

Clark Atlanta University

Job Description

Position Title:	System Administrator
Employee:	
Department:	Cyber-Physical Systems
Reports To:	Roy George

The following statements are intended to describe the general nature and level of work to be performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

General Function (Description):

The System Administrator (SA) is responsible for effective provisioning, installation/configuration, operation, and maintenance of Department of Cyber-Physical Systems computer hardware and software infrastructure. This individual will participate in technical research and software development to enable continuing innovation within the infrastructure and the development of software products to enhance the infrastructure environment.

Examples of Duties and Responsibilities:

Engineering and Provisioning

- Install new / rebuild existing servers and configure hardware, peripherals, services, settings, directories, storage, etc. in accordance with standards and project/operational requirement
- Install software and configure systems to support the Machine Learning infrastructure
- Develop and maintain installation and configuration procedures. Create virtualization services using bare metal OS
- Research and recommend innovative, and where possible automated approaches for Document Management tasks. Identify approaches that leverage resources and provide economies of scale.

Operations and Support

- Perform system monitoring, verifying the integrity and availability of all hardware, server resources, and systems and key processes
- Perform regular security monitoring to identify any possible intrusions.
- Perform backup operations, ensuring all required file systems and system data are successfully backed up to the appropriate media
- Repair and recover from hardware or software failures. Coordinate and communicate with impacted constituencies.
- Interface with the Faculty, Staff, and Students, and perform system administration tasks across a variety of platforms from servers, to embedded computing

Maintenance

- Apply OS patches and upgrades on a regular basis, and upgrade administrative tools and utilities. Configure / add new services as necessary.
- Upgrade and configure system software that supports Machine Learning infrastructure applications

Software Development

- Develop well designed, testable, and efficient code for a variety of Machine Learning functionality

- Integrate software components into a fully functional software system
- Develop and execute software verification and validation plans

Knowledge, Skills and Abilities

This individual will have knowledge and experience in the following: Linux and Windows systems that support the Systems infrastructure; and software development focused on supporting Machine Learning which includes programming skills in Java, Python, R, and Javascript. The ideal candidate individual would have knowledge and or experience of advanced operating systems such as Xen and virtualization environments, database environments such as MySQL, Mongo, etc., and/or programming frameworks such as Angular 2 and NodeJS.

Position requires independent problem solving capabilities. The ideal candidate will research software, hardware, and system administration solutions as required, evaluate different approaches, and select the best alternatives.

COMMUNICATIONS/INTERPERSONAL NEEDS:

Interpret and/or discuss information with others, which involves terminology or concepts not familiar to people outside this area of expertise and regularly provide advice and recommend actions. The selected candidate will be required to provide training seminars and presentations to a varied audience.

Minimum Hiring Standards:

Education	B.S. in Computer Science or a closely related field. Preference will be given to candidates have 12 graduate hours of study or more.
Years of Experience Required	
Years of Management/Supervisor Experience	