Research Centre: ADAPT

Post title: Systems Administrator

Post duration: Fixed Term up to Two Years

The ADAPT Centre is Ireland’s global centre of excellence for digital content technology. It combines the expertise of researchers at four universities (Trinity College Dublin, Dublin City University, University College Dublin, and Dublin Institute of Technology) with that of its industry partners to produce ground-breaking digital content innovations.

ADAPT brings together more than 150 researchers who collectively have won more than €100m in funding and have a strong track record of transferring world-leading research and innovations to more than 140 companies. ADAPT partners are successfully advancing the frontiers of content analysis, machine translation, personalisation, e-learning/education, media technologies and spoken interaction, as well as driving global standards in content technologies.

With €50m in research funding from Science Foundation Ireland and industry and with ambitious targets for additional new funding under EU H2020 and other programmes, ADAPT is seeking talented individuals to join its growing team. Our research and technologies will continue to help businesses in all sectors to achieve unprecedented engagement among customers, companies and communities.

The ADAPT Centre is seeking to appoint a Systems Administrator. The successful candidate will support the current Systems Administrator and will need to have expertise in both maintaining advanced software platforms and clusters, which support the Industry Spoke Projects. The System Administrator (SA) will be responsible for effective provisioning, installation/configuration, operation, and maintenance of systems hardware and software and related infrastructure. The SA will ensure that these systems are maintained to a high level, are reliable, secure and deliver the required performance.

Infrastructure to be administered includes:

- Google apps for business
- two HPC clusters
- one VM and container cluster
- two storage clusters
- VMs on AWS and other hosting providers
- Git servers
- several websites
- supporting infrastructure (DNS, LDAP, reverse proxies…)

The SAs are part of the Operations team and will advise this team on how best to deliver the IT Infrastructure to support the business and research activities of the Centre. The SA team will assist research and project teams with technical issues and requests as required. These activities may include the definition of needs, specification of hardware and software, technical strategy, technical analysis and design, and support of the design and development lab staff in executing, testing and rolling-out the solutions.

The successful candidate will work closely with software developers and researchers to assist with the deployment and maintenance of research prototypes and proofs-of-concept.

**Duties and Responsibilities**

The Systems Administrator will:

**Activities:**
- Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirements.
- Develop and maintain installation and configuration procedures for the infrastructure within scope of the SA’s responsibilities.
- Contribute to and maintain system standards (including performance and security)
- Research and recommend improvements for system administration tasks.
- Collaborate with the ongoing training of researchers and programmers on operating systems and tools usage and management.
- Develop and maintain current user documentation for our staff members.

**Operations:**
- Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs such as backups.
- Perform/monitor backup operations, ensuring all required file systems and system data are successfully backed up accordingly to the Centre’s policies.
- Perform regular security monitoring to identify any possible intrusions.
- Be responsible for the user provisioning processes including initial set up, monitoring, changes and cessation.
- Investigate and troubleshoot technical issues as required.
- Repair and recover from hardware or software failures. Coordinate and communicate with impacted users and liaise with any internal and external partners as required.
- Hosting and maintaining web servers such as apache tomcat, oracle weblogic, google app engines
- Cloud infrastructure management such as AWS (instance specification, management and automation).
- Cluster Management - Amazon EC2 and similar.
- Virtual Machine setups and maintenance Vagrant, Virtual Box.
- Development Environment setup based on project’s requirement.
- Data repository (git, cvs, clearcase, cloudstation) management.
- Computer security: Firewalls and intrusion detection systems. Setup security policies for users. Monitoring server security and other services.

Maintenance:
- Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities.
- Maintain operational, configuration, or other procedures to ensure smooth and secure operation of the IT environment within the Centre.
- Perform periodic performance reporting to support capacity planning.
- Work with University and external partners to ensure effective provision and operation of cloud or data centre delivered IT, where appropriate

Qualifications
The post-holder must possess a primary degree in a technical discipline, such as engineering or computer science with a minimum of four years relevant experience.

Experience
- Systems Administration/System Engineer certification in Unix, Linux or Microsoft would be an advantage.
- Knowledge at a power user level of GNU/Linux workstations is required.
- Knowledge of provisioning and monitoring tools.
- Experience with IT security.
- Experience of web application development.
- Experience of java, php, python, javascript (frameworks), databases.
- Agile software development experience is an advantage
• Knowledge of content management systems and source control systems is an advantage.
• Certification in IT Operations or IT Security is an advantage.

Skills
• Good written and oral proficiency in English (essential).
• Excellent communication and interpersonal skills both written and verbal.
• Should possess excellent computer skills, innovative ideas and solutions, flexibility and the ability to anticipate and provide solutions as they arise.
• Adaptive thinker with broad perspective.
• Proven ability to prioritise workload and work to exacting deadlines.
• Excellent problem solving abilities.

Closing date: 10th November 2017

Salary scale: *€45,488 - €54,612
*Appointment will be commensurate with qualifications and experience will be made on the appropriate point of the salary scale, in line with current Government pay policy.

Informal Queries
Informal Queries to: Cliodhna Horan cliodhna.horan@adaptcentre.ie. Please include the ADAPT Position Title in all email communications.

Application Procedure
Application forms are available from the DCU Current Vacancies (open Competitions) website at http://www.dcu.ie/vacancies/current.shtml and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149.

Please clearly state the role that you are applying for in your application and email subject line: Job Ref 677 Systems Administrator, ADAPT

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9.Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: hr.applications@dcu.ie

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