

# Library Lab Final Report: Undergraduate Course on Special Collections Processing

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## **Project summary**

Library Lab provided funding in the amount of about \$1200 to fund equipment purchases for an undergraduate systems design project course offered in spring 2011-12 jointly in the Engineering Sciences and Computer Science curricula as ES/CS96. The aim of the course is to help the students learn about the process of solving complex, real-world problems — applying engineering and computational design skills — by undertaking an extended, focused effort directed toward an open-ended problem defined by an interested “client”.

The students work independently as a self-directed team. The instructional staff provides coaching, but the students do all of the organization and carrying out of the work, from fact-finding to design to development to presentation of their findings.

The problem to be addressed concerned the Harvard Library’s exceptional special collections, vast holdings of rare books, archives, manuscripts, personal documents, and other materials that the library stewards. Harvard’s special collections are unique and invaluable, but are useful only insofar as potential users of the material can find and gain access to them. Despite herculean efforts of an outstanding staff of archivists, the scope of the collections means that large portions are not catalogued, or catalogued in insufficient detail, making materials essentially unavailable for research. And this problem is growing as the cataloging backlog mounts. The students were asked to address core questions about this valuable resource: What accounts for this problem at its core? Can tools from computer science and technology help address the problems? Can they even qualitatively improve the utility of the special collections? The clients were the leadership of Harvard’s premier Houghton and Schlesinger libraries.

## Accomplishments

The students' recommendations centered around the design, development, and prototyping of an "archivist's workstation" and the unconventional "flipped" collections processing that the workstation enabled. Their process involves exhaustive but lightweight digitization of a collection as a precursor to highly efficient metadata acquisition on top of the digitized images, rather than the conventional approach of digitizing selectively only after all processing of the collection is performed. The "digitize first" approach means that documents need only be touched once, with all of the sorting, arrangement, and metadata application being performed virtually using optimized user interfaces that they designed for these purposes. The output is a dynamic finding aid with images of all documents, complete with search and faceted browsing of the collection, to supplement the static finding aid of traditional archival processing. The students estimate that processing in this way would be faster than current methods, while delivering a superior result.

## Budget spent

Library Lab funds were used to purchase the hardware components of the archivist's workstation prototype.

<b>Item</b>	<b>Date</b>	<b>Amount</b>
Mount Bracket for LCD Screen	8-May-12	25.49
Canon ACK-E8 AC Adapter Kit, 4/6/2012	16-May-12	59.00
Canon EOS Rebel T21 Camera	16-May-12	649.00
Scythe USB-1FS-2 USB 1 Foot Switch	16-May-12	45.88
Floor-mounted Rail Fittings, 3/31/12	16-May-12	325.94
Manfrotto 396B, Articulated Arm	12-Jun-12	84.95
NEEWER Macro Ring LED Light	12-Jun-12	30.16
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total		1220.42

## Next steps

The course is completed, but based on the tremendous interest among Harvard archivists, we hope to pursue the ideas further.

## Code

The code is made available through the course github depository at <https://github.com/organizations/ES96Library>.

## Presentations and publicity

The final presentation was advertised to the entire Harvard Library (hl-comms) and SEAS communities.

The deliverables for the course are now available at the [course web site](#), including the [final report](#) and a [videotape of the students' final presentation](#) before dozens of Harvard archivists, librarians, and other members of the community.