:	Monday 15 June 2020
Salary:	£33,797- £40,322 per annum
Anticipated Interview Date:	Friday 26 June 2020
Duration:	Until 31 December 2023

JOB PURPOSE:

The candidate will work as part a project team involving Queens University Belfast and Ulster University and be responsible for engaging researchers from multiple disciplines with the Kelvin-2 Tier 2 facilities. He/she will work with researchers to gain a clear understanding of their research challenges, help them design HPC software, and provide necessary support to researchers on deploying existing code bases and simulations onto HPC.

MAJOR DUTIES:

1. Contributing to researcher's HPC knowledge and skills within the research community at all stages of the research software development cycle and assist researchers, through support, to transition existing code bases and simulations for deployment on HPC to maximise productivity and research quality.
2. Assist and facilitate the on-boarding of UK-based researchers in gaining access and running applications on the Kelvin-2 Facility by reducing the barrier to entry and ease of use of HPC.
3. Contributing to the design, development, management and support research software and applications for research involving high performance computing including GPU resources, real-time data processing and AI software pipelines.
4. Help to increase the number of HPC users, maximising utilisation and allocation from users internally within each institution, locally within Northern Ireland including industry via Catalyst, and engaging HPC users across the UK in our key priority research themes.
5. Deployment, maintenance and support of research including related Service Desk tickets and troubleshooting incidents and problem and technical documentation.
6. Be a strong advocate for HPC by contributing and/or organising outreach activities to raise awareness and present knowledge of other resources such as the other Tier-2 centres and the national service (ARCHER).
7. Being prepared to travel in connection with the needs of the project and spend periods of research at the premises of collaborating partners.
8. Adopting a professional attitude to the responsibilities and duties of the post, complying with University policies
9. Performing any other research duties, as assigned by the Principal Investigator, which are compatible with the designation and seniority of the post.

Planning and Organising:

1. Plan own work over the short to medium term with an awareness of longer term issues, in response to manager's general instructions.
2. Contribute to larger projects as part of a project team.
3. Contribute to the planning and organisation of service changes with regard to their impact on the business of the University.
4. Develop appropriate work schedules in order to meet targets and/or turnaround times.

Resource Management Responsibilities:

1. Assist in the planning of resources within the area of responsibility to ensure that they are effectively managed and monitored.
2. Advise on the cost/benefit of new and existing technologies.
3. Assume delegated responsibilities as appropriate.

Internal and External Relationships:

1. Attend internal and external meetings to ensure that relevant issues are appropriately represented and reported.
2. Liaise with key contacts to ensure appropriate integration, collaboration and understanding.
3. Liaise with external suppliers, consultants and other third parties.

ESSENTIAL CRITERIA:

1. *Degree (2.1 or higher) in Science, Engineering or Computing, or a closely related discipline, or a higher degree in the same or closely related subjects.
2. *2+ years software development in industry.
3. *Academic or industrial experience in Linux including compiling applications, making software available and developing/maintaining shell scripts.
4. Experience of working within a research team and/or software development team.
5. Ability to quickly understand research and/or project objectives and contribute to successful outcome of projects.
6. Contributing to the investigation of new research approaches and/or new software pipelines.
7. Ability to troubleshoot and resolve issues across software and hardware.
8. Ability to clearly communicate in English, orally and in writing.
9. Excellent presentation skills in English.
10. Passionate about computing/programming and ability to work unsupervised and independently over extended periods of time, to deliver results, meet deadlines and to achieve agreed targets.
11. Ability to work collaboratively and flexibly as an integral part of a multidisciplinary research team.
12. Willingness to travel locally and internationally as required by the post.
13. High motivation and ability to learn new knowledge and skills.

DESIRABLE CRITERIA:

1. PhD in a relevant area.
2. System administration of a number of networked servers running Linux.
3. Providing technical user support.
4. Code optimization, speedup and tuning of software skills.
5. Experience of working in a research institute as a data analyst, software developer or researcher.
6. High level analysis, design and problem-solving skills.
7. Certifications in one or more of the following Linux, programming, networking, storage technologies.
8. Experience working on High Performance Computing clusters.
9. Experience of presenting at conferences to a large diverse audience.
10. Access to own transport or means to fulfil the mobility requirements of the post