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Summary

Senior UI Developer / Architect strong in both visual design and hands-on software development; M.S., Computer Science; Certificate, Human-Computer Interaction (expected Spring 2013); Studied Graphic Design at Mass. College of Art and elsewhere.

Technologies

- Expertise in **C++** in **Unix/Linux**, **Windows** and **Mac** environments.
- Numerous projects in **Flash/Flex/ActionScript**.
- Designed and built **JavaScript/AJAX** front-ends for data-driven Web pages, using **HTML** and **CSS**.
- Designed and build **Java** applets for **SQL**-driven pages.
- Extensive experience with **C#/.NET** and **WPF**.
- Contributed to **XML**-based standards for printing and publishing.
- Expert in **POSTSCRIPT**, **PDF** and both print and electronic publishing.
- Successful project, technical and management leadership.
- Polished in large and small customer-facing, partner-facing and standards group situations.

Professional Experience

Xerox XMPie
Software Architect
Aug 2010 – present

- Re-architect and implement high-speed document composition workflow for variable data documents
- Update and enhance Flex-based Web document editor

Vistaprint
Technology Manager
June 2009 – Aug 2010

- Manage two engineers
- Designed and built Web-based document editing
- Designed and built UI enhancements for retail store kiosk
- Added document table support
- Convert GDI Web rendering to WPF
- Evaluate composition/rendering engines for Asian and complex scripts

Bitstream

Software Architect
Jan 1998 – June 2009

- Lead Architect for InDesign CS4 plugin
- Created JavaScript to process XML, format documents and produce output for printing
- Enhanced Web-based document editor, including porting from Flash to Flex 2
- Developed Web service to output XML Job Definition Format (JDF)
- Wrote Photoshop scripts to *personalize* images
- Developed PPML (Personalized Print Markup Language), XML format that became an industry standard.
- Architected plug-in mechanism for output drivers
- Developed graphics, imaging, display, POSTSCRIPT/PDF output and UI components of document composition engine
- Developed computational geometry algorithms for automatic page layout.

XyVision/Contex

Consulting Engineer
April 1997 – Dec 1997

- Overhauled POSTSCRIPT prepress workflow, including RIPping input and generating POSTSCRIPT output for image/platesetters and desktop applications
- Technical lead for TIFF/IT → PDF converter project.

IBM Lotus

Development
Principal SW Engineer
Oct 1996 – April 1997

- Developed Web site creation tool based on Domino.Action
- Led Solaris port of configuration application

**BBN Educational
Technology Dept**

Software Engineer
Dec 1994 – Oct 1996

- Director of Software Development for award-winning *Orcas in Our Midst* (Sunburst Communications, 1997)
- Designed interaction and software for components of multimedia titles for K-12 education for both CD-ROM and Web distribution (Mac, SuperCard)
- Developed Web pages and portions of client/server Internet management software.

XyVision/Contex

Principal Software
Engineer
Nov 1993 – Nov 1994

- Project Leader for POSTSCRIPT-based prepress workstation
- Responsible for OO design and implementation on Silicon Graphics, Windows NT and Macintosh platforms

**MIT Center for
Educational
Computing Initiatives**

Research Associate
March 1993 – Nov 1993

- Responsible for Windows implementation, Asset Manager and DB components for AthenaMuse 2, authoring and runtime system for multimedia applications, based on new OO language
- Supervised students implementing portions of project.

Digital Equipment Corp

Supervisor/Principal
Software Engineer
June 1979 – March
1993

- Initiated and led R&D of high-end multimedia workbench as part of joint research project with MIT Media Laboratory and Paws Incorporated (makers of Garfield)
- Supported 2D & 3D design, illustration and animation, audio composition and editing, video editing, etc.
- Led four engineers building 3D user interface toolkit (SGI Inventor, GL)
- Awarded in-house R&D grant to develop *transactional graphics* editing paradigm, combining features of vector-oriented and bitmap-oriented models
- Supervised seven engineers on publishing software and graphics advanced development
- Developed GUI and code design, specification and testing of math fonts, design and development of equation formatting software based on T_EX
- Formed working group to resolve issues in device-independent color representation
- Designed and lead the implementation of graphics editors.

Publications

- With Dave deBronkart, *PPML (Personalized Print Markup Language): a new XML-based industry standard print language*, **Proceedings of XML Europe 2000**, June 2000, pp. 951-960. Available at: <http://www.gca.org/papers/xml europe2000/papers/s23-01.html>
- *Software Director, Orcas in our Midst* (Sunburst, 1997), an interactive CD-ROM and book for middle school classroom use; Winner: **1999 Best Software of the Past Decade: Readers Choice Award**, *Technology & Learning Magazine*.

Education

Tufts University

Certificate,
Human-Computer
Interaction

In progress; Expected Spring 2013.

New York University

M.S., Computer Science

Courses included: computer graphics, operating systems design, compiler design, machine architecture. Thesis: *Drawing Wide Lines on Raster Devices*

Brandeis University

B.A., Theater Arts

Courses included: computer science, linguistics, physics, mathematics, stage design and lighting, acting and directing.

Massachusetts College of Art

Courses in communications design, including: *Communication and Form*, *Graphic Design II*, *Animation Design*.

Affiliations

- Association for Computing Machinery (ACM)
 - Special Interest Group: Computer Human Interaction (SIGCHI)
 - Special Interest Group: Graphics (SIGGRAPH)
- Boston Flex User's Group
- Usability Professionals Association (UPA), Boston Chapter
- Print on Demand Initiative (PODi)
- International Visual Literacy Association (IVLA)