

Educational Opportunities

- Joseph Fisher
 - Database Management Librarian
 - digital initiatives project manager
 - University of Massachusetts Lowell (2007 – current)
 - Database Management Librarian

Why Continue Education?

- Libraries are complex digital environments
- Increasing demand for technical expertise and credentials, especially in academic libraries:
 - Digital Archives
 - Institutional Repositories
 - Digital Publishing and Open Access
 - Data Preservation
 - Data Management Planning in support of NSF grants
 - Data Science, eScience, Digital Humanities, Big Data

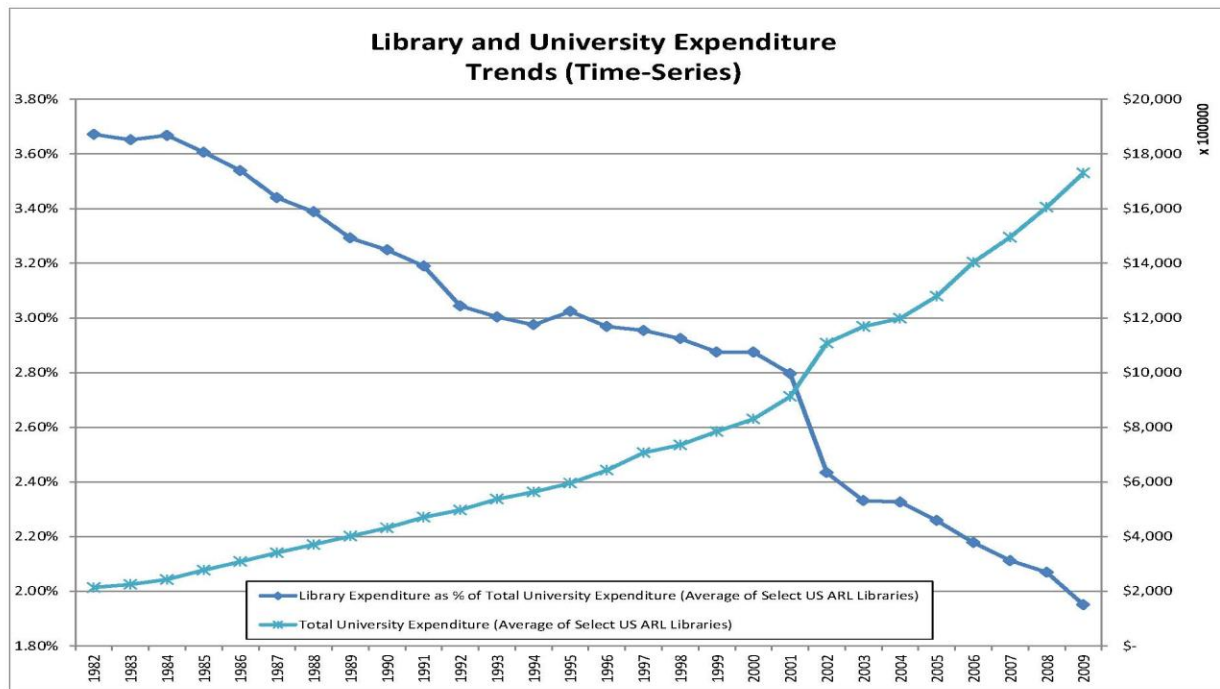
Public Library Systems Average Total
Operating Expenditures Change FY2008 to FY2013

	FY2008-2009	FY2009-2010	FY2010-2011	FY2011-2012	FY2012-2013 (anticipated)
Reported average total change, all funding sources	5.0%	-41.8%	-3.8%	-2.4%	-5.3%

“Public Library Funding Landscape,” americanlibrariesmagazine.org, Digital Supplement, Summer 2012.

http://www.ala.org/research/sites/ala.org.research/files/content/initiatives/plftas/2011_2012/plftas12_funding%20landscape.pdf

Library Expenditures as a Percent of Total University Expenditures v. Total University Expenditures, 1982-2009 (Select Data)



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University and Library Expenditures, (formerly known as the E&G Survey), ARL. http://www.libqual.org/documents/admin/EG_3.pdf

DigIn
Digital Information Management
Graduate Certificate Program

School of Information Resources and Library Science



- University of Arizona SIRLS
- Established 2006
- Six 14-week graduate level courses
- 2009 awarded over \$900,000 IMLS grant primarily to support scholarships

	Tuition Total
DigIn Non-Resident Tuition 2010	\$4,044
DigIn Program Fee 2010	\$1,449
Total tuition certificate cost	\$7,600
Simmons GISLIS course cost 2013	\$3,489

DigIn Instructors

- Peter Boticelli, PhD, program coordinator
 - Digital record keeping and preservation
- Bruce Fulton, M.L.S. and SIRLS PhD candidate
 - 20 years Technology education, CIO/COO
- Tyler Walters, Georgia Tech Library
 - Managing digital information

Digital Curriculum

- IRLS 671 Introduction to Digital Collections
- IRLS 672 Introduction to Applied Technology
- IRLS 673 Managing the Digital Information Environment
- IRLS 674 Preservation of Digital Collections
- IRLS 675 Advanced Digital Collections
- IRLS 676 Capstone

IRLS 672 Introduction to Applied Technology

- VMware
- Ubuntu Linux command-line server
- Apache
- MySQL
- PHP
- XML
- Technology planning, installation, configuration, and implementation

IRLS 675 Advanced Digital Collections

IRLS 675

- Drupal
- Dspace
- Eprints
- PKP- OAH
- Omeka

IRLS 676 Capstone

- TDR and TRAC
- Islandora
- Fedora Commons
- Archivematica

Data Scientist Training for Librarians

Harvard-Smithsonian Center for Astrophysics · Instructors: Christopher Erdmann, Jennifer Prentice, Louise Rubin

The Data Scientist Training for Librarians Course aims to upgrade the skill sets of librarians so that they can better serve the data needs of their communities.

The class will be provided with real world use cases and hands-on training covering data extraction, cleansing, sharing and presentation. Members of the course will concentrate on bibliographic data sources; learn web programming and database development to the extent that is possible. The group will also look into telling a story with data through various visualization approaches and be introduced to a variety of tools currently used by data scientists.

<http://lore.com/Data-Scientist-Training-for-the-Librarian.1/cover>

Technologies covered

- Python
- Google Refine
- DataWrangler
- BibSoup
- ScraperWiki
- FigShare
- R
- Tableau
- Fusion Charts
- D3
- Protovis
- NoSQL/MongoDB
- NLTK
- GitHub

The Digital Preservation Management Workshop, MIT

- Provides practical guidance for developing effective digital preservation programs.
- Developed at Cornell University in 2003 under the direction of Anne Kenney and Nancy McGovern, then at the ICPSR, 2008-2011
- Now based at MIT under the direction of Nancy McGovern, Head of Curation and Preservation Services for MIT Libraries.

Free Coursera online classes



University of London International Programmes
Creative Programming for Digital Media & Mobile Apps

with Marco Gillies, Matthew Yee-King & Mick Grierson

June 2013
6 weeks long



Rice University
An Introduction to Interactive Programming in Python

with Joe Warren, Scott Rixner, John Greiner & Stephen Wong

Apr 15th 2013
9 weeks long
Signature Track



Pennsylvania State University
Maps and the Geospatial Revolution

with Anthony C. Robinson

Jul 17th 2013
5 weeks long



Northwestern University
Fundamentals of Digital Image and Video Processing

with Aggelos Katsaggelos

Date to be announced
12 weeks long



The University of North Carolina at Chapel Hill
Metadata: Organizing and Discovering Information

with Jeffrey Pomerantz

September 2013
8 weeks long



University of Toronto
Learn to Program: The Fundamentals

with Jennifer Campbell & Paul Gries

Sep 24th 2012
7 weeks long

Final Thoughts

- It takes a team
- Not every team member needs to be a tech wizard
- But every member needs to be tech literate
- Become an expert in something
- Team is a virtual concept

It's a 401(k) World

“We’re entering a world that increasingly rewards individual aspiration and persistence and can measure precisely who is contributing and who it not. This is not going away I find a lot of this scary.”

Thomas L. Friedman. It's a 401(k) World.” New York Times op-ed. May 1, 2012