Peter Keane

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Education

The University of Texas at Austin, Master of Library and Information Science, August 1995.

Harvard University, A.B. English and American Literature, June 1986.

Professional Experience

The University of Texas at Austin (March 1995 - present)

Senior Software Developer, Liberal Arts Instructional Technology Services May 2004 - present.

Chief Architect/Programmer for Tower Online Learning Environment project:

- Designed and programmed the Tower application, a real-time web application for introductory Psychology at UT Austin. Used by 1500 students in Fall 2012 (one class of 500, one class of 1000) the Tower application provides benchmark quizzing, data collection (demographic surveys and psychological tests), class materials (text, audio, and video) and real-time chat. The application is used live during class for student both on an off campus (live video streaming is included). Quizzes and surveys delivered to student are dynamically generated based on the student's previous quizzes, demographics, and/or scores on psychological measures. For the chat component, students are broken up into small chat "rooms" either randomly or based on previously collected data. All interactions are saved, analysed (natural language processing) and fed back into the system both for live feedback and dynamic content-generation. This data will also be used by researchers studying interaction models and its effects on learning. Technologies: PHP, MySQL, Redis, Javascript/AJAX, Apache Bench, Siege (load/performance testing)

Chief Architect/Tech Lead/Project Manager for Digital Archive Services project:

- Designed and implemented DASe web application, a digital repository and web services framework used across the UT Campus for organizing, cataloging, presenting and sharing documents, images, sound files, video, and bibliographic references. Technologies: PHP, PostgreSQL, MySQL, Javascript/AJAX, Perl, Python, Atom/AtomPub, Solr

- Supervised the work of junior programmers on DASe-related programming tasks, including one FTE staff member and numerous student programmers. Introduced REST/Resource-Oriented Architecture in projects, leveraging Atom/AtomPub as well as JSON-based RESTful Ajax.

- Architected and managed cross-unit collaborative projects including distributed file storage for visual resources and REST-services based Blackboard/DASe integration.

Application Programmer, Administrative Applications:

- Designed and wrote administrative applications for the College of Liberal Arts, including grant proposal submission/management, data collection application for department-wide surveys, voting tool for running departmental committee election, and various quiz/assessment tools. Work included requirements gathering, drawing up specifications, data modeling (ER-diagram/database schema), and programming. Technologies: PHP (custom MVC framework), Python (Django), MySQL, PostgreSQL, Javascript (jQuery/jQuery UI).

Information Analyst/Programmer, The General Libraries November 2001 - May 2004.

- As part of the General Libraries Metadata Task Force, drew up specifications for and wrote Metadata Registry (digital asset repository) web application for the General Libraries.
Technologies: Java/Tomcat, Struts Framework, Apache OJB ORM, MySQL

- Designed and wrote PHP/MySQL applications for library, including knowledge bank and service desk scheduler.
Technologies: PHP, MySQL, LDAP, SMTP

- Served as a member of the Undergraduate Library's reference department

Professional Librarian, The General Libraries December 1995 - March 1997.

- Developed processes and procedures for the acquisition of networked electronic resources. Worked with faculty and staff members on issues related to access and use of new electronic resources.

- Provided reference desk coverage in the Perry-Castaneda Library.

- Served as interim History Bibliographer.

Harvard University (July 1986 - July 1994)

Reference Assistant, Hilles Library September 1988 - July 1994.

- Worked as a member of the reference department at Hilles Undergraduate Library.
  Duties included the design and management of barcoding project for undergraduate libraries.

Technology Skills:

- PHP, Python, Perl, Javascript, Bash, Java, XSLT, CSS, HTML

- PostgreSQL, MySQL

- XML processing (parsing, validating, object-to-XML serialization)

- Data Harvesting and Processing

- Source Code management (Subversion, CVS)

- Build and Integration Tools (Make, Ant, Hudson)

- RSS, Atom, MARC, MARCXML, MODS, METS, FRBR, OAI-PMH

- Linux System Administration

- Solaris, Mac OS X

- LDAP, Samba, NFS, HTTP, SMTP, rsync, SSH

- Image processing (ImageMagick, GIMP) and embedded metadata formats IPTC/EXIF

Conference Attended / Talks Given

- OSCON 2005

- ApacheCon 2006

- Open Repositories Conference 2007

- EduCause Southwest Regional 2007 (presented talk on DASe)

- Texas Conference on Digital Libraries 2007 (presented talk on DASe)

- Common Solutions Group Fall 2007 http://stonesoup.org (presented talk on DASe)

- UT Web Publishers Group FYI, June 2008 (presented talk *Real World REST with Atom/AtomPub*)

- Digital Library Federation Fall Forum 2008 (presented talk *The Use of Atom/AtomPub in Digital Archive Services at The University of Texas at Austin*)

- Maryland Institute For Technology in the Humanities API Workshop, Feb 2011 (presented talk _REST in the design, use, and documentation of Web APIs)

Other

- Member, Open Web Foundation (http://openwebfoundation.org)

- Library Technology Blog (http://blogs.law.harvard.edu/pkeane)

- Professional Folk Musician (http://en.wikipedia.org/wiki/Peter_Keane)

- Licensed Ham Radio Operator (Advanced Class)

- Twitter: @pkeane

- GitHub: (http://github.com/pkeane)

references provided upon request

September 2012