Johns Hopkins University Sheridan Libraries
Report to the Digital Library Federation
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I. Collections, services, and systems

A. Collections

Maryland Art and Artists

Based at the Sheridan Libraries, Maryland ArtSource is a scholarly Web resource on Maryland artists, cultural heritage institutions, art collections online, art libraries and the regional art community. It is the collaborative effort of eight cultural and arts organizations in Baltimore dedicated to promoting art information resources that illuminate Maryland art and artists.
http://www.marylandartsource.org

American Sheet Music

The Lester S. Levy Collection of Sheet Music contains 30,000 pieces of music and focuses on popular American music spanning the period 1780 to 1960. Both the sheet music covers and the scores have been digitized and the collection is searchable. It is currently being migrated to an institutional repository (DSpace). Research activities associated with the collection include the development of a digital workflow management system, and research on optical music recognition.
http://levysheetmusic.mse.jhu.edu

Digital Maryland Maps

The Sheridan Libraries' entire collection of Maryland atlases prior to 1914 has been digitized, creating a resource of over 1,000 plates that can be used with other digital cartographic data and GIS (Geographic Information Systems) software. The collection includes historical maps of Baltimore City as well as aerial photographs originally

produced for the U. S. Agricultural Stabilization and Conservation Service to monitor the use of agricultural land.

Laurence Hall Fowler "Lost Baltimore"

Original photographs and drawings of lost and hidden Baltimore from the Sheridan Libraries' Special Collections comprise the "Lost Baltimore" collection. The Web-based collection includes approximately 300 images drawn primarily from photographs taken between the two world wars by Baltimore architect Laurence Hall Fowler. This photographic record documents a wave of demolition that took place in Baltimore's historic Mt. Vernon area during the inter-war period. The images are linked to metadata in a METS template and will ultimately be linked to a larger Web site devoted to Baltimore architecture.

B. Services

Instructional Technology

The Center for Educational Resources (CER) partners with faculty to extend their instructional impact through the integration of digital technologies and innovative teaching strategies. Located in the library, the Center's mission aligns with the evolving role of university libraries as they advance from print-based repositories to electronic collaboratories that enable application of digital collections and networked services to new approaches in instructional and scholarly communication. The CER's popular Technology Fellows Program awards mini-grants to faculty and students projects that enhance teaching, facilitate access to course materials, encourage active learning and promote student/teacher collaboration.
http://www.cer.jhu.edu

Usability Evaluation and Research

Usability testing is increasingly common in the library community. Digital libraries present issues and opportunities that merit the investigation of usability testing methods with the aim of identifying the most appropriate approaches. The Sheridan Libraries are engaged in research on meaningful quantitative measures, the location and diversity of digital library users, partial interface control, realistic vs. controlled test settings, and the balance of user feedback and librarian expertise.
http://ldp.library.jhu.edu/research/usability

Virtual Library Services for Alumni

Hopkins KnowledgeNET is a Web-based service devoted exclusively to Hopkins alumni. Launched in 2004, this joint venture of the Sheridan Libraries and the Johns Hopkins Alumni Association offers free access to hundreds of journals, newspapers and e-books, and fee-based access to an expanded set of resources, such as the Harvard Business Review, The Economist, and many other resources. The service also provides toll-free

phone, e-mail and fax access to a dedicated KnowledgeNET librarian.
https://hopkinsnet.jhu.edu/

C. Systems

Electronic Resource Management Development Partnership

The Sheridan Libraries and the University of Chicago teamed with SirsiDynix on their development of a full-featured Electronic Resource Management (ERM) module. Staff in both academic libraries worked with SirsiDynix to identify functional requirements for the module, which is designed to be a comprehensive ERM solution. Plans call for the Horizon Information Management System to provide an industry-standard platform for e-resource management, and open applications environment with exposed Web Services APIs to Horizon functionality.

Comprehensive Access to Print Materials

CAPM focuses on the evaluation and development of a robotic system that will provide real-time access, through a Web interface, to materials shelved in off-site locations. Also collaborating on the project are faculty from the Departments of Mechanical Engineering and Geography and Environmental Engineering at Johns Hopkins and faculty from the Economics Department at the University of Colorado at Boulder.

The first phase of the CAPM Project produced a prototype retrieval robot and an economic analysis of the potential costs and benefits. The economic analysis framework is applicable for assessing general library services.
http://ldp.library.jhu.edu/projects/capm

Structured Document Analysis Applications

Gamera is a framework for the creation of structured document analysis applications by domain experts. It combines a programming library with GUI tools for the training and interactive development of recognition systems. Gamera is a Python-based framework, with many extensions in C++ for low-level image processing. It runs on Linux, Microsoft Windows and Macintosh OS X.
http://ldp.library.jhu.edu/projects/gamera/

Services for Customizable Authority Linking

With Tufts University digital library researchers, the Sheridan Libraries will provide National Science Digital Library users with automatic linking services that bind key words and phrases to supplementary information and infrastructure to support automatic linking of names and terms in thesauri, glossaries, encyclopedias, subject hierarchies, and object catalogs. The SCALE project is funded by the National Science Foundation.
http://ldp.library.jhu.edu/activities

II. Projects and programs

A. Projects

New Project Announcements

Baltimore Architecture Project

A collaborative effort led by the Sheridan Libraries, with the Athenaeum of Philadelphia and Towson University, the project will incorporate digital images, biographical information about Baltimore's most prominent architects, and primary source materials pertaining to Baltimore's rich architectural heritage. The Sheridan Libraries will survey local institutions to identify relevant historical resources. The Athenaeum of Philadelphia, which developed a similar resource to document Philadelphia's architectural resources, will assist in the design of the project Web site and underlying database. Towson University will spearhead the efforts to research local architects and architectural firms, and will write the biographical sketches. A $40,000 grant from the Gladys Krieble Delmas Foundation is funding the pilot phase of the project.

Electronic Finding Aid for the Papers of Jacob Blaustein

In 2004, the Sheridan Libraries received an extraordinary collection of papers related to the personal and professional life of Jacob Blaustein, who together with his father Louis, founded the American Oil Company in 1910. The Libraries have created a template for the EAD compliant finding aid that is being developed to provide access to the rich research resources in the collection. This project is supported by funding from the Louis and Jacob Blaustein family foundations.

Unified Medical Language System-Based Archive System for Digital Resources

The enormous amount of health-related material generated in digital format-lab images, statistical data, databases, clinical correspondence, internal reports, and pre-published papers-are of great value to research and teaching, yet are challenging for health science librarians to manage, archive, and preserve. A variety of institutional repositories have recently emerged that allow faculty to access, share, search, and retrieve their digital material, but none of them offer built-in metadata subject categorization, metadata indexing, and a comprehensive search/retrieval interface geared towards time-crunched health sciences professionals, and

most of them require considerable human involvement and have complicated or time-consuming submission processes.

With funding from the National Library of Medicine, the university's Welch Medical Library and the School of Medicine's Microscope Facility will develop a Unified Medical Language System-based Archive System (UAS) that will enable health science professionals to create digital archives to manage their work and help medical librarians to acquire, organize, and preserve their institution's digital materials. The system will be based on open-source code and technology and open standards and will be integrated with an XML-based UMLS Web service as its metadata source.

Electronic Theses and Dissertations Pilot

The Sheridan Libraries have launched a pilot project this year to evaluate various electronic publishing systems including DSpace, eprints, DPubS, and DiVA for electronic theses and dissertations at Johns Hopkins. The pilot is a component of the larger initiative led by the Libraries to create an institutional repository.
http://ldp.library.jhu.edu/activities/etdpilot

Sakai

The Sheridan Libraries, in collaboration with IT@JH, are participants in the Sakai Educational Partners Program (SEPP), a community of higher education institutions that are developing an open-source, open-standards collaboration and learning environment (CLE). Sakai will offer features and tools to support electronic and distance learning, and collaboration for work groups or teams. Given its flexible design and open nature, Sakai provides the capability to integrate new services and features within a course management environment, and preserve the digital content that supports learning
http://ldp.library.jhu.edu/activities

A Technology Analysis of Repositories and Services

The Sheridan Libraries, in collaboration with the University of Virginia, MIT, and an extensive network of collaborators, are conducting an architecture and technology evaluation of repository software and services such as e-learning, e-publishing, and digital preservation. The result will be a set of best practices and recommendations that will inform the development of repositories, services, and appropriate interfaces. This project is funded by an award of $111,000 from the Mellon Foundation.

Update on Existing Projects

Digital Medieval Manuscripts- *Roman de la Rose*

An award of $717,000 this year from the Mellon Foundation is funding the next phase of the Rose project to enhance medieval studies through digital technology. The Mellon funding will enable the project team to develop an integrated approach to preservation and access through the design of a repository, which will house the digital content and support its easy integration into learning environments. In addition, the award will support the creation of an advisory board, a technical conference, and the digitization of additional versions of *Roman de la Rose*, the story of a dreamer pursuing Love while encountering obstacles, adventures and life lessons along the way.

Begun in 1998, this collaboration between the Johns Hopkins University's Sheridan Libraries' Digital Knowledge Center and the Department of Romance Languages enables new approaches to medieval studies through the creation of digital surrogates, transcriptions, and text and image searching. Rather than travel thousands of miles to make comparisons of these texts, scholars can easily compare and study them online.
To date, Rose manuscripts from the Walters Art Museum in Baltimore, the Pierpont Morgan Library in New York, the J. Paul Getty Museum in Los Angeles, and the Bodleian Library at Oxford University have been digitized.

Digital Audio Archive Project

This project focuses on the design and creation of an effective and economical workflow management system for digitizing analog audio tapes, and building a Web-based digital audio library. The primary goal is to reduce the costs associated with building a digital audio library. Emphasis is placed on using best practices, open standards and open-source software. The Sheridan Libraries are working with Indiana University, which is providing the tested through a subset of their audio tape collection in the music archives. This project is funded by a $230,000 grant from IMLS.

B. Programs

National Digital Information Infrastructure and Preservation Program Archive Ingest and Handling Test

The Archive Ingest Handling Test (AIHT) is part of the Library of Congress' National Digital Information Infrastructure and Preservation Program (NDIIPP). The Sheridan Libraries' AIHT work focuses on the preservation of the 9/11 archive. It will ingest this archive into DSpace and Fedora, and examine both format migration and archive transfer issues. Funded by the Library of Congress.

III. Specific Digital Library Challenges

Data curation and the migration and integration of disparate content into an institutional repository.

IV. Digital library publications, policies, working papers, and other documents

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o   Choudhury, G. S., T. DiLauro, M. Droettboom, I. Fujinaga, and K. MacMillan. 2001. Strike up the score: Deriving searchable and playable digital formats from sheet music. D-Lib Magazine 7 (2).

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