HPC Systems Administrator
Adapt Centre
Professional 4
2 Year Fixed Term Contract

Dublin City University

Dublin City University (DCU) is a leading innovative European University. It is proud to be one of the world's leading Young Universities and is among the world's top 2% globally. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

Overview of the Department

ADAPT is the world leading SFI research centre for AI Driven Digital Content Technology hosted by Trinity College Dublin. ADAPT's partner institutions include Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Munster Technological University, Athlone Institute of Technology, and the National University of Ireland Galway. ADAPT's research vision is to pioneer new forms of proactive, scalable, and integrated AI-driven Digital Content Technology that empower individuals and society to engage in digital experiences with control, inclusion, and accountability with the long-term goal of a balanced digital society by 2030. ADAPT is

pioneering new Human Centric AI techniques and technologies including personalisation, natural language processing, data analytics, intelligent machine translation human-computer interaction, as well as setting the standards for data governance, privacy and ethics for digital content.

Since launching, ADAPT's researchers have signed 43 collaborative research projects, 52 licence agreements and oversee 16 active commercialisation funds and 52 commercialisation awards. ADAPT has won 40 competitive EU research projects and obtained €18.5 million in non-exchequer non-commercial funding. Additionally, six spinout companies have been formed. ADAPT's researchers have produced over 1,500 journal and conference publications. Nearly 100 PhD students have been trained.

ADAPT's breakthrough technologies and research applications AI for Media Interaction, Digital Humanities, Health, Data governance, and Fintech are being applied across multiple industry domains, expertly facilitated through the ADAPT Design and Innovation Lab (dLab) to deliver product and service innovation. ADAPT's Start-up & Development team fosters and steers collaborations between researchers and AI entrepreneurs from start-up to successful spinout.

Role Profile

The ADAPT Centre is seeking to appoint a HPC Systems Administrator. This position is mainly based in DCU and is open to university graduates along with experienced candidates. The HPC System Administrator (SA) will be responsible for effective installation, configuration and maintenance of our IT infrastructure. The infrastructure includes two High Performance Computing clusters, one Virtual Machine cluster and two Docker clusters, hosted in our data centres in TCD (Trinity College Dublin) and DCU (Dublin City University). The infrastructure runs GNU/Linux, mostly Debian. The SA will ensure that these systems are maintained to a high level, are reliable, secure and deliver the required performance.

The SA will also provide user assistance to our researchers and help them to use our infrastructure optimally. Finally, the SA will report to the Senior Systems Administrator. The SA will have the opportunity to develop in-demand skills in today's trending IT technologies (VMs, HPC, Docker, Kubernetes, Ceph, etc.)

Principal Duties and Responsibilities

- Maintain a state-of-the art IT infrastructure, including Virtual Machines and High-Performance Computing (mostly based on Debian) across multiple institutions.
- Based in DCU, the successful candidate will assist our infrastructure and users in DCU & TCD, remotely and on-site when required.
- Work independently on assigned support tickets and maintenance tasks.
- Resolve assigned technical queries and assistance requests from our users ranging from day-to-day to more complex situations.
- Monitor our infrastructure and perform correcting actions when alerts or warnings are received.
- Activate and manage user accounts for over 300 ADAPT members, providing expert assistance and guidance in related to the Google Suite platform.

- Familiarise and develop skills for a range of technologies used in the ADAPT Centre e.g. Docker, Git, OpenNebula, Ceph, HAproxy, Salt.
- Provide training to ADAPT researchers to enable them to use our infrastructure optimally.
- Monitor the performance of servers, software and hardware.
- Ensure the smooth deployment of new applications.
- Configuring internal systems.
- Diagnosing and troubleshooting technical issues.

Qualifications, Skills and Experience Required

The candidate must have a Primary Degree or equivalent (NFQ Level 7) in a relevant discipline. Ideally the candidate will also have:

- 3 years' appropriate experience in a similar role/environment.
- The ability to work independently.
- A personable, friendly approach to all interactions with end-users and fellow team members.
- Experience with Linux/GNU, Debian experience will be an advantage.
- Willingness to quickly acquire practical knowledge on state-of-the-art IT technologies.
- Capable of explaining complicated processes and practices to new users clearly and patiently.
- Excellent written and oral proficiency in English (essential), good communication both written and verbal.
- Knowledge/experience of the following technologies are a bonus: Docker, Git, OpenNebula, Ceph, HAproxy, Salt.

Essential Training

The postholder will be required to undertake the following essential compliance training: Orientation, Health & Safety, Data Protection (GDPR) and all Cyber Security Awareness Training.

They will also be expected to engage with DCU/ADAPT training on Gender, Equality, Diversity and Inclusion. Other training may need to be undertaken when required.

Dublin City University is an equal opportunities employer.

In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes.

The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the DCU Policy Starter Packs