

EDWARD SUMMERS

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Skills/Interests: object oriented design, unit/application testing, metadata standards, agile development methodologies, content management systems, network programming, systems administration

Languages: Perl, Java, Python, PHP, C, C++, Tcl, Scheme

Databases: Oracle, MySQL, SQLite, BerkeleyDB, CDB

Operating Systems: Linux, Solaris, WindowsNT/2000/XP

Technologies: Apache, mod_perl, XML/XSLT, HTML/CSS, SOAP, CVS, samba, netfilter, qmail, daemontools, ucspi-tcp

PROFESSIONAL EXPERIENCE:

Follett Library Resources Applications Programmer

July 2002 Present
McHenry, IL

- Refactoring inline/procedural PHP code using object oriented techniques, the Template Toolkit and Class::DBI frameworks.
- Developed a collection analysis tool which allows libraries to upload their bibliographic records to FLR via the web, and then to view online reports that analyze the collection as a whole, and suggests materials that will improve the quality of their collection. All reports are also exportable as a single PDF document.
- Designed and developed an order integration system that uses XML and X12 to allow FLR to electronically load quotes, orders and purchase orders with the Chicago Public Schools System in real time using an Oracle and Unisys database.
- Create unit and regression tests for modules, database integrity, and web interfaces.
- Maintained and developed new functionality in FLR's online ordering system TITLEWAVE which allows thousands of schools around the world to order books for their libraries.
- Developed object oriented Perl and PHP modules to abstract business and application logic.
- Wrote Oracle and Apache stress testing and reporting programs to measure real time performance statistics.
- Responsible for creating and maintaining projects specifications, tasklists, time estimates and code documentation.

CheetahMail Senior Software Engineer

Feb 2000 July 2002
New York, NY

- Designed, developed and maintained a suite of programs to allow fortune 500 clients to remotely upload data into an Oracle database. Programs included a web-based front end, a daemon that queues and executes upload jobs, a loader which parses many different data formats, an object oriented Perl module to abstract client business logic, and a web based reporting tool to obtain information regarding current and past data uploads.
- Worked as a team lead in a group of 8 programmers to create a web-based reporting system to provide clients with access to both real-time and historical data concerning their email marketing campaigns. This work involved creating client/server applications, caching mechanisms, and 'tied' databases enable reports to be retrieved quickly and efficiently.
- Created database cleanup tools to selectively update and delete duplicate and out of date client data in an Oracle Database with over 80 million client records.
- Created web accessible graphing applications to monitor server activity, and to provide data visualization tools.
- Wrote client integration API programs in Perl which are distributed to clients to allow them direct access to our database from their machines. Also created web services at Cheetahmail which interact with these clients.
- Designed a Linux/Samba/Perl intranet application to provide employees with a means of organizing and sharing documents and links throughout the company using Apache, Samba, and Perl.

- Created a web based application to assist data entry clerks in creating descriptive information about archival collections in XML using the Encoded Archival Description DTD (<http://lcweb.loc.gov/ead/>). Wrote programs that used XML::Parser to parse the XML documents and generate indexes in a MySQL database. Converted XML data into HTML using XT a Java XSL processor.
- Created a web based interface to the library's archival collection, which allowed library users to explore the library's archival holdings and view the XML encoded finding aids using XSL.
- Created conversion programs for the Virtual Library of Virginia to provide Machine Readable Cataloging (MARC) data for SGML encoded electronic texts to a consortium of 39 academic colleges and universities in Virginia.
- Designed and implemented a current awareness system which notified interested students and faculty when new materials arrived in the library system which matched their interest profile.
- Designed and populated a MySQL database to store descriptive information for over 13,000 periodical titles that were either owned by the library or accessible online through a commercial vendor. Also, created a web interface to the database which allows users to browse the journal collection by title and subject, and to link to online content where available.

University of Illinois
Visiting Assistant Professor

Aug 1996 Mar 1998
Champaign-Urbana, IL

- Created and maintained a web searchable database of video holdings for the University of Illinois using Visual Basic and Microsoft SQLServer.
- Maintained portions of library website relating to Sociology and Political Science.
- Evaluated and made recommendations for purchase of online indexes and electronic text collections in the social sciences.
- Provided graduate and undergraduate instruction in the use of electronic and print resources.
- Managed an NEH preservation project to microfilm a collection of 19th century pamphlets.

OTHER PROJECTS

- CPAN Modules: Net::OAI::Harvester, Business::ISBN, MARC::Record, MARC::Charset, HTML::DublinCore, PHP::Include, WWW::Wikipedia.
- Project Manager for MARC/Perl: <http://marcpm.sourceforge.net>

PUBLICATIONS

- "Building OAI-PMH Harvesters With Net::OAI::Harvester", Ariadne, no. 38, Jan 2004, <http://www.ariadne.ac.uk/issue38/summers/>.
- "Cyril: Expanding the Horizons of MARC21", Library Hi Tech, v. 22, no. 1, 2004.
- "A Consortial Approach to Cooperative Cataloging and Authority Control: The Virtual Library of Virginia Experience", Resource Sharing and Information Networks, v. 16, no. 1, 2003, p. 33-53.
- "Paying Homage to Perl (PHP)", Perl Review, January, 2003.
- "MARC it your way: MARC.pm", Information Technology and Libraries, March, 2002.
- "Comprehensive Access to Periodicals: A Database Solution", Library Collections Acquisitions and Technical Services, v. 24, no. 2, 2000, p. 33-44.
- "Show Me the Metadata", Against the Grain, v.11, no.1, 1998.
- "Gateways to Social Work/Welfare on the Net", C&RL News, v.59, no. 3, 1998, p.163-167.

EDUCATION

- MS, Computer Science coursework, Old Dominion University, 1998-2000.
- MLS, School of Communications and Library Science, Rutgers University, 1995-1996
- BA, English, Rutgers University, 1987-1991
- Semester Abroad, University of Sussex, 1990

