Job Title: Developer, Data Infrastructure

Summary

Drexel University Libraries seeks an innovative and enthusiastic developer to design, implement, and maintain back-end systems and infrastructure that optimize processes and workflows for improving the discoverability of Drexel research outputs, academic content, and unique collections.

As a member of the Data & Digital Stewardship division, the incumbent will work in a collaborative, team-based environment. The position's principal responsibility will be the development and implementation of applications and workflows for processing and managing the data and digital content used by the Libraries' discovery and preservation systems. The position will work with tools such as Solr, Blazegraph, Archivematica, BitCurator, Vireo, Camel, and Fedora Commons. Additional responsibilities include the design and/or implementation of tools for the gathering of data related to library services.

Reporting to the Manager, Discovery Systems, the successful candidate will collaborate on technical project development including user needs and functional requirements, design documentation, and evaluating solutions. As needed, the incumbent will also work with related groups across the Drexel campus to establish technical requirements in conjunction with other departments. The candidate will ensure system adherence to technical, quality assurance, data integrity, and security standards for managing data.

Key Responsibilities

- Employ metadata tools, ontologies, and services to create and expose linked data to enhance searching, browsing, and accessing library and scholarly information resources.
- Using web services and related technologies, implement workflows for managing data and digital objects as they move from acquisition and processing into long-term storage and indexing for online access.
- Evaluate, implement, and customize tools such as Archivematica and BitCurator to support digital object processing and conversion, data transformation, metadata extraction, archival description, and digital forensics.
- Collaborate with team members on the data management requirements of repository solutions and front-end discovery development.
- Ensure adherence of systems to technical, quality assurance, data integrity, and security standards.
- Document solutions and workflows for internal purposes and also as part of compliance with University regulatory and privacy requirements.
- As part of the Discovery Systems team, provide coverage for library applications and systems.

Required Qualifications

- Bachelor's degree in Information or Computer Sciences or related field or equivalent combination of education and experience
- 3 years minimum application or systems development experience
- Demonstrated understanding of the application development life cycle
- Demonstrated proficiency with a major language such as Java, PHP, Ruby, Python
- Knowledge of triple stores, SPARQL, RDF
- Experience performing data transfers utilizing software library or language APIs
- Experience with XML, XSLT, XPath, XQuery, and data encoding languages and standards.
- Experience with Linux and shell scripting

- Commitment to continuously enhancing development skills
- Strong analytical and problem solving ability
- Strong oral and written communications skills
- Demonstrated success in working effectively both independently and within teams
- Evidence of flexibility and initiative working within a dynamic environment and a diverse matrix organization

Preferred Qualifications

- Experience in an academic, library, or archives environments
- Knowledge of standards for submission, archival, and dissemination information packages
- Working knowledge of Apache, Tomcat & other delivery servers.
- Experience with a version-control system such as Git or Subversion.
- Experience with the Fedora Commons and Islandora digital asset management systems
- Experience with data or digital object processing tools such as Archivematica

Supplemental Posting Information:

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Background investigations are required for all new hires as a condition of employment, after the job offer is made. Employment will be contingent upon the University's acceptance of the results of the background investigation. Interested, qualified applicants may apply at: www.drexeljobs.com/applicants/Central?quickFind=81539