ROBERT **BRUCE** WALLACE JR
SOFTWARE DEVELOPMENT & CONSULTING

Overview	As Principal Consultant of PolyGlot Inc, Bruce has provided computer software development, consulting, and training services around the world. Projects have been completed in San Francisco, "Silicon Valley", "Route 128" MA, Austin TX, Charlotte NC, Atlanta GA, Juan-les-Pins France, Sydney and Perth Australia.
	Hands-On development in 40+ languages and 50+ application domains for 75+ clients *(including Apple, Sun/Javasoft, HP, FedEx, BellSouth, Coca-Cola, Wachovia, Wells Fargo, Williams-Sonoma, Chevron, Lockheed, Raytheon)*.
	Authored Top-5 world-wide best-selling software, and articles for magazines like OReilly, DZone, Byte, JavaPro, OnJava, Gamelan/Developer.com.

Skills

Software Architect	Software Engineer	Managing & Mentoring
Combining computer science theory and pragmatic hands-on experience in 50+ domains as Application & Solutions Architect.	Hands-on experience in every software development lifecycle phase: analysis, design, implementation, testing, maintenance & documentation.	From Team Lead to CTO, leading a wide variety of design & development projects in team and independent situations.

Technical

Modern Javascript	Java/J2EE/JSP	OS X
AJAX/JSON/REST	XML/XSL/WSDL/SOA	Windows
RIA/YUI/jQuery/Dojo	SQL/NoSQL	Unix
HTML/CSS	C/C++	Linux

Experience (excerpts)

PolyGlot, Inc.
President & Principal Consultant

As a consultant to scores of companies, my roles ranged over Architect, Author, CTO, Chief Scientist, Product/Project Manager, Business Analyst, Systems Analyst, Lead Developer, QA Developer/Tester, Tech Writer, and Instructor.

fabric.com
Chief Technical Officer

Took over as a hands-on CTO of a small startup (which was later sold to Amazon.com). Was in charge of all technical aspects of the company, developing online retail stores and real-time web auctions for Hancock Fabrics and Walt Disney. Directed staff and contractors across multiple time zones.

Synergy, Inc.
Chief Scientist/Product Manager

Developed a general purpose "NoSQL" semantic-network database kernel, based on AI techniques. Built an interactive development tool to allow business users to create data forms, screen layouts, ontologies, and datasets. Managed all development staff.

Ayden Energy
Head of Software Development

In charge of software design and implementation for a $75 million *(in 2010 dollars)* subcontract to a Lawrence Livermore Labs fusion reactor experiment. Personally wrote a hard real-time multi-tasking operating system from bare metal, interfacing to custom hardware, underneath two separate control system apps. Managed ten other programmers on the project.

Education

Florida State University, Tallahassee, FL
B.S. in Mathematics / Computer Science
National Merit Scholarship

Profiles

Who's Who in Frontier Science & Technology
(Marquis Who's Who in America)

Who's Who in Technology Today
Who's Who in California
Who's Who in Society
Who's Who Worldwide Registry

Languages	Ada	APL	BASIC	C	C++	COBOL	ColdFusion	Exlax	Fortran	Forth/Graforth	FreeMarker	HTML/CSS
	Java	JavaScript	Lisp	Modcal	ObjectPAL	Object Pascal	ObjectVision	Pascal	Perl	PHP		
	PL/SQL	Prolog	RDF	Scheme	Snobol	SQL/ESQL-C/Pro*C	SVG	Tutor	UCSD Pascal	UML		
	Unix shells/sh/csh/bash/tsch/ksh		WSDL/SOAP	XML/XSL/XSchema/DTD								
	Z80	6502	6800	68000	8080	8052	8085	Compass	GAS/FLECS	Macro-10/11/20		

Technologies

Front End:	AJAX/JSON/REST/SOA	Applets	RIA/Gravey/jQuery/YUI/Dojo	Epicentric/Portals
Back End:	Apache/Tomcat	Borland Enterprise Server	J2EE/JSP/Servlets/EJB	JRun	Struts/Spring
IDEs:	CodeWarrior	Eclipse	JBuilder	MPW	Rational Rose	WebSphere/WSAD
Tools:	Ant	Batik	MediaBin	NetView	Protege-2000	TOAD	JUnit/JsUnit	XALAN/XERCES
Protocols:	BER-ASN	DecNet	HTTP	ICMP	IS41	LDAP	OSI	SNMP	SS7	TCP/IP	T1 (D4/ESF)

Databases

Access | ADABASE | DBVista | FileMaker Pro | HP Image/View | Informix | Ingres

MySQL | Oracle | Paradox | Progress | Sybase | Savant | 4th Dimension

Industries

Apparel/Fabrics | Automotive | Banking/Financial | Biotechnology | Computer OEM | Data Aggregation

E-Commerce | Education | Game Software | Government | Energy/Utilities | Insurance | Legal | Manufacturing

Military | Retail | Scientific/Laboratories | Software Publishing | Telecommunications | Transportation

Domains

artificial intelligence/ontology/semantic web | asset/image management | business processes/BPA/BPR

CAD/CAM | CAI | CIM | CRM | compilers | computational geometry | control systems | database kernels

data warehouses | device drivers | distributed systems | embedded systems | graphics | middleware (MOM)

MRP/ERP/DRP | O/S kernels | protocol design | real-time systems | simulation | user interfaces | workflow

Roles

Architect | Author | Business/Domain Analyst | CTO / Chief Scientist | Instructor | Lead Developer

Product/Project Manager | QA Developer/Tester | Systems/Technical Analyst | Technical Writer

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Custom Resume Extract: **Robert BRUCE Wallace, Jr.**
Projects Displayed: 21 out of 82

1/2014 thru 5/2015: Consultant
Williams Sonoma, San Francisco, CA
Shiva Harris, Business Mgr

KEYWORDS: DOJO, FreeMarker, RIA, AJAX, JavaScript, HTML, CSS, Sass, design patterns, Java, Spring, MVC, Endeca, ecommerce, analytics

Member of team developing and supporting the six brands in the Williams-Sonoma family of retail websites including Pottery Barn. Developed new GUI widgets in JavaScript and Dojo, and webpages in HTML, CSS, Java, Spring, and Freemarker. Focused on Checkout tunnel, Analytics generation, and site search using Endeca. Also created documentation and training materials for developers about design patterns and MVC techniques.

2/2011 thru 7/2013: Consultant
Wells Fargo Bank, San Francisco, CA
Manuel Jasso, Supervisor

HEADCOUNT: Supervised 3 other team members.

KEYWORDS: ARIA, RIA, AJAX, JavaScript, HTML, CSS, XML, JSON, design patterns, Java, JSP, J2EE, MVC, YUI, Ext-JS, Struts, cross-browser, Accessibility, performance optimization, jsUnit, yuiTest, QA/QC

Member of core team developing Wells Fargo's WRIA & WFRIA RIA frameworks used by scores of customer-facing banking web apps. Developed new GUI widgets in YUI, JavaScript, HTML & CSS, new custom JSP tags to generate corporate standard markup, and server-side framework components using Java, Servlets, JSP & Struts. I also created documentation and training materials for framework users and developers including performance optimization and MVC techniques.

1/2007 thru 10/2008: Consultant
Wachovia Bank, Charlotte, NC
Chris McDonald, Supervisor

KEYWORDS: BA, Business Analyst, Java, .Net, mainframe, Web Services, SQL, architecture, data model, data warehouse, domain model

For an enterprise-wide revamping of customer identity management for Basel II compliance, I performed business and systems analysis required to: (1) produce a design for a new common system for managing customer identity data, and (2) retrofit a large number of internal banking applications to integrate with that new system, and (3) integrate those same systems with a new enterprise data warehouse. This involved surveying and bridging a wide range of data models, user interface technologies, and data exchange technologies.

12/2004 thru 11/2007: Consultant
Wachovia Bank, Charlotte, NC
Chris McDonald, Supervisor

HEADCOUNT: Supervised 4 other team members.

KEYWORDS: AJAX, REST, MVC, WSDL, web services, Java, J2EE, XML, XSL, WSAD, Websphere, HTML, CSS, IE, Javascript, MQ, CVS, Win2K/XP, HP-UX, Solaris, Oracle, TOAD, ANT, Unix shell scripting, PL/SQL, SQL, BA, Business Analyst, domain model

As architect and lead developer, I helped gather Basel II business requirements and led translating them into technical requirements, design specifications, as well as, managing myself and 4 other developers in implementing them as three rich-client banking applications, using AJAX, REST/WSDL web services, J2EE, XML, XSLT, Javascript, DHTML, and Oracle. Also, I helped convert persistence servers from a standalone Java application to an EJB server, and, set up SOAP interface to Basel II Grading Calculator App.

6/2004 thru 12/2004: Consultant
Wachovia Bank, Charlotte, NC
Chris McCabe, Supervisor

KEYWORDS: Java, J2EE, XML, XSL, WSAD, Websphere, HTML, DHTML, CSS, Javascript, MQ, CVS, IE5, Win2000, HP-UX, Solaris, Oracle, TOAD, ANT, shell scripting, PL/SQL, SQL, Unix, JMS

Developed an interactive banking database query and analysis webapp using J2EE, XML, XSLT, Javascript, DHTML technology to access Oracle databases via an IBM MQ transaction framework. The webapp provided a user interface to slice/dice reporting data via dynamic displays and dynamic SQL query generation. Development tools were Websphere, WSAD, Win2000 and deployment targets were iPlanet and WAS app-servers, IE browsers, Oracle DB, IBM MQ and JMS messaging middleware on HPUX and Solaris servers.

10/2003 thru 1/2004: Consultant
Wachovia Bank, Charlotte, NC
Mark Manning, Supervisor

KEYWORDS: Java, J2EE, XML, XSLT, WSAD 5, CVS, Win2000, DBA, HP-UX, Oracle, TOAD, ANT, shell scripting, PL/SQL, SQL, Unix

Analysed a mature Websphere-based J2EE/XML/XSL commercial banking loan servicing system for obsolete database tables/columns and refactored the PL/SQL to remove them. Developed ANT, Win2K DOS, and Unix shell scripts to automate the process of scanning XML, PL/SQL, and shell script sources to generate a cross reference of accessed database objects.

6/2003 thru 9/2003: Architect
reXume.org / reXume.net, Atlanta, GA
PolyGlot, Inc., Sponsor

KEYWORDS: SVG, XML, XSL, XSchema, Java, J2EE, Tomcat, JRun, MySQL, JDBC, JSP, JAXP, XHTML, HTML, ontology, Protege-2000, Linux, Gantt, Apache, Batik, SQL, UML, Architect, Unix, JBuilder 8 Enterprise

Developed the GanttMagic and reXume XML stds (described via RDDL) for representing Gantt Chart and resume data. Developed and published an open source reference implementation as interactive J2EE web apps (using XSLT and Java hook functions) which filter and display resume data as HTML, plain text, and graphic image renderings of "Experience Diagrams", i.e. gantt chart summaries of which skills were used during which time periods.

8/2002 thru 5/2003: Consultant
ChoicePoint, Atlanta, GA
K. Deshpande, Supervisor

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: Java, J2EE, XML, XSL, XSchema, JBuilder, BES, Win2000, Solaris, Oracle, JAAS, UML, QA/QC, JNDI, LDAP, Struts, education, SQL, RUP, Unix, BA, Business Analyst, SSA NAME3

Worked on multiple projects including developing XSLT transforms of XML bulk data into Oracle load scripts. Was developer/mentor for a team developing the Business Identity Management middleware of a large Business Credit Information Warehouse that used EJB CMP 2.0 technology with Oracle. Documented Struts-based biometric information system. Integrated LDAP servers with Borland J2EE server developing custom JNDI and JAAS components. Developed proof of concept demonstrating Crystal Reports interfacing with Java and EJBs.

4/2002 thru 8/2002: Architect
PolyGlot, Inc., Atlanta, GA
Robert Wallace, Owner

KEYWORDS: SVG, XML, DTD, XSL, XSchema, Java, J2EE, JRun, MySQL, JDBC, JSP, JAXP, XHTML, HTML, ontology, Protege-2000, Linux, Win2000, Apache, Batik, SQL, Javascript, UML, Architect, Unix

Ported GanttMagic, a set of Java/XML utilities for publishing resumes and job requirements in a number of formats including GANTT chart graphics, from standalone Java application to SVG/XML/XSLT based middleware integrated with an interactive web site using multi-threaded J2EE technologies. An ontology was created to organize buzzwords enabling better search and summary results.

11/2001 thru 6/2002: Architect
Grassroots Girls, Atlanta, GA
Renee Izadi, Supervisor

HEADCOUNT: Supervised one other team member.

KEYWORDS: XSchema, HTML, CSS, J2EE, education, workflow, XALAN, XERCES, JAXP, PHP, Win2000, BA, Business Analysis

Site architect and developer of a set of Java, XML, XSLT utilities for automating the generation of their interactive web site. Also, taught in-house classes on XML. Was main liaison between business partners and web graphics designer. Also developed server side scripts in PHP to support forms and order processing.

2/2001 thru 10/2001: Consultant
MediaBin, Atlanta, GA
Bill Coleman, Supervisor

KEYWORDS: Java, C++, JUnit, JBuilder, GDPro, Win2000, BER-ASN-TCP/IP protocols, Design Patterns, UML, QA/QC

Ported from C++ to Java the implementation of the client-side API of the MediaBin Image and Asset Management System. This multi-threaded Java middleware managed the C++ server via proprietary client/server protocols using BER encoding and ASN style protocol layers on top of TCP/IP. I also developed an extensive automated unit/integration test suite using JUnit and JBuilder IDE.

3/2000 thru 1/2001: Tech Asst to Chairman
Matrix.net, Austin, TX
Don Fussell, Chief Science Officer

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: Portals, Java, Servlets, JSP, J2EE, JDBC, HTML, Perl, Solaris, Linux, TCP/IP, ICMP, XML, Epicentric, JRun, MySQL, Apache, Architect, Win95, SQL, UML, Unix, BA, Business Analyst, QA/QC, MVC

Managed, from software purchase negotiations thru development and developer training, the Portal portion of a product delivering network monitoring info via a web user interface. The project used the Epicentric portal framework and JRun JSP/servlet engine on top of a JDBC database and Apache web server. Also, designed, implemented and built automated testing of a servlet-based Configuration Server middleware for the Java and Perl components of the product. Performed all development remotely via Internet telecommuting.

6/1999 thru 3/2000: Lead Developer
Nuforia, Houston, TX
Michael Wollin, Dir., Engineering

KEYWORDS: e-commerce, Portals, education, CRM, Java, Servlets, JSP, J2EE, EJB, HTML, WinNT, Linux, network admin, firewalls, XML, Epicentric, WebLogic, Apache, SQL, UML, Unix, BA, Business Analyst

Hired as lead developer for the Atlanta office of an internet consulting start-up. Participated in OO Analysis JAD of a CRM system for private credit card client, Enterprise Portal development using Epicentric middleware and custom servlets/JSPs, and taught Java and J2EE technology classes to both in-house and client developers. Specialized in multi-tier distributed/internet/intranet systems.

3/1998 thru 4/1999: Chief Technical Officer
fabric.com, Marietta, GA
Stephen Friedman, President

HEADCOUNT: Supervised 22 other team members.

KEYWORDS: Manager, e-commerce, BA, Business Analyst, workflow, data model, data mining, database admin, Filemaker, Access, Java, Javascript, Perl, HTML, Cold Fusion, network admin, WinNT, Win95, Linux, Architect, SQL, UML, Unix

Took over as a hands-on CTO of a small startup that was later sold to Amazon.com. It had lost its entire technical staff midway through its seed funding cycle. Was in charge of all technical aspects of the company, focused on marrying internet commerce with the textile and apparel industries. Reporting to the President, I managed all software development, both in-house, remote outsourced, and licensed, as well as technical architecture development and support. Web sites included retail stores for clients like Hancock Fabrics, Java-applet-based real-time auctions for clients like Walt Disney Company, and the portal sites www.fabric.com and www.apparelex.com. Developed infrastructure to collect data from online activities and data mine it to support email and fax based promotions. Also developed enterprise data integration and workflow middleware to automate internal operations wherever possible. Directed 5 staff members and 17 contractors from 7 different vendors.

7/1997 thru 2/1998: Consultant
Javasoft (Sun), Cupertino, CA
Frank Dibbell, SQE Manager

KEYWORDS: Java, HTML, HTTP, Solaris, Win95, QA/QC, JDK, Visual Cafe, JBuilder, JavaStudio, Unix

Was in charge of developing a set of Java applets to test a broad range of Java APIs available in the HotJava Browser environment, especially security limits. APIs included Java Beans, GUI, networking, communications, system calls, etc. Also developed a multi-threaded HTTP server written in Java with special server side include processing to support browser stress testing.

9/1996 thru 3/1998: Consultant
MIDS, Austin, TX
John Quarterman, President

KEYWORDS: Java, HTML, HTTP, JDK, Visual Cafe, Solaris, Win95, Macintosh, Unix

Developed a data visualization applet in Java that enables Web users to see Internet data storms. Also, wrote Java applications to poll web sites and collect performance statistics. MIDS collects a database of statistics about data flow over the entire Internet. Performed all development remotely via Internet telecommuting.

6/1996 thru 5/1997: Consultant
Coca-Cola, Atlanta, GA
Tamara Wright, Supervisor

KEYWORDS: Java, C++, MacApp, CodeWarrior, SQL, client/server, data warehouse, OOAD, MVC

Helped support & extend Coke's custom Macintosh client software for a client/server data warehouse system. The databases were implemented with Oracle and Teradata servers. The Macintosh software was implemented with MacApp 3.1 using CodeWarrior and C++. Helped develop proof of concept for porting Mac and PC versions of software to a single 3-tier implementation in Java.

3/1996 thru 6/1996: Consultant
IRI Logistics, Atlanta, GA
Vittal Devarajan, Supervisor

KEYWORDS: HP-UX, AIX, C, Oracle Pro*C, Informix ESQL-C, MRP/DRP, compilers, Unix, SQL

Helped to port and enhance the Logistics Partner DRP product from Oracle PL/SQL to C, Oracle Pro*C, & Informix ESQL-C on HP-UX and AIX platforms. Developed preprocessor language to enable common source files to generate both Pro*C and ESQL-C embedded SQL. Was in charge of integration of all backend server code produced by 6 developers.

4/1994 thru 4/1995: Consultant
BellSouth Cellular, Atlanta, GA
Gary Schwaiger, Supervisor

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: C++, AIX, HP-UX, Sybase, DCE, SNMP, NetView, SM/6000, distributed systems, X Windows, SQL, education, OOAD, Unix, BA, Business Analyst

Architect of middleware layer as well as portions of the application layer for a multi-threaded real-time billing network for cellular phone services. The system was written in C++ using Sybase, DCE, & SNMP on AIX and HP-UX servers. Developed real-time process control, communications, and monitoring using custom X windows graphics displays and SNMP interface to NetView & SM/6000. Taught in-house classes on Object Oriented development and C++.

2/1993 thru 3/1994: Consultant
Coca-Cola, Atlanta, GA
Karen Gratton, Supervisor

KEYWORDS: C++, MPW, MacApp, Oracle, Pro*C, SQL, client/server, Win31, OOAD, MVC

Helped develop two marketing promotions tracking systems for Coke where Macintosh and MS Windows custom applications were written to provide a uniform GUI front end to SQL databases. The databases were implemented with Oracle via central servers. The PC clients used Oracle PRO*C embedded SQL pre-compiler. The Macintosh programs were implemented with MacApp 3.0 using MPW and C++.

3/1988 thru 12/1988: Consultant
Cameo Systems, Santa Clara, CA
Fred Hyden, Supervisor

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: Macintosh, MPW, MacApp, Object Pascal, CIM, SQL, object oriented, 4th Dimension 4GL, protocol design, client/server

Macintosh team leader on project to develop computer-integrated-manufacturing (CIM) system for Genentech. Designed and implemented workstation prototypes. Macintoshes were connected to Tandem mainframe which handled central SQL database.

Last Revised Monday October 17, 2016