Position Type: Exempt

Position Title: Systems Analyst

Division: Digital Systems and Stewardship

Department: Software Systems Development and Research

Reports to: Ben Wallberg

Prepared by: Ben Wallberg

Date Prepared: May 8, 2019

NATURE OF WORK

The Systems Analyst is primarily responsible for configuring, deploying, and monitoring University of Maryland Libraries' server based applications across a wide range of services, including web site delivery, content management, digital collections, digital preservation, and enterprise infrastructure. These include locally developed and third-party applications, in support of the UMD Libraries and the broader University of Maryland research and learning communities.

The Systems Analyst will work closely with both developers and systems administrators to ensure Libraries' applications are highly-performing, highly-available, and fault-tolerant. During the first year the successful candidate will both learn our traditional RedHat Linux based server environment and help lead our transition to a Docker deployment environment. This includes transitioning increasingly more complex and important services to Docker and selecting the orchestration tools and strategies.

The Systems Analyst will utilize automation and monitoring tools to ensure highly-available systems. The candidate will also participate in the Libraries' change advisory board by discussing and documenting system and applications changes as well as their deployment procedures. On rare occasions the job requires emergency response for critical systems outside standard work hours.

DUTIES AND RESPONSIBILITIES

40% - *Application Monitoring and Tuning* - setup automated monitoring and notification of application availability, stability, and performance; analyze and tune resource allocations and application configurations to ensure secure, highly-performing, highly-available, and fault-tolerant systems

25% - *Application Deployment* - install, configure, upgrade, and promote applications through their deployment environments;

10% - *Documentation* - Provide strong written documentation throughout the systems deployment and maintenance lifecycle, utilizing tools such as Jira for issue and work tracking, Git for version control, and Confluence wiki for knowledge sharing

10% - *Disaster Recovery* - Develop, implement, and verify processes for continuity of operations in case of catastrophic loss of service and systems

10% - *Technology Research* – research new tools and technologies, including applications, standards, languages, and frameworks; provide leadership in timing and extent of new technology adoption.

5% - Other duties as assigned

PHYSICAL DEMANDS

- Normal Office duties
- Extensive use of keyboard and computer displays
- The job requires emergency response for critical systems outside standard work hours on occasion

SUPERVISORY RESPONSIBILITIES

None

QUALIFICATIONS

Required:
- Demonstrated ability to research and learn new technologies
- Demonstrated ability to analyze and solve complex technical issues

- Strong user service orientation
- Ability to work independently and as a member of a team
- Excellent interpersonal skills
- Excellent written and verbal communications skills

EDUCATION

Required: Bachelor's Degree

Preferred: Bachelor's Degree in a field related to information sciences, computer sciences and engineering, or information management

EXPERIENCE

Required:
- Three years experience working in the software development and deployment lifecycle, in roles such as Systems Administrator, Systems Analyst, or Software Developer.

Preferred:
- Experience deploying and supporting applications in a Linux environment
- Experience building and deploying Docker images and using orchestration tools
- Experience in database administration
- Experience automating deployment and monitoring using Bash shell
- Experience using continuous integration and continuous deployment tools, such as Jenkins
- Experience using version control, such as Git