Position Type: Exempt, Contingent-I

Position Title: Digital Collections Developer

Division: Digital Systems and Stewardship

Department: Software Systems Development and Research

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Reports to: Ben Wallberg

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NATURE OF WORK

The University of Maryland (UMD) Libraries are collaborating with a local radio station on a Broadcast Content Management Pilot, which aims to explore how to create a cost-effective and scalable set of processes, tools, and services to manage access and preservation for audio digital assets generated by broadcasting organizations. The four primary deliverables of the pilot are:

1) Create a reliable, scalable, and auditable ingest and submission interface for administrators and end users.

2) Implement digital preservation services to ensure that no content is lost or altered from the state it was in at the time it was received from the sender;

3) Develop a user interface to facilitate discovery, delivery and rights management of media content

4) Conduct cost-benefit analysis and business assessment of the application.

The project will utilize technologies either in use or under evaluation at the UMD Libraries, such as Ruby on Rails, Solr, Blacklight, Samvera (formerly Hydra, see https://wiki.duraspace.org/display/samvera/Samvera), and the Fedora Content Repository (http://fedorarepository.org). We additionally would like to gain experience and increase our services in the area of streaming and other forms of audio/visual delivery. As such we have chosen the Avalon Media System (http://www.avalonmediasystem.org) as our baseline application to begin the pilot project. Work on this project will also facilitate technology transfer
back into the UMD Libraries Digital Collections program, which is in the process of migrating to Fedora Content Repository and Samvera.

**DUTIES AND RESPONSIBILITIES**

- **50%** - Build Libraries’ applications using Ruby on Rails, Samvera, Blacklight, and Fedora Content Repository, working in conjunction with in-house developers; participate in code design and review

- **20%** - Provide support for processing and delivery of time based media, including streaming, client delivery, and batch processing; research and recommend formats and implementation options

- **10%** - Provide Samvera expertise and support for the development team; help navigate the evolving landscape of Samvera gems and functionality

- **10%** - Provide strong written documentation throughout the software development lifecycle, utilizing tools such as JIRA for issue tracking, Git for version control, and Confluence for knowledge sharing and documentation; gather user requirements and feedback.

- **10%** - Other software programming and support duties as assigned

**PHYSICAL DEMANDS**

Normal Office duties

**SUPERVISORY RESPONSIBILITIES**

None

**QUALIFICATIONS**

**Required:**

- Excellent interpersonal skills
- Excellent written and verbal communication skills

**Preferred:**

- Expertise in processing and delivery of time based media
- Knowledge of audio metadata standards such as ID3
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:

- Two years of programming experience
- Experience developing web applications using Ruby on Rails
- Experience using software development tools for version control, such as Git

Preferred:

- Experience with Samvera and Fedora Content Repository tools
- Experience with Blacklight and Solr tools for search and discovery
- Experience using ffmpeg or related tools for multimedia processing
- Experience engineering solutions for audio/video streaming
- Experience as front-end web developer using HTML, CSS, JavaScript, and JS libraries