

Job Description

Job Title:	Research Computing Analyst
Department/Division/Faculty:	Research Computing Service (RCS), Information and Communications Technologies (ICT)
Campus/Location:	South Kensington
Job Family/Level:	Professional Services Level 3b (Salary scales)
Responsible to:	Senior Research Computing Analyst
Line Management for:	
Key Working Relationships (Internal):	Research community at Imperial College and colleagues within ICT
Key Working Relationships (External):	
Contract type:	Open-ended contract

Purpose of the Post

Imperial College London is a world top ten university and is home to the greatest concentration of high-impact research of any UK university. The Research Computing Service (RCS) encompasses a range of services in the support of research activities across the College. This role within the RCS Platforms team is to provide support to researchers on the use of the High-Performance Computing (HPC) facility, associated Research Data storage facility, and future cloud developments that RCS is creating to support research activities.

Research Computing Services HPC estate is a large, heterogeneous system with both proprietary and commodity clusters. It includes high-throughput capacity, high-end capability, GPU compute and large-memory services and is tailored to support the diverse computing needs of the research community.

This role represents an opportunity to support world leading research in the use of our research computing services. As a member of the team, you will provide advice to customers with a high-quality and timely response to incoming support requests. The role will allow a technically minded individual to develop their career in High Performance Computing, mentored by an existing team of HPC specialists to resolve complex issues. We envision this role as taking the 'first steps' into the world of High-Performance Computing.

Key Responsibilities

- Understanding Imperial's Research Computing estate to gain an integrated view of facilities and services.
- Provide support and expert guidance to the research end users on data platforms.
- Responsible for the installation, configuration, and support of scientific software, while working under the general direction of a Senior Analyst.
- Assist researchers to utilise the RCS resources, compile and debug code, use queues, access, and manage data as required.
- Carry out diagnostic processes and implement solutions.
- Monitoring the batch queuing system, for operational issues.
- Support the analysis of system issues resulting from hardware problems or user software usage.

- Managing incoming support requests, performing root-cause investigation, and providing timely, comprehensive solutions either independently or via escalation to other RCS team members.
- Actively participating in meetings to facilitate collaboration and deliver a professional service.
- Develop your understanding of the technology and tools within Research Computing by attending seminars, conferences, and other community events.
- Planning your work to meet agreed objectives and service level targets while demonstrating initiative.
- Work flexibly as a part of the RCS Platforms Team, supporting the group's activities and undertaking individual projects.
- Delivering a high-quality service through a collaborative approach and superior analytical skills.
- Contribute to internal and user facing documentation, making recommendations, establishing best practices, and defining standard operating procedures.

Person Specification

Requirements	Essential (E)/ Desirable (D)
Candidates/post holders will be expected to demonstrate the following:	
Education	
A degree in a scientific or technical discipline or corresponding relevant experience	E
Experience	
Experience of working in a customer orientated support service or a research/technology environment, with a positive attitude to delivery.	E
Practical experience of working within a Linux environment	E
Practical experience in Python or shell scripting	D
Experience with installing and configuring software, including familiarity with common build-systems	D
Experience of using a service management tool	D
Knowledge	
Awareness of Research Computing infrastructure and the types of service components involved in providing a service.	D
Knowledge of operational software in an HPC clustered environment, as used for monitoring, parallel command execution and scheduling with PBS Pro or similar resource management systems	D
Familiarity with the DevOps development culture	D
Awareness of cloud computing, virtualisation, and container technologies/ platforms, including experience of commercial platforms.	D
Awareness and working knowledge of ITIL best practice	D
Skills & Abilities	
Excellent interpersonal skills with the ability to communicate complex technical information effectively to a diverse range of stakeholders, including those without a technical background	E
Demonstrable problem-solving abilities, including proven ability to use initiative, creative thinking, and self-directed learning to resolve unfamiliar issues.	E
Able to use testing and evaluation methods for problem solving.	E
A team player who collaborates and supports the RCS Platforms Team, other teams within ICT, and researchers.	E
Able to work autonomously and take initiative, exercising judgement on escalating issues to senior colleagues	E
Able to propose improvements and enhancements, coupled with a pragmatic approach to providing technical solutions	D

Further Information

Please note that job descriptions cannot be exhaustive, and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the [Imperial Values & Behaviours framework](#). Our values are:

- Respect
- Collaboration
- Excellence
- Integrity
- Innovation

Employees are also required to comply with all College policies and regulations paying special attention to: Confidentiality, Conflict of Interest, Data Protection, Equal Opportunities, Financial Regulations, Health and Safety, Information Technology, Smoking, Private Engagements and Register of Interests. They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the [College Website Health and Safety Structure and Responsibilities](#) page.

Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see <https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/>

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes which are ultimately aimed towards finding new treatments and making scientific and medical advances, and where there are no satisfactory or reasonably practical alternatives to their use. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College's care are treated with full respect, and that all staff involved with this work show due consideration at every level. [Find out more about animal research at Imperial.](#)

We are committed to equality of opportunity, to eliminating discrimination and to creating an inclusive working environment for all. We therefore encourage candidates to apply irrespective of age, disability, marriage or civil partnership status, pregnancy or maternity, race, religion and belief, gender reassignment, sex, or sexual orientation. We are an [Athena SWAN Silver Award](#) winner, a [Disability Confident Leader](#) and a [Stonewall Diversity Champion](#).

July 2023