Massachusetts Institute of Technology

MIT Job Description

Position Overview:
The Sloan Technology Services (STS) Infrastructure, Operations & Security (IOS) team is seeking an analytical and flexible Senior Systems Engineer to support the MIT Sloan community. The successful candidate will play a key role designing, implementing and maintaining IT infrastructure for the school. S/he will be part of a multi-disciplinary team that delivers high quality, effective and secure IT capabilities to the Sloan community.

Principal Duties and Responsibilities:

- Will be the lead element for STS's infrastructure platform(s). Current infrastructure is 100% virtualized and consists of over 600 systems spread across two (on-prem) data centers managed with VMware vSphere. The senior systems engineer will take ownership of current infrastructure ensuring its stability and consistency in the short term. In the long term the candidate will be deeply involved with STS's migration to a cloud-based, Infrastructure as a Service (Iaas), platform. S/he will work with STS IOS team to support the scoping & selection of the optimal IaaS platform and lead the transition to the cloud.

- Will lead efforts to generate documentation and infrastructure monitoring metrics that provide detailed situational awareness of STS's infrastructure. This information will be heavily leveraged as STS better defines current and future Service Level Offering and scopes work. This effort will be a mixture of administrative and technical duties.

- Will directly support STS's Linux operating systems. These duties include the design, installation, configuration & administration of Linux systems and components. These highly customized systems support world-class research activities and require a significant amount of end user interaction.

- Will directly support STS's web infrastructure. These duties include application administration (Apache and IIS), configuring F5 LTM for load balancing and security & database maintenance.

Secondary Duties and Responsibilities:
STS IOS is a small (5 person) team that supports a dynamic, extremely fast paced environment. A successful candidate will be expected to provide secondary support for:

- Windows system administration and maintenance
- Storage (Dell/EMC/Tegile) platforms
- Virtual Desktop Infrastructure (VMware Horizon) administration
- Information security scanning and vulnerability remediation
- High performance, research computing platforms

Candidate will be expected to quickly master new technologies to support end user needs.

REQUIRED

- BS in Information Technology, Computer Science or similar field.
- Min 5 years supporting heterogeneous infrastructure platforms.
- Demonstrable proficiency with:
    - VMware vSphere, public cloud (IaaS in AWS / Azure) platform, Linux administration (ideally CentOS / SELinux)
- Demonstrable ability to perform root cause analysis and think laterally.

- Must be a self-starter with good interpersonal skills.
- Must be motivated to learn new technologies.
- Excellent oral communications skills. It is very important that the candidate demonstrate they can explain complex concepts and present information to individual researchers and small groups, such as in a classroom setting.
- Excellent written communication skills, including the ability to create clear accurate documentation of processes, preparing training materials, and documenting customer needs and requirements.

PREFERRED

- MS in Information Technology, Computer Science or similar field.
- Experience working with faculty and students at a research university.
- Demonstrable experience with:
    - WordPress / SharePoint administration
    - Database (MariaDB / MySQL) administration and optimization
    - Scripting language (bash / python)
    - networking (OSI model, routing/switching, VPN tunneling)
    - Infrastructure scanning and reporting (NESSUS / OpenVAS / Nagios)
    - Configuration management (puppet / ansible / chef / salt)
    - Log aggregation (ELK / Splunk)
- Information security risk assessment and mitigation experience.
- Experience working in a team-oriented, collaborative environment.
- Operating within a work management / ticketing system.
- Active IT certifications.

Will share after hours monitoring and response duties for critical emergencies.