# JEREMY PAUL NELSON CURRICULUM VITAE

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## EDUCATION

*Master of Science*, Graduate School of Library and Information Science, University of Illinois Urbana-Champaign, Urbana, IL. Major field: Library and Information Science. Research interests: information science, library management. July 2003

*Bachelor of Arts*, Philosophy and Economics, Cum Laude, Phi Beta Kappa. Knox College, Galesburg, IL. June 1996

## PUBLICATIONS

Nelson, J. (2013) Building a Library App Portfolio with Redis and Django. Code4Lib Journal, 19

Nelson, J., Cleary, A. (2010) FRBRizing an ELibrary: Migrating from Dublin Core to MODS and FRBR. Code4Lib Journal, 12

Nelson, J. (2008). Catalog in the Cloud: Building an eLibrary on Google's App Engine. Colorado Libraries, 34(4), 32-35

Nelson, J. (2006). Book Review: Putting XML to Work in the Library: Tools for Improving Access and Management, by Dick R. Miller and Kevin S. Clarke. Journal of the American Society for Information Science and Technology, 57(2), 294-295

Nelson, J. (2003). Book Review: Competitive Intelligence, by Christopher West. Journal of Business & Finance Librarianship, 9(1), 90-93

## PRESENTATIONS AND WEBINARS

Nelson, J. (October, 2013). BIBFRAME & RDA. Presentation at CALCON 2013, http://tuttdemo.coloradocollege.edu/calcon-2013-session/. Loveland, CO

Nelson, J. (September, 2013). MARC & MODS to BIBFRAME LinkedData. Presentation at ADR Metadata Day, http://tuttdemo.coloradocollege.edu/metadata-day-2013/. Denver, CO

Nelson, J. (October, 2013). Library Technology Collaboration in 2018. Webinar for CALLI Cohorts, http://tuttdemo.coloradocollege.edu/calli-2013-presentation/.

Nelson, J. (June, 2013). Experimenting with BIBFRAME & Redis. Presentation at ALA Annual Bibliographic Framework Forum, http://tuttdemo.coloradocollege.edu/ala2013/. Chicago, IL

Nelson, J. (April, 2013). Lightening Talk at NISO Bibliographic Roadmap. Baltimore, MD

Nelson, J., Yeh, S. (February, 2013). Presentation at Code4Lib 2013 Annual Conference, http://tuttdemo.coloradocollege.edu/code4lib/, Chicago, IL

Nelson, J. (November, 2012). The Library as a Lean Start-up. University of Denver Student ASSIS&T TechBytes Presentation, http://intro2libsys.info/techbytes/, Denver, CO

Nelson, J., Driscoll, J. (March, 2012). Presentation at CoALA. Denver, CO

Nelson, J. (February, 2012). NoSQL Bibliographic Records: Implementing a Native FRBR Datastore with Redis. Presentation at Code4Lib 2012 Annual Conference, http://discovery.coloradocollege.edu/code4lib/, Seattle, WA

Dean, R. Nelson, J., Fugikawa, E. (June, 2011). The Occasional (Un)Realities of Managing, Manipulating, and Migrating a Consortial Digital Repository Service. Group presentation at Open Repositories 2011, https://docs.google.com/present/view?id=dcgrqjbk\_276pq6hnxdx, Austin, TX

Nelson, J. (November, 2009). Computing in the Cloud: Google App Engine for Academic Libraries . Poster session at the Colorado Library Association annual conference. http://docs.google.com/present/view?id=dcgrqjbk\_212d9czj6c6, Denver, CO

Nelson, J. (March, 2009). Developing a Library Web Application using Google App Engine. Western State College Computer Science Seminar. http://docs.google.com/Presentation?id=dcgrqjbk\_141gmgsxz9q. Gunnison, CO

Nelson, J., Hickman, C. (May, 2008). Creating an Institutional Repository For A Small Liberal Arts College. Poster session at the Colorado Academic Summit: Getting into the Game Repositioning the Library within the Academy, http://docs.google.com/Present?docid=dcgrqjbk\_75dxh6mh&hl=en. Denver, CO

Nelson, J. (September, 2007). Government Information in the 21st Century Citizenship and Immigration Training Session. Training session at the Marmot User Group (MUG) conference as part of a grant from the IMLS, http://docs.google.com/Present?docid=dc45mkjr\_0dhzb3wgz&hl=en. Grand Junction, CO

Nelson, J. (June, 2007). Use of Wikis in the Academic Library. Poster session at the Colorado Academic Summit: Changing Cultures Collaboration, Social Networking and New Technologies, Denver, CO

Bramble, J., Lombardo, N, Craigle, V., Nelson, J., (May, 2005). There is No Time Like The Present: Librarians Learning The Digital Language Of The Future. Group presentation at the Utah Library Association: Times They Are A Changin. Ogden, UT

## OPEN-SOURCE PROJECTS

Alliance Digital Repository - Colorado College Utilities (November 2013/Present) Flask application tha supports common and helpful task useful for managing a Fedora Commons digital repository. Documentation at https://readthedocs.org/projects/adr-cc-utilities-web-app Source code at https://github.com/jermnelson/adr-cc-utilities.

Aristotle Library Apps (May 2012/Present) Aristotle Library Apps are HTML5 Django mobile and tablet apps for discovering, accessing, and managing library information. Bibliographic records along with other library and organizational specific are linked, stored, and managed using Redis and Fedora Commons. Wiki at https://github.com/jermnelson/aristotle-library-apps Source code at https://github.com/jermnelson/aristotle-library-apps

BIBFRAME Datastore (October 2012/Present) BIBFRAME Datastore is a Redis-based project for managing bibliographic records and operational data focused on libraries and other similar information-based organizations. Source code is available at https://github.com/jermnelson/BIBFRAME-Datastore, wiki available at https://github.com/jermnelson/BIBFRAME-Datastore/wiki

Colorado College Electronic Thesis Dissertation (June 2011/Present) The CCETD is a web app that allows senior students at Colorado College self-submit their thesis, capstone project, final film, or other media to the Colorado College Digital Repository. This web app started as a standalone project that first ran under the Discover Aristotle Discovery Layer but later migrated to run as a web app under the Aristotle Library Apps project and is its functionality is being considered to migrated to the catalog push platform. Source code at https://github.com/jermnelson/ccetd/

Colorado Springs Friends Meeting Website (February 2012/Present) Colorado Springs Quaker Monthly Meeting's website, including the Meeting's official minutes, reports, queries, and friends reformatted as Markdown files for tracking through git. Website is at http://www.coloradospringsquakers.org/. Source code at https://github.com/jermnelson/Colorado-Springs-Friends-Meeting-Website/

Discover Aristotle (September 2011/December 2012) Aristotle is an Django-based bibliographic Discovery Layer originally forked from the Kochief project and access project. Is the active Colorado College Discovery Layer at http://discovery.coloradocollege.edu/. Active development on this project has ceased although maintenance is ongoing. Source code is available at https://github.com/jermnelson/Discover-Aristotle

Flask-FedoraCommons (November 2013/Present) Flask-FedoraCommons is an extension to Flask that provides an interface to the open-source Fedora Commons digital repository. Certain modules from the Eulfedora project were forked and included as libraries in this extension. Source code is hosted on github at https://github.com/jermnelson/flask-fedora-commons and documentation including installing and using is available at http://pythonhosted.org//Flask-FedoraCommons.

Flask-Solr (November 2013/Present) Flask-Solr is a Flask extension that provides helper functions for indexing documents into an Apache Solr search server. This source code for this project is on github at https://github.com/jermnelson/flask-solr.

FRBR-Redis Datastore (November 2011/April 2012) The frbr-redis-datastore project is a proof-of-concept native NoSQL bibiliographic datastore that interoperates with Library of Congress's MARC MODS, VRA Core, CIDOC CRM, RDA Vocabularies, and others into native Redis keys-values structured as FRBR, FRBRoo and FRAD entities. This project also includes a bottle application for the 2012 Code4Lib presentation in Seattle, WA. Source code is available at https://github.com/jermnelson/FRBR-Redis-Datastore

## HONORS AND AWARDS

Mentor Recognition , Colorado College, 2011

University of Illinois Graduate Assistantship, $11,500/year, 2002-2003

Economics Senior Reward, Knox College Economics Department, 1996

Mortar Board Academic Honor Society, Knox College, 1995

Ford Foundation Undergraduate Research Fellowship, 1994

## PROFESSIONAL DEVELOPMENT

### Service

Chair, Colorado Association of Libraries EResources Interest Group 2013/Present

Member, ADR Services Committee, Colorado Alliance of Research Libraries, 2010/Present

Member, ITAL Committee, Colorado College, 2010/2013

Member, Web Admin Search Committee, 2012

Chair, Discovery Systems Working Group, Colorado College, 2010/2012

Member, Web-Redesign Working Group, Colorado College, 2010/2011

Member, OPAC Task Force, Marmot Library Network, 2006/2010

Recorder, Information Technology Committee, Western State College, 2006/2010

Member, Academic Faculty Senate, Western State College, 2006/2009

Member, Curriculum Committee, Western State College, 2009/2010

### Continuing Education

Graduate, Colorado Association of Libraries Leadership Institute, 2012-2013.

Data Curation Profiles Workshop, CARL and Colorado State University, April 2011 Electronic Collection Development for Academic Libraries, ALA online course, March-April 2008 Local Holdings Maintenance with the Connexion Browser, BCR Workshop, February 2008 Government Information in the 21st Century training, June 2007

## Affiliations

American Library Association (ALA)

Colorado Association Libraries (CAL)

## COLLEGE TEACHING EXPERIENCE

2012/Fall Term, Lecturer, Introduction to Library Systems at University of Denver Graduate School of Library Science.

2011/September & October, Various FYE Library Instruction at Colorado College 2010/September October, FYE Library Instruction at Colorado College

2009/November Instructor, Managing Your Information Stream using New Technologies. Continuing Teaching Excellence (CTE) Western State College Faculty training seminar on RSS feeds and using Google Reader for use in college curriculum design and research support.

2009/2010 Guest lecturer, System Analysis and Design (CS 410) at Western State College

2006/2010 Instructor, information literacy classes to undergraduate students at Western State College.

2008/2010 Guest lecturer, Computers in Society (CS 110) at Western State College

2004/2005 Instructor, Introduction to XML, an information literacy seminar to undergraduate and graduate students at University of Utah.

## ACADEMIC LIBRARY EXPERIENCE

2010/Present Tutt Library, Colorado College: Metadata and Systems Librarian. Department head for the library's system and cataloging groups. Direct supervisor of three full-time staff. Created new web service record normalization of MARC records from database vendors which significantly reduced the time and errors of formal manual process for cataloging department. Lead the development and release of a new open-source Discovery layer for the library's ILS with direct integration with college’s digital repository and other third-party services. Lead research and developer of the FRBR-Redis Datastore with end-user mobile and tablet library discovery, access, and productivity apps. Active contributor to campus and library committees and working groups. Worked regular shifts at the reference desk including evenings and weekends. Colorado Springs, CO

2006/2010 Leslie J. Savage Library, Western State College: Electronic Services/Government Documents/Periodicals Librarian. Responsible for $120k electronic database and $40k print periodical budgets. Managed Federal Document depository program at Western State College. Responsible for library website. Lead for library projects including chat reference, federated searching, eLibrary. Worked 9-15 hours a week on reference desk. Worked 3-6 hours a month, virtual chat reference. Gunnison, CO.

2003/2006 Marriott Library, University of Utah: Web Services Librarian. Lead effort in designing new web presence for Library, lead technical effort to upgrade Dynix catalog, supported legacy UNIX web presence and applications, created XML application for online resumes using Apache Cocoon. Worked three hours a week on Government documents reference, provided three hours a week virtual reference service, taught information technology seminars on XML, RSS, and Blogs. Salt Lake City, UT

2002/2003 Business and Economics Library, University of Illinois at Urbana Champaign: Graduate Assistant Assisted patrons with business related questions through reference interviews. Assisted and trained patrons on business related electronic resources as LexisNexis, Dun & Bradstreet, Standard & Poor, and others. Developed online tutorials for business databases using PHP. Urbana, IL

## OTHER PROFESSIONAL EXPERIENCE

2012/Present intro2libsys.info: Founder/Primary Principal of educational online textbook and open-badge platform highlighting a range of topics introducing library systems. This website includes presentations, and badge assessments on various historical and current while also offering the following professional services:

* Coaching and consulting on extending library resources into the larger linked data ecosystem using AJAX, REST API, NoSQL, and semantic web systems.
* Software development and support for custom web apps developed to support internal and public linked-data, bibliographic and digital archives using including but limited to the following Python, Flask, Django, Redis, Bootstrap, Knockoutjs, Redis, Solr, MySQL, Fedora Commons, MongoDB, all running on Ubuntu virtual machines on both public and private clouds.

2009/2012 Tomichi Informatics LLC: Founder/Primary Principal. Primary principal in consulting and custom software development focusing on next-generation cataloging and web development and deployment with a focus on HTML, XML, Django, Python, AJAX, and other web technologies to develop seamless web-based information management tools and web mash-ups. Colorado Springs, CO

2003 Wolfram Research: Information management paid intern. Provided advice to improve search on staff intranet. Assisted in data-mining efforts of public academic websites. Champaign, IL

2001/2002 Pearson Education Technologies: Independent Consultant. Designed and Developed migration plan for Pearson's NovaNET standardized testing package to Java peer-to-peer application. Developed Java Swing GUI for instructor management and reports using XML, XSLT, and Oracle. Champaign, IL

1999/2001 Metris Companies: Business and Web Programmer. Developed static and dynamic e-commerce applications for financial services company. Used HTML, Java, XML/XSLT, PL/SQL for back-end reporting and processing for credit product enrollments to enterprise Oracle databases, integrated third-party vendors into Metris Intranet infrastructure. Champaign, IL

1997/1999 NoveNET Learning: Support Engineer, Maintenance Programmer, Project Manager. Supported PLATO Online Educational System, programmed TUTOR online lessons and C++ utilities, designed key user interface migration efforts, including new reports for instructors and support staff. Champaign, IL

1996/1997 Gateway Systems: Project Manager. Assisted in installation and support of Cash Management software for corporate clients, designed and managed software enhancement, trained clients on software. Barrington, IL