



1 Advertisement

Post Title: Research Computing Officer (Linux & Mac)
School/department: School of Engineering and Informatics (Informatics Systems Team) – Technical Services
Hours: Full time Hours considered up to a maximum of 36.5 hours per week
Requests for flexible working options will be considered (subject to business need).
Location: Falmer, Brighton, United Kingdom
Contract: Permanent, Full-Time
Reference: 9982
Salary: starting at £32,411 rising to £36,333 per annum, pro rata if part time.
Placed on: 04 April 2023
Closing date: 22 May 2023. Applications must be received by midnight of the closing date.
Expected Interview date: to be confirmed
Expected start date: as soon as possible

An exciting opportunity for a Research Computing Officer (Linux & Mac) has arisen. We are looking for an experienced and enthusiastic IT support professional to provide dedicated support for cutting-edge research and teaching. Applicants will have experience of supporting macOS, iOS, and Linux OSs such as Ubuntu and AlmaLinux, some experience with cloud computing environments (Microsoft Azure, AWS, Google Cloud, Oracle Cloud, OpenStack), Containers and VMs, and familiarity with Linux and macOS systems in a professional research milieu.

You will join a vibrant environment with a broad range of research and teaching including computer science, artificial intelligence, machine and deep learning, digital media technology, consciousness research, creative technologies, and human computer interaction. An emphasis on interdisciplinary work leads to many collaborative projects across the University and with commercial partners. You will work closely with staff and students to deliver their goals. The scope and dynamic nature of the activities ensures the role requires a diverse and specialist set of IT skills and the ability to engage with those supporting other platforms.

One element of the role is the configuration, deployment, and maintenance of macOS and Linux systems and applications. With over 150 managed macOS and nearly 75 Linux devices, you will be expected to have experience with tools – such as Puppet, Ansible, Slurm, Adobe Remote Update Manager (RUM), Proxmox, Foreman, and Munki Tools – that enable efficient and systematic management of devices on this scale.

You will also be supporting our Media Technology Laboratory (MTL) used for teaching, research, and development it includes broadcast studios and post-production facilities, with macOS being the primary computing platform. Familiarity with the workflows and equipment used in such an environment is highly desirable and you will likely have experience of integrating Apple equipment with both professional and consumer-grade audio and video equipment. You will be expected to attend and provide support for a range of external, off-site broadcasts. For informal inquiries please contact Paul Keene, Senior Research Computing Officer (Linux & Mac), Department of Informatics, University of Sussex, Falmer, Brighton BN1 9QJ, UK: <u>p.keene@sussex.ac.uk</u>

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

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.

Please note: The University requires that work undertaken for the University is performed from the UK.

2. The School / Division

Please find further information regarding the school/division at https://www.sussex.ac.uk/informatics/

3. Job Description

Job Description for the post of: Research Computing Officer (Linux & Mac)

Department:	Informatics
Section/Unit/School:	EngInf (Informatics Systems Team) – Technical Services
Location:	Chichester 1
Grade:	6
Responsible to:	IT Lab Manager
Responsible for:	None

• The Research Computing Officer (Linux & Mac) supports computer systems in the Department of Informatics. The post has a specific focus on managing Mac and Linux systems (servers, desktops, and laptops) used for research and specialist teaching, including systems used in the Department's GPU compute facilities and in the Media Technology Lab.

PRINCIPAL ACCOUNTABILITIES

- 1. Manage, promote, and maintain a high-quality, School-based Computing Service, as a member of a team, engendering a culture of continuous improvement.
- 2. Develop and maintain effective relationships across the organisation, working in partnership with other key stakeholders to ensure seamless service and best practice.

- 3. Provide objective and expert information, advice, and guidance for managers within the organisation on improvements to services and activities related to specific area of expertise.
- 4. Assist with all aspects of the work of Informatics Systems team with primary focus on supporting Linux and Mac systems including GPU-based servers but also contributing to the support of Windows systems as required.
- 5. Help the School to achieve its research and teaching objectives and facilitate the achievement of strategic targets identified in the Sussex 2025 framework.
- 6. Facilitate *high-quality research* and *grant capture* by providing computing services to enhance Computer Science and AI work, and by providing the School-based HPC and GPU compute facilities that underpin the work of leading groups in Data Science, Deep Learning, and Consciousness research.
- 7. Facilitate *interdisciplinary* research by providing computing services to groups that span academic units such as the Creative Technology Group, Predictive Analytics Lab, Sussex Humanities Lab, Sackler Centre, AI Research Group, and the Centre for Computational Neuroscience and Robotics.
- Facilitate learning of *digitally advanced technologies* (for example through support of the Media Technology Lab), and the teaching of 21st century software-development skills (by supporting specialist teaching across the Informatics curriculum).

KEY RESPONSIBILITIES

1. Service Delivery

- 1.1 Working within University policy and procedure, undertake day-to-day management of operational matters in the area of expertise. Plan and implement activities to ensure the achievement of departmental targets and objectives.
- 1.2 Ensure effective systems and procedures are in place to support the achievement of key performance targets in area of responsibility.
- 1.3 Support the implementation of improvements to systems and procedures in area of responsibility to ensure effective administration within area of responsibility.
- 1.4 Maintain appropriate records and documentation commensurate with policy and procedure.
- 1.5 Provide reports internally and externally as appropriate. Undertake analysis, interpretation and presentation of standard data to inform decisions related to subject area.
- 1.6 Identify critical issues when resolving problems and, where relevant, use university policy and procedure to support the application of appropriate resolutions.

2. Policy and Procedure

- 2.1 Work within policy and procedure, providing advice to enquiries on the application of policy/procedure as required.
- 2.2 Contribute to policy decisions and improvement in area of expertise.

3. Customers and Stakeholders

3.1 Proactively work with internal and external stakeholders, colleagues, and students to ensure effective service delivery, exchange information, and provide data to inform decisions as necessary, showing appropriate sensitivity when needed.

4. Work environment

- 4.1 Monitor risks in the work environment and take necessary measures to maintain safety of self and others (such as use of appropriate PPE).
- 4.2 Undertake risk assessments for procedures and work environments; review regularly.
- 4.3 Consider wide range of risks at off-campus venues and outdoor events; plan and implement measures to mitigate risks.
- 4.4 Monitor and support the safety of self and colleagues particularly when working with unfamiliar equipment or in non-standard environments (including experimental spaces, Informatics machine room, network concentration points, and off-campus events).
- 4.5 Advise colleagues about appropriate safety measures based on based of expertise and experience.

5. **Teaching and learning support**

5.1 Train and supervise academic and junior technical staff and students in procedures, techniques, and use of equipment, conveying the underlying operational and practical principles.

6. Role-Specific Responsibilities

- 6.1 Work with colleagues in the Informatics Systems Team to provide an effective specialist computing support service to the Department of Informatics.
- 6.2 Support the development of specialist computing services in the Department with focus on Linux and Mac systems, adapting services to suit changing requirements, and providing advice to less experienced staff who may assist with this work.
- 6.3 Comply with current data protection law (UK-GDPR/EU-GDPR), and current campus standards for maintaining data security and IT equipment (as advised by IT Services).
- 6.4 Configure, deploy, and manage computer systems, together with storage devices, monitors, printers and other peripheral devices, to suit specific research and teaching requirements.
- 6.5 Provide advice to students and staff on use of computer systems and respond to requests for assistance.
- 6.6 Manage and prioritize tickets relating to Linux and Mac systems efficiently, working on own initiative, and referring to other team members as necessary.
- 6.7 Diagnose and resolve problems with complex IT systems where data may be limited and conflicting, requiring creativity and multiple lines of investigation to reach a solution.
- 6.8 Initiate and maintain contacts with staff in IT Services to enhance compatibility of services and share best practice.
- 6.9 Initiate and maintain contacts with suppliers' technical support services, and with technical specialists at other institutions.
- 6.10 Maintain data security and the integrity of systems. Respond to security breaches and to reports of malicious or inappropriate use of Informatics systems.
- 6.11 Install rack-mounted server systems (which are typically heavy) and related rackmounted equipment such as UPS systems (also heavy).
- 6.12 Replace components as required in server, desktop, and laptop systems. (This work requires precise handling of components and sustained concentration).
- 6.13 Provide specialist support for Macs and their interconnection to equipment in the broadcast studios and post-production facilities of the Media Technology Lab.
- 6.14 Provide IT support at events produced by the MTL team, including, for example, graduation ceremonies at the Brighton Centre, and Sussex Conversations at the Royal Institute. (This work also entails moving, handling, connecting/disconnecting sensitive, high-value equipment).

To carry out any other duties that are within the employee's skills and abilities whenever reasonably instructed.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.

INDICATIVE PERFORMANCE CRITERIA

- Assists with specification and procurement of computing and related equipment working within School and research grant budgets at all levels.
- Assists with management of computer systems (primarily Linux and Mac systems) in the Department of Informatics.
- Reports to the IT Lab Manager working within a clear framework, managing their own work (and those assisting in their specialist area) to achieve agreed objectives. Works primarily under the supervision of the SRCO (Linux & Mac) but also under the supervision of SRCO (Windows), as required. In doing this, the post holder supports the achievement of the strategic and operational goals of the University and their Division. The post holder may be 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.
- In accordance with management guidance and with relevant training opportunities provided, supports 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.
- Helps to balance effectiveness and cost-efficiency in the management of budgets where role-holder has influence, demonstrating compliance with Value for Money and Return on Investment principles to support the University's strategic aim to achieve a worldclass standard of teaching and research by managing resources effectively and efficiently.

4. Person Specification

ESSENTIAL CRITERIA

- 1. Education to degree level or equivalent training and experience.
- 2. A detailed practical knowledge and understanding of specialist area.
- 3. Ability to plan, prioritise and organise own work/resources and delegate to others.
- 4. Ability to work independently or collaboratively, as required.
- 5. Change management skills.
- 6. Good oral and written communication skills with the ability to present information in a way that is accessible to a diverse audience.
- 7. Well-developed interpersonal skills with the ability to effectively influence team members, develop good working relationships, and enhance the function of the team

- 8. Good analytical skills that generate appropriate decisions and effective solutions.
- 9. Ability to create and maintain documentation for team and client group
- 10. Commitment to providing excellence in customer experience.
- 11. Ability and enthusiasm for monitoring and evaluating current trends and emerging technologies.

ESSENTIAL ROLE-SPECIFIC CRITERIA

- 1. Degree in Computer Science or related discipline, or equivalent training and experience.
- 2. Minimum of one year's experience working in a hands-on role in an IT support environment.
- 3. Ability to diagnose and resolve issues arising with complex IT systems where no standard procedure exists, requiring creativity, persistence, and multiple lines of investigation to reach a solution.
- 4. Ability to take independent decisions and use initiative in area of expertise.
- 5. Recognition of the importance of the University's procedures, systems, and guidelines; willingness to undertake training in order to gain full familiarity with those relevant to the role.
- 6. Good knowledge of UK-GDPR/EU-GDPR.
- 7. Good understanding of relevant health and safety issues and willingness to undertake further training relevant to the role.
- 8. In-depth knowledge of general IT infrastructure and services including wired and wireless networking, email, firewalls, Active Directory, LDAP, web services, databases, backup software, storage technologies and cloud-based services.
- 9. Good understanding of Linux and Mac processes, protocols, and integrations, such as DNS, DHCP, SMTP, TCP/IP, AD, LAN routing and switching.
- 10. Experience with DevOps and CI/CD tools used for applications packaging (such as pkgutil or Packages) and OS imaging, configuration, and provisioning tools (such as Puppet, Munki, Ansible, Cobbler).
- 11. Understanding of the principles of configuring and operating standard Linux and Mac service applications, with knowledge of related services, components, and tools, (such as SELinux, Apache, MySQL, RPM/DEB/DMG packaging, Git).
- 12. Experience of programming and scripting (for example with Python, Bash, or Ruby)
- 13. Mobility and manual handling skills necessary to manage equipment, some of which is heavy.
- 14. Dexterity and fine motor skills required to upgrade and replace components in computer systems.
- 15. Commitment and enthusiasm for helping users to achieve their specific research and teaching objectives.
- 16. Commitment to self-directed learning and continuing professional development.
- 17. Willingness to work outside normal hours (with TOIL) to cope with unexpected circumstances or to meet specific project deadlines.
- 18. Willingness to travel to trade exhibitions and conferences and to support events that are held off-campus.

DESIRABLE CRITERIA

- 1. Experience of providing IT support in an educational environment and/or scientific research environment.
- 2. Understanding the needs of a software development community.
- 3. Training and certification relevant to Apple hardware and macOS.
- 4. Experience of writing scripts to automate systems administration tasks (for any platform).

- 5. Experience of configuring and operating virtual and containerised platforms for servers, with knowledge of relevant applications, services, middleware, and tools (such as VMWare, OracleBox, Docker, and Kubernetes).
- 6. Experience of managing Windows-based systems.
- 7. Familiarity with software used for audio, image, and video editing such as Adobe Audition, Photoshop, and Premier Pro.
- 8. Experience of operating amateur/professional-grade stills or video cameras and other audio and video equipment.
- 9. Familiarity with broadcast audio and video technology and the workflows used in creative media, including capture, post-production, and live streaming.

To carry out any other duties that are within the employee's skills and abilities whenever reasonably instructed.

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