Bob DuCharme

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This document: http://bobdc.com/BobDuCharmeResume.pdf

Summary

Technical writer, software engineer and data architect 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, communicating their value in a variety of media to end-users and management, and applying them to get more value out of local and public data.

Professional Experience

Commonwealth Computer Research, Inc. Charlottesville, VA 2015 - present

Technical Writer at data science and machine learning research firm. Coordinate and write software documentation, white papers, proposals, and marketing literature. Technical writing includes end-user and API documentation and multiple contractual document deliverables for government and commercial customers. Marketing communications include tweeting and overseeing publication of monthly blog. Management of sales leads, evaluation and configuration of multi-user CRM system.

TopQuadrant Raleigh, NC 2009 - 2015

Solutions Architect for leading semantic web software firm. Marketing, sales support, application design and development, data modeling, training, and documentation.

- Wrote marketing pieces, gave presentations and live and remote demos, and produced and participated in webinars.
- Wrote several product documentation volumes; wrote and edited product online help.
- Training of customers in RDF, SPARQL, data modeling, and related technologies in four-day "Introduction to Semantic Web" course.
- Presented TopOuadrant-related technology at multiple conferences.
- Provided sales support, requirements gathering, data transformation and prototyping for a range of customers.
- Created TopQuadrant YouTube channel at youtube.com/topquadrant and produced, wrote, narrated, and scored all 2013 2015 promotional videos using Camtasia (for example, <u>Search Enhancement with TopBraid Enterprise Vocabulary Net</u>; see also <u>SPARQL in 11 Minutes</u> video produced to promote "Learning SPARQL" book).
- Wrote and edited company blog entries (for example, NoSQL, RDF, and TopBraid), and topquadrant.com website pages; extensive editing of related work by other staff members.
- Developed automated reports on customer evaluation use and, using CRM API, lead tracking report.

Innodata Isogen Hackensack, NJ 2006 - 2009 Solutions Architect for publishing consulting firm.

- Analyzed and redesigned publishing systems for domestic and international clients using commercial and open source XML-based standards and tools and offshore labor.
- Developed DITA architecture for large Redmond-based software company's online server system help.
- Participated in sales proposal development and client meetings leading to several large contracts; extensive editing of sales proposals.

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 modular linking architecture to replace ad hoc linking markup used throughout LexisNexis, simplifying implementation of hypertext linking between products.
- Implemented intranet web-based data schema repository, resulting in easier and more tightly-controlled access to new and old versions of schemas throughout the company.
- 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. Oversaw all writing and production of hard copy and online documentation for PC/FOCUS product line. Managed fourperson 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

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

- *Learning SPARQL* 2013 (2nd ed.) O'Reilly Books. The only book dedicated to the W3C query language for the semantic web and linked data. See www.learningspargl.com for more.
- 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. 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.
- Contributed several chapters to O'Reilly XML Hacks and Prentice-Hall's XML Handbook and forward (along with Martin Fowler) to Elliote Rusty Harold's Refactoring HTML.

Other

- Weblog on RDF and other metadata technology continually updated since 2005 at www.bobdc.com/blog.
- 2013 wrote report and presentation and developed prototype web-based reporting tool for Virginia University Press People of the Founding Era project. This built on the 2012 work described below to integrate relational databases, XML, and RDF to aid in the PFE group's prosopography work. Report available upon request.
- 2012 wrote report and presentation "Documents Compass and RDF-related Technology" for Virginia Foundation for the Humanities Documents Compass group. This recommended steps to take advantage of linked data standards to aid in their prosopography work. Report available upon request.
- Papers presented at Semantic Technologies Conference 2010 2014 include "Semantic Web standards and the Variety 'V' of Big Data" and "Semantic Web Technology and the Publishing World: What Can They Offer Each Other?" Served on program committed 2012 and 2013.
- Editing contributions to W3C technical documents "Architecture of the World Wide Web," "RDF 1.1 Primer," and "RDFa Primer."
- Editing contributions to "The Hundred-Page Machine Learning Book."
- Chair and speaker in XSLT track at XML Summer School in Oxford, England, 2000 - 2007; chair and speaker in Semantic Web track 2009 - 2011.
- Co-chaired first ever Linked Data Planet conference in New York City, 2008.
- Technical editing of McGraw-Hill, Prentice-Hall, and Manning books as well as *IBM Systems Journal*.
- pg2epub: created system to convert Project Gutenberg books to ePub format. Sample children's picture books available at www.snee.com/epubkidsbooks.

Programming Languages SPARQL, JavaScript, XSLT, Python, Perl, UNIX scripting languages; some SQL, Java, C, C++, LISP, XQuery, Scheme, Prolog, Smalltalk, R, Scala, and Spark.

Personal Plays upright bass with several jazz ensembles in the Charlottesville area; album "Gin & Heptatonic" available on Spotify and other streaming services. Plays viola for the Waynesboro Symphony Orchestra.

Review Excerpts

"Nobody so clearly describes SPARQL as Bob DuCharme. His prose is clear and his examples feel realistic." prototypo Amazon review of "Learning SPARQL," 2d ed.

"One of the best technical writers I've read. A logical progression of insight-full explanations with each subsequent layer building on the previous." *Robert Pilz Amazon review of "Learning SPARQL, 2d ed.*

"...the author describes how things work in detail, shows the best way to perform a task, warns about subtle issues you would spend hours fighting with on your own. I found the explanations very useful: even reading about basic concepts can bring discoveries." JavaRanch on "XSLT Quickly"

"XSLT Quickly is the rare technical book that is valuable in a range of contexts. In addition to providing a gentle, concise introduction to XSLT for the novice, the book is a real find for skilled, working developers who can (and must) absorb paradigms and languages quickly. As a reference, it has saved me considerable time by often providing an index entry that corresponded directly to the question I had formulated. If every book on my shelf were this useable I'd have fewer shelves." *Amazon review*, "XSLT Quickly"

"I lached [sic] upon Bob Ducharme's XSLT Quickly after thumbing through several of the other, thicker tomes on the subject in my local bookstore. I needed a clear and concise guidebook that stepped me through the basics, and that is just what I got-over a single weekend reading. Since then I have been reading other work by Mr. Ducharme available on the net, and I continue to be impressed with the breath, volume and clarity of his writing." *Amazon Review*, "XSLT Quickly"

"In the preface, Goldfarb describes the XML Recommendation document as being expressed in "rigorous, elegant (in the mathematical sense...), formal, and concise language." The same can be said for this book's style of writing. "Amazon Review, "XML: The Annotated Specification"

"He explains everything clearly and simply, but most of all practically!" Leonard R Budney, Amazon Review, "SGML CD"

"Great job! it saved me tens of hours scanning the perversely written mvs documentation! thanks for making it available!" *Guillermo Alvarez, Ph.D., Research Staff Member, Storage Systems, IBM Almaden Research Center, on "Operating Systems Handbook," June 2005*