UNIVERSITY
OF SUSSEX

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talk flexible
working

1 Advertisement

Post Title: Systems Engineer (Research)
School/department: IT Services division
Hours: Full time. Requests for part-time working patterns can also be considered (subject to business need).
Contract: Fixed-term 3 year contract
Reference: 8832
Salary: from £36,333 to £43,155 per annum (depending on experience)
Placed on: 28 February 2023
Closing date: 30 March 2023   Applications must be received by midnight of the closing date.
Expected Interview date: to be confirmed
Expected start date: as soon as possible

This is an exciting opportunity for an enthusiastic individual with the right blend of broad technical skills and professional capabilities to progress in the exciting world of High-Performance Computing. You will be joining a welcoming and multi-skilled team and an IT division that is taking forward a major programme of digital transformation works. Full training and development will be provided as required.

The research computing support team is part of the ITS division and provides computing resources and expertise to researchers across our Schools including physical, life, medical and social sciences, and arts humanities and media. Through collaboration with academic colleagues, we are currently mobilising projects and initiatives that will expand and enhance our research computing and IT support, including support for data science, research software engineering, and exploitation of Cloud technologies.

The team also operates and develops the University's GridPP service that is part of the global Large Hadron Collider (LHC) project based at CERN. Depending on their skills and experience, the postholder may be assigned as primary contact within the team for this activity, or for any other disciplinary theme across our University, within the dynamic context outlined above.

The successful candidate will be able to demonstrate:

- Experience working with researchers and/or scientific research involving computing

- Experience in the installation and maintenance of Linux operating systems and ability to write and debug scripts in at least one of: sh, bash, Python

- Ability to program in more than one computing language used in research (C, C++, Python, etc),

Applications are welcomed from both experienced IT professionals and researchers with a high level of broad technical competence and hunger to develop that will enable them to rapidly assimilate new skills and learning, and be able to apply these as part of a service-oriented team and transformative projects.

The University is committed to equality and valuing diversity, and applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in Science, Technology, Engineering, Medicine and Mathematics (STEMM) at Sussex.

Please contact Michelle Richardson (michelle.richardson@sussex.ac.uk) for informal enquiries.

For full details and how to apply see our vacancies page

The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds.

2.   The School / Division

IT Services delivers a wide range of digital services to users across our Campus and beyond. Our Chief Digital Transformation Officer, Jason Oliver, is now tasked with shaping the strategic initiatives and strategies that will secure a successful and sustainable future for the institution, where digital technology and mobile platforms will increasingly transcend physical and geographical boundaries providing opportunities for the transformation of our students' and staff lives.

IT Services is organised into four main teams, delivering services through an evolving agile service management and delivery model:

The **Digital Engagement** team are primary changes agents working to transform our business processes and systems, to nurture the relationships between IT Services and its stakeholders and helping us to understand and develop the ambitions for our use of digital technologies in education, research, student services and university administration.

The **Strategy and Architecture** team ensure our strategies, technologies, security and standards support our digital aspirations whilst planning the replacement, upgrades and improvements to our technologies and systems, ensuring that they are aligned and prioritised around the University's strategic plans and objectives.

The **Infrastructure** team work to define, modernise and automate our underlying platforms and network ensuring that they are optimised to meet the needs of the diverse communities across the University, to continue our journey to the cloud and to advance our approaches to ubiquitous connectivity across our campus.

The **Operations** teamwork across the research, teaching, professional services and student groups to manage our product areas, develop and integrate our platforms and applications, and support our communities to ensure outstanding service provision across the operational activity of IT Services.

3.   Job Description

Job Description for the post of Systems Engineer (Research)

Department: IT Services – Research Platforms Team

Location: Shawcross Building, University of Sussex Campus

Grade: **7**

Responsible to: **Research Platforms Owner**

Responsible for: **N/A**

Role Description

The Research Platform Team provides computing services, resources and expertise to researchers and research projects across the different Schools of the University.

As a member of this team, the postholder assists in the operation, maintenance and development of research computing services. They collaborate with team and wider ITS colleagues and researchers and may also participate as member of project teams that are driving transformational change.

They will also work alongside team colleagues in responding to incoming support requests from researchers, in accordance with agreed operational procedures.

Key Responsibilities

1	To engage and collaborate with researchers across the University's Schools and the GridPP UK collaboration.
2	To assist in maintaining and developing the Linux cluster including the GridPP resources and the wider research computing infrastructure.
3	To provide scientific computing support to research groups across the University. Supporting researchers with software and hardware issues,
4	Analyse and resolve any escalated operational incidents in accordance with ITS protocols and best practices, maintaining focus on customer service at all times.
5	As required, to prioritise and maintain the product (task) backlog.
6	To perform root cause analyses of incidents to determine any underlying problem(s) and where appropriate, work with suppliers to resolve these in a timely fashion.
7	To install and configure software and firmware using automated configuration management tools on research servers and networking equipment.
8	To represent the University research groups at relevant meetings, special interest groups and conferences as appropriate.
9	To physically lift and install computing equipment into computer room racks as appropriate.
10	To gather technical requirements, obtain quotes and make recommendations for hardware and software purchases.
11	To maintain computer security through regular review and deployment of security patches to relevant devices.
12	To assist in the implementation of technical solutions to researchers computing requirements in line with the University's *Enabling Research Technology Strategy*
13	To produce technical documentation, reports, papers, user documentation and internal records as appropriate in support of assigned research and administrative tasks.

14	Participate in agile ceremonies such as stand-ups, story refinements, and team retrospectives to have a clear understanding of priorities and next steps.
15	Participate in sprint planning, sprint plan implementation and review
16	Analyse feedback from sprint reviews, and other data such as end user feedback and operational metrics, to identify and understand product needs

Indicative Performance Criteria

1	Does not hold any line management responsibility.
2	Does not have any budgetary responsibility.
3	Holds responsibility for equipment or premises [link to person spec]
4	The post holder reports to the Research Platform Owner, working under general direction within a clear framework the post holder will manage their own work to achieve their agreed objectives. The role holder will play a key role in supporting the Divisional leadership team and senior academic colleagues to achieve the strategic and operational goals of the University. The post holder is expected to work collaboratively across the University and with key stakeholders to deliver single team working that efficiently and effectively supports the achievement of those goals and objectives.
5	Support achievement of the Division's/Unit's/School's compliance with all applicable statutory and regulatory compliance obligations, including (but not limited to): UKVI, Health & Safety, the Prevent Duty, data protection, Competition and Markets Authority requirements and equal opportunities, as appropriate to the grade and role. Additionally, to promote good practice in relation to University policy, procedure and guidance in relation to those compliance matters in respect of students, staff and other relevant parties.
6	Balance effectiveness and cost-efficiency in support of budgets, demonstrating compliance with Value for Money and Return on Investment principles to support the University's strategic aim to achieve a world-class standard of teaching and research by managing our resources effectively and efficiently

4.   Person Specification

Skills/Abilities	Essential	Desirable
Ability to program in more than one computing language (C, C++, Python, others).	Y	
Ability to work both independently and as part of a team.	Y	
Effective communication skills in both written and spoken English to a wide variety of audiences.	Y	
Ability to move, lift and carry computing equipment including Servers. Also, the mobility to occasionally work on equipment in confined spaces	Y	

	Essential	Desirable
Ability to research and process technical information to make technical decisions.	Y	

Experience/Knowledge	Essential	Desirable
Experience working with researchers and/or scientific research involving computing	Y	
Experience of writing and de-bugging scripts in one of: sh, bash, Python	Y	
Experience of installing Linux Operating system	Y	
Familiarity with the Linux Command line	Y	
Experience of applying security patches to Linux systems	Y	
Experience working in a service-oriented environment		Y
General knowledge of High Performance Computing and related technologies (workload managers, parallel computing, parallel file systems)		Y
Experience of trouble-shooting computing devices. (e.g. computer hardware, network equipment, scientific equipment)		Y
Experience of webserver management and web programming.		Y

Qualifications	Essential	Desirable
Postgraduate qualification in a STEM subject with strong C&IT component or equivalent experience	Y	
ITIL certification or other relevant professional qualifications.		Y

Personal Attributes	Essential	Desirable
Strong interest in University research activities	Y	
Highly service-focused	Y	
Reliable, dependable, trustworthy	Y	
Proactive and self-motivated learner; able to assimilate knowledge and acquire new skills whilst working	Y	
Willingness to share skills and knowledge with the team	Y	
Problem solving and analytical skills	Y	

Knowledge of agile development methodologies		Y
Knowledge of agile planning tools (e.g. JIRA, Confluence)		Y