Check one: Faculty____ Exempt __X__ Non-Exempt ____ Other___

Date Prepared: October 18, 2012 **Division:** DSS

Prepared by: Ben Wallberg **Department:** Software Systems Development & Research

Reports to: Ben Wallberg **Position Title: Software Developer**

NATURE OF WORK:

The Software Developer provides broad programming support to the University of Maryland Libraries for the development and delivery of Java-based software applications. The applications support development and management of web pages and large-scale digital collections. They include tools for cataloging, search, and discovery of digital collections, tools for acquisition of digital collections, access to and retrieval of digital objects in the collections, and tools for preservation and maintenance of digital collections over the long term.

In addition to developing new functionality, the Software Developer will participate in the full life cycle of the Libraries' applications, including initial configuration and setup, design, testing, updates, and ongoing support, maintenance, and troubleshooting. Development will also include interfacing with and expanding functionality of open source, commercial and production software.

The incumbent serves on a growing development team which works collaboratively using agile methodologies and tools. The incumbent will use and promote tools such as Eclipse, Maven, JUnit, Jira, and Git with a growing body of applications and may participate in retrofitting existing applications.

DUTIES AND RESPONSIBILITIES:

- 30% - Design and develop digital repository tools for managing production workflows, large-scale ingestion, inventory control and preservation of digital collections. Examples include design of file-system architectures for digital repositories, development of name management systems, and development of programs for automated ingestion of digital objects into repository systems.

- 20% - Develop applications to interface with commercial bibliographic systems, acquisition systems, reference and circulation systems. Examples include development of loader applications which use system API's to batch load vendor provided bibliographic records into the bibliographic systems.

- 30% - Provide web interface development support for web pages and digital collection management systems. Examples include web development for JSP/Servlet based applications like HippoCMS, Fedora Commons and DSpace.

- 10% - Utilize project management tools such as JIRA to record and monitor progress

- 10% - Other software programming and management duties as assigned

PHYSICAL DEMANDS: Normal Office duties

SUPERVISORY RESPONSIBILITIES: None

QUALIFICATIONS:

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 or more years of programming experience
- Experience creating web applications using a Web Application Framework
- Experience using database connectivity tools such as JDBC or ORM
- Experience using version control software such as Subversion or Git
- Excellent interpersonal skills
- Excellent written and verbal communication skills

Preferred:

- Experience programming in Java
- Experience with XML, Xpath, and XSLT
- Experience using an integrated development environment such as Eclipse
- Experience using Lucene or Solr search tools
- Experience with automated testing tools such as Junit or Selenium
- Experience with REST/SOAP web services and related tools
- Experience with Spring or Grails
- Experience in academic libraries and archives.

Employee's Signature_____ Date_____

Print Employee's Name_____

Supervisor's Signature_____ Date_____