Internships@ Digital Collections

Intern with Digital Collections

Digital Collections always has projects available for graduate students in library/information science, computer science or graphic design. All projects will need to include some work on-site, but many can include a significant amount of remote participation. Please see our list of internship opportunities for more information on projects or contact us to discuss your own ideas. Send a CV and letter of interest to Michael Reece (reecem@ecu.edu) to apply.

Library Science

Full text encoding
The candidate would work with Digital Collections to create online, full-text books. The project would include scanning the texts, using OCR software to extract text from scanned images, developing those texts into searchable TEI documents, and transforming existing MARC records into MODS descriptive metadata records. Through the course of this project the candidate would gain exposure to imaging techniques, OCR software, basic XML encoding skills, knowledge of the standard XML schema for full text markup (TEI), experience with the MODS metadata standard. In addition to the creation of the records, at the end of the experience the candidate will be asked to create a simple tutorial for future candidates on the process of extracting text via OCR and performing TEI markup.

Metadata/cataloging
This project would be done jointly with the Digital Collections and Technical Services departments to create original metadata records for items added to the Digital Collections repository. The candidate would use interactive web forms to create MODS records for items in the collection. In addition, they would spend some time learning about the overall METS structure, the MIX standard for image technical metadata, and the Dublin Core descriptive metadata standard. Through the course of this project the candidate would gain experience creating original metadata records using controlled vocabularies such as LCSH, LCNAF, TGM, and the Getty Art and Architecture thesaurus. They would gain some experience with the creation and structure of XML for metadata applications.

EAD Updates/MARC records
This project would involve Digital Collections, Special Collections, and Technical Services to create/update/enhance Encoded Archival Description (EAD) records for archival collections in addition to creating MARC records as needed. Through the course of this project the candidate would gain experience creating original metadata records using controlled vocabularies such as LCSH and LCNAF. They would gain some experience with the creation and structure of XML
through the EAD and EAC schemas in particular, as well as cataloging according to MARC standards.

**Usability testing**
This candidate project would involve doing usability testing of any of Digital Collections current projects. The candidate would work with the Digital Collections unit to determine audience, goals, and intended outcomes for the site in question. Then the candidate would determine the best usability test methods and create a test plan from recruitment and scheduling, through testing, synthesis and recommendations. The candidate would have access to Digital Collections’ Morae usability software for conducting tests.

**Web tutorial and other documentation**
This project would involve creating some useful guides for users of our site. The candidate will be encouraged to use interactive and 2.0 tools to develop tutorials or other forms of documentation on repository skills like searching, using the subject cloud, refining search results, the appropriate reuse of materials (i.e. copyright and other usage restrictions). In addition to developing one or more tutorials that will reside on the Digital Collections web site, the candidate will work with the department to define goals and learning objectives, evaluate and learn how to use different presentation formats and software.

**Manage a small digitization project**
In this project a candidate would be involved in the planning and organization for a small digitization project. As the project leader they would work closely with the Digital Collections head of services as well as with various staff members to develop a project plan that would include deliverable, equipment, staffing, supplies and timeline. The candidate would be exposed to the basics of digitization projects including selection, metadata and description standards, digitization techniques (including audio, video, image or text depending on the content selected for digitization), and basic web development. The requirements for completion will be the project plan, although it is expected that work on the project could commence or even be completed in the internship period.

**Institutional Repository Content Development**
This internship involves working on *The Scholarship* ECU’s Institutional Repository that archives the academic output of the university including faculty research and exemplary candidate work. The intern in this position will assist the IR’s managers in obtaining content for the site. Through the course of this experience the candidate would gain experience analyzing research databases to identify candidates for archiving, obtaining copyright/permissions clearance for faculty publications, creating (publisher) acceptable versions of faculty publications using software such as Adobe Acrobat, using administrative tools in the DSpace repository platform to upload works, creating original descriptive metadata using the Dublin Core standard.
Graphic Design

(Re-)Design a Digital Collection
In this project, the candidate will work with the Digital Collections department to design the web site for a new collection or re-design the site for an existing collection. All of the library’s digital collections exist within and underlying infrastructure, which will have to be adhered to, but collection home pages and other contextual resources, as well as some of the overall elements of other pages are open for development. The candidate will need to work with web-safe colors and produce a design that meets complies with the Americans with Disabilities Act. Preference will be given to candidates with the ability to develop actual code and graphics for the site, rather than a single image file. In addition to experience working with various web standards and for an institutional client, if the design is completed and meets the agreed-on criteria, the design will be implemented in the web site and will therefore be a working piece to be added to a portfolio.

Printables
This project involves developing any of a variety of print media to promote the Digital Collections at ECU. Deliverables may include bookmarks, flyers, posters, brochures, etc. and will be produced by the department for distribution in the library as well as at professional conferences and other events.

Computer Science

Develop widgets or other plugins
The candidate will work with Digital Collections to create widgets, Blackboard plugins, and other tools to increase access to Digital Collections. This project provides the opportunity to develop web programming skills and database design and development. The project could include working with PHP, SQL, ASP.NET, Flash, Ruby, Python, Javascript, XML and XSLT.

DSpace software development
The candidate will work with the Digital Initiatives Librarian and the Digital Library Developer to identify and implement upgrades to the library's implementation of the DSpace repository platform. DSpace is an open-source repository software developed with Java. The Library runs the DSpace application in a Windows environment. This internship will involve working with the native Java code as well as the DSpace software interface to develop end-user features such as author profiles and RSS feeds, as well as administrative tools to be used by library staff to create and manage repository content. Work on this project will provide experience working with clients, developing requirements and documentation, work with any of a number of programming languages, and experience with repositories and search software.