

Patrick Mueller Resume

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Goals

Member of a small software development team engineering solutions to customer's problems with cutting edge technologies. Areas of interest: web-enabled applications, markup languages, scripting languages, embedded programming, tools for software developers, music / audio, all things math.

Positions

2009 - present	IBM / Emerging Technologies	Research Triangle Park, NC
WebKit contributor		Senior Technical Staff Member

IBM's sole contributor to the WebKit project, to get IBM's skin in the game for this important technology. Currently focusing on improving the Web Inspector debugger.

2008 - 2009	IBM / Rational	Research Triangle Park, NC
Member Rational CTO team		Senior Technical Staff Member

Various tasks for the CTO team including contributing to the design of the Jazz Foundation Services, consulting for Rational product development, and early investigation on usage of cloud-based computing for Rational products.

2006 - 2008	IBM / WebSphere	Research Triangle Park, NC
WebSphere Development - various		Senior Technical Staff Member

Various tasks relating to the Project Zero project, including coordinating IBM's involvement with the PHP community, developing REST-based modeling tools, and working on the Project Zero web-based IDE.

2005 - 2006	IBM / Rational	Research Triangle Park, NC
Jazz: RESTy web services in Java		Senior Technical Staff Member

Developed the web services framework for IBM Rational's Jazz project.

2004 - 2005	IBM / OTI Labs	Raleigh, NC
VMs and Scripting		Senior Technical Staff Member

Worked with a small team investigating scripting languages and VMs.

Continued with the Open Source Java Guru / Apache Geronimo tracking work from before, to a lesser extent.

2004	IBM / OTI Labs	Raleigh, NC
Open Source Java Guru / Apache Geronimo tracking		Senior Technical Staff Member

Analysis work for IBM Director-ish folk who needed to keep abreast of Open Source Java technology. Lots of reading and playing with stuff.

Tracked the Apache Geronimo project quite closely, including doing a bit of development, though not contributing.

2002 - 2003	IBM / OTI Labs	Raleigh, NC
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WSDD Runtimes Architect / Embedded GUI Architect**Senior Technical Staff Member**

Technical lead for the embedded GUI libraries for the WebSphere Device Developer (WSDD) runtimes, including MIDP, AWT, P3ML and BMG technologies. Most of this work was done with a set of small teams in the former OTI Lab in Raleigh. Worked on operating systems/libraries including PalmOS, WinCE/PocketPC, Qt, SymbianOS, and devices such as Palm devices from various manufacturers, HP/Compaq IPAQs, Nokia Communicator. Also worked on deeply embedded systems using QNX and MontaVista Linux on development boards such as the Motorola MobileGT platform and Intel CerfCruiser.

Coordinated the releases of the runtime code in the WSDD product for versions 5.0, 5.0.1 and 5.5.

Designed/developed the audio interfaces for MIDP 2.0 for the initial releases of this functionality for the WSDD product.

Member of the J2ME JCP Review team that met weekly to discuss IBM's role in the Java Community Process for the J2ME related JSRs.

2001 - 2002	OTI	Raleigh, NC
Embedded GUI Guru / Lab Director		Lab Director

Started these new roles in late 2001. Additional responsibilities, over and above TL role, were assisting in the management of the lab's employees, as well as helping to set the technical direction for the lab. Personnel work included doing employee appraisals, counseling, mentoring, hiring, and firing.

1998 - 2002	OTI	Raleigh, NC
Embedded Java		TL - Team/Tech Lead

Lead developer of the jxeLink project, an embedded java linker. Other contributions included serial port runtime libraries, the Degas/EGFX GUI package, the BMG GUI package, bbAWT (AWT implemented on SWT), and doing project management for two releases of the VAME product. Co-wrote the initial SWT port to QNX/Photon.

1997 - 1998	OTI	Raleigh, NC
Embedded Smalltalk/Java		Senior Software Developer

Went on assignment to Object Technology International (OTI). Worked with embedded Smalltalk and then embedded Java, trying to understand the technologies and how to exploit them. Designed / developed concept car with Delco and Sun for Comdex 97 in Las Vegas.

1995 - 1997	IBM	Research Triangle Park, NC
VisualAge Smalltalk / Java Features		Senior Software Developer

Lead developer of the "Web Connection" feature of VisualAge Smalltalk. Before moving on, developed the initial prototype of the VisualAge Java version of this project using the nascent Servlet technology.

1993 - 1995	IBM	Research Triangle Park, NC
IBM VisualAge Distributed Smalltalk		Advisory Software Developer

Designed / developed the communications layer (TCP/IP) and GSS-API security API usage for the Distributed Smalltalk feature of VisualAge Smalltalk.

1992 - 1993	IBM	Cary, NC
CORBA implementation on top of DCE		Staff Software Developer

Development team member of an OMG CORBA implementation on top of DCE for OS/2 and AIX.

1991 - 1992	IBM	Cary, NC
Hickory Editor		Software Developer
Designed / developed the REXX macro interface into the Hickory editor control, which was a follow-on to the OS/2 Multi-Line Edit Control. Designed / developed the text model for the follow-on to the Hickory editor.		
1989 - 1991	IBM	Bethesda, MD
PLNLP Dictionary Development		Software Developer
Designed / developed dictionary building tools and dictionary access APIs for a grammar checking editor for both VM/CMS and OS/2.		
1988 - 1989	IBM	Bethesda, MD
Twain Library Development		Software Developer
Designed / developed text-processing algorithms for use in the natural language processing Twain library for OS/2.		
1985 - 1988	IBM	Lexington, KY
Master Product Inventory		Software Developer
Designed / developed programs for the internal IBM product MPI. Batch programming for MVS, interactive CICS programs for 3270, and REXX programming tools as development aids for VM/CMS and MS-DOS.		

Education

1981 - 1985	Purdue University	West Lafayette, IN
B.S. Computer Science, Systems option		
B.S. Mathematics, Computer option		

Standards Work

Object Management Group, [OMG IDL Mappings to Smalltalk](#), 1995

IBM J2ME JCP Review Board, 2001-2004

Expert Group Member, [JSR 241: The Groovy Programming Language](#), 2004

Papers

Forward to Book: "OS/2 2.1 REXX Handbook: Basics, Applications, and Tips" By Hallett German, 1993

IBM Technical report, "cPost - Typesetting C Language Files With PostScript", 1994

IBM Technical report, "The Design and Implementation of REXX Object Extension - ROX", 1994

IBM Technical report, "REXX Source Level Debugging with System Exits", 1994

REXX Language Symposium, "The Design and Implementation of REXX Object Extension - ROX", 1994

OOPSLA 1995 Workshop on "Objects, Scripts and the Web": "[Smalltalk Scripts for the Web](#)"

Smalltalk Report, "[Building a Gopher from Sockets and Widgets](#)", 1995. Republished in "[Wisdom of the Gurus: A Sigs Developer's Guide](#)", ISBN: 0134998499

OOPSLA 1996 Workshop on "Toward the integration of WWW and Distributed Object Technology": "[Use of HTTP as a Transport for Distributed Object Systems](#)"

1996 Smalltalk Solutions Panel on Smalltalk and the Web: "[The Future of Application Development for the Web with Smalltalk](#)"

1997 Smalltalk Solutions Presentation: "[Interfacing Smalltalk Systems to the Web](#)"

1998 Smalltalk Solutions Presentation: "[Smalltalk in the Network Vehicle](#)"

OOPSLA 2003 Workshop on "Pervasive Computing": "[Java Community Process and Embedded Java User Interface](#)"

Personal Interests

Bicycling, hiking, car camping, family fun, guitar.

Extracurricular hacking: see various projects at my site <http://muellerware.org>, at [github](#), and my personal [mercurial repository](#).

Last updated, November 2009.