Digital Curation Education Using Open-Source Digital Forensics Software: BitCurator.edu

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PROJECT OVERVIEW

Libraries, archives and museums (LAMs) are using digital forensics tools and methods to meet preservation and access requirements. However, there are gaps in hands-on education. BitCurator.edu is engaged in research to investigate and support educational offerings focused on digital forensics tools and methods.

We've partnered with 9 educational institutions that are teaching digital forensics techniques now or have committed to incorporating them into curricula, and 7 institutions engaged in continuing education. By the conclusion of the project in 2021 we will have created open learning modules and built a network of educators to support digital forensics education for LIS professionals.

RESEARCH QUESTIONS

- What are the primary **institutional and technological factors** that influence adoption of digital forensics tools and methods in LIS classes in different educational settings?
- What are the most viable **mechanisms for sustaining collaboration** among LIS programs on the adoption of digital forensics tools and methods?

PROFESSIONAL EXPERTS PANEL INSTITUTIONS

Council of State Archivists (CoSA)
Digital Library Federation (DLF)
The Lyndhurst Group
LYRASIS
Massachusetts Institute of Technology (MIT)
National Museum of American History
Southeastern Museums Conference (SEMC)

PARTNER EDUCATIONAL INSTITUTIONS

Catholic University
Indiana University
New York University
University of Illinois
University of Maryland
University of Michigan
University of Texas
Wayne State University
San Jose State University

LEARNING MODULES

We will produce learning modules to address least the following topics (and others based on our further elicitation of needs):

- creating disk images to ensure the completeness, authenticity and availability of data
- using cryptographic hashes for de-duplication and to identify, verify and authenticate materials
- generating metadata to document chain of custody and provide context to the material
- finding and locating sensitive information for further review, redaction or removal
- generating specialized reports to characterize contents of collections

PRELIMINARY FINDINGS

- Instructors desire realistic datasets and mechanisms to connect students to real-world projects.
- Prerequisite technology and troubleshooting skills vary dramatically across programs
- Institutions take a variety of approaches in provisioning necessary hardware and software to support hands-on activities.

FUTURE DIRECTIONS

- Development, testing and refinement of learning modules
- Further engagement with continuing education providers
- Build a community of practitioners and educators who create and share educational resources and support each other in developing them

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