

Bob DuCharme

2938 Old Via Road
Charlottesville, Virginia 22901

bob@snee.com
(434) 977-5339
<http://www.snee.com/bob>
Twitter: bobdc

Summary

Software engineer with extensive experience managing and distributing semi-structured data and metadata. A published author and experienced speaker with proven success at learning new technology and standards, evaluating their value for end-users and management, and applying them to create new opportunities.

Professional Experience

Innodata Isogen Hackensack, NJ 2006 – present

Solutions Architect for publishing consulting firm. System and architecture analysis and design, sales support. Redesign of client publishing systems and development of new ones using commercial and open source XML-based standards and tools and offshore labor.

- Analyzed and redesigned publishing system for German divisions of large multinational legal publisher, leading to faster publication times and lower costs.
- Led two-day client workshop for system analysis and redesign for publisher with over 3,000 book titles and over 70 magazines in print. Prototyped web-based system for dynamic book compilation, demonstrated it for top management, and created a screencast demo for those who missed the meeting.
- Developed DITA architecture for large software company's documentation of online server system help.
- Analyzed, designed, and implemented updates to publishing systems for large aerospace client and CMS software company.
- Co-chaired first ever Linked Data Planet conference in New York City.
- Participated in client meetings and sales proposal development leading to several large contracts; extensive editing of sales proposals.
- Completed sales training program.

LexisNexis Newark, NJ, and Charlottesville, VA 2001– 2006

Consulting Software Engineer. System and architecture design, internal and external standards development and evaluation, product and tool prototyping.

- Designed new modular linking architecture to replace complex accumulated ad hoc linking markup used throughout LexisNexis, simplifying the implementation of hypertext linking between products.
- Co-designed XPath-based search syntax for querying LexisNexis databases, enabling customer searches of LexisNexis databases to retrieve more focused results.
- Implemented DTD data schema repository with version management and intranet web-based access, resulting in easier and more tightly-controlled access to new and old versions of schemas throughout the company.
- Costed fabrication issues as part of a team evaluating everything from billing to search query issues affected by a potential adoption of Unicode to accommodate Chinese and Japanese markets; reports used by senior management to develop strategy for Pacific Rim market.

- Completed all research and original drafting of over 250 high-level requirements for \$23M XML Migration project.
- Tuned architecture, requirements, and system documentation of stalled CRM project to help meet its new schedule and budget.
- Represented LexisNexis on the PRISM metadata standards group, providing extensive specification editing and technical expertise. Participation ensured that the resulting standard would have the most efficient influence on hundreds of data feeds provided to LexisNexis by Time Inc., McGraw-Hill, and other major periodical publishers.

UDICo (www.udico.com) New York City 2000 – 2001

Vice President of Corporate Documentation. XML architecture, product design, and pre-sales tech support for creators of high-performance middleware. Developed documentation and marketing material to turn software libraries into a marketable product.

Moody's Investors Service New York City 1997 – 2000

Assistant Vice President overseeing XML and SGML development. DTD and schema design, maintenance, and documentation. Implemented an automated, multiple-media publishing and ratings delivery system to replace Quark-based manual system using FrameMaker C API and Omnimark, resulting in faster, higher volume, more efficient publishing. Managed transition of company from SGML to XML to allow the use of a wider choice of less expensive publishing tools.

Research Institute of America Group New York City 1994 – 1997

Managed team developing <http://www.RIAcheckpoint.com> website, a tax research product consisting of hyperlinked primary and secondary tax research material for users billed by monthly subscription and by transaction. Prototyped SQL-based link management system. Researched usability testing. *Earlier position:* Principal developer in creation of \$4600 hyperlinked multi-CD tax research product created from SGML repositories.

Information Builders, Inc. New York City 1989 – 1994

Developed automated systems to convert technical documentation from SGML-based structured text format to online help systems delivered with database management software products running under multiple operating systems. *Earlier position:* Director of documentation for PC products. Responsible for all writing, editing, screen shots, layout, and production of hard copy and online documentation for PC/FOCUS and related products. Managed four-person team in the update of a five-volume documentation set. Set later translated to German, French, and Spanish.

Education

MS, Computer Science, New York University New York City

Major projects: Smalltalk SGML parser to demonstrate concepts of accompanying paper "Object-Oriented Development of SGML Applications" for independent research project; multi-user client/server game playable across Internet TCP/IP connection implemented in both C and Perl; paper for Dennis Shasha's Advanced Database class "Increasing Concurrency in Object-Oriented Databases Using Semantic Information: A Survey;" LISP system for natural language generation from existing grammar for Ralph Grishman's computational linguistics class.

BA, Religion, Columbia University New York City

Simmons College Graduate School of Library and Information Science Successfully completed Taxonomies and Controlled Vocabularies Workshop.

Addendum

Publications

- *XSLT Quickly* 2001 Manning Publications. A tutorial and users guide to the W3C standard language for transforming XML documents. Later translated into Korean and into Brazilian Portuguese; over 6500 copies of English version sold to date.
- *XML: The Annotated Specification* 1999. An annotated version of the official W3C specification published by Prentice Hall Professional Technical Reference Books. 6000 copies sold in first six months; used in courses and by developers as standard reference book around the world. Japanese version available.
- *SGML CD* 1997 Prentice Hall. A tutorial and user's guide to free SGML software, with CD.
- *Operating Systems Handbook* 1994 McGraw-Hill Professional Books. A series of crash courses in UNIX, VMS, OS/400, VM/CMS, and MVS. (Book now out of print; Acrobat files of book available at www.snee.com/bob/opsys.html.)
- Contributed several chapters to O'Reilly "XML Hacks" and Prentice-Hall's "XML Handbook." Periodicals: Over 60 "Transforming XML" columns and numerous other articles for XML.com since 1998, as well as several articles for *IBM developerWorks* and *devx.com*. April 2005 article in *Dr. Dobb's Journal* "RDF: Store Metadata About Anything, Anywhere."

Other

- Papers presented at SGML 1995 – XML 2008 include "XHTML 2 for Publishers: New opportunities for storing interoperable content and metadata," "Relational database integration with RDF/OWL," "Automated mass production of XSLT stylesheets," "Your schema and the industry standard schema," "Documents vs. data, schemas vs. schemas," "Converting DTDs (and DTD developers) to RELAX NG Schemas," and "Maintaining schemas for pipelined stages."
- O'Reilly Tools of Change Conference, New York City 2007 presentation "Strategies for approaching the eBook Marketplace."
- Program Committee for 2007 Workshop on Semantic Web technology for Law
- Weblog on publishing, metadata, XML, and related issues: www.snee.com/bobdc.blog.
- Consulting editor on XML technology, Manning Publications.
- Chair and speaker in XSLT track at XML Summer School in Oxford, England, 2000 – 2007.
- Technical editing of McGraw-Hill, Prentice-Hall, and Manning books as well as *IBM Systems Journal*.
- Editing contributions to W3C documents "Architecture of the World Wide Web" and "RDFa Primer."
- pg2epub: created system to convert Project Gutenberg books to EPUB format. Sample children's picture books available at www.snee.com/epubkidsbooks.

Technical Addendum

Operating Systems UNIX (Linux and older), Windows flavors, VM/CMS, VMS, MVS, OS/400.

Programming Languages XSLT, XQuery, Python, RDF/OWL, Java, Perl and various UNIX scripting languages, C, C++, OmniMark, JavaScript, Smalltalk, LISP, Scheme, SQL, Prolog, Ada.

Personal

Plays upright bass with the Haywood Giles quartet, www.myspace.com/haywoodgilesquartet.