

Robert Bruce Wallace, Jr.

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

National Merit Scholarship
ACM Member since 1974

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

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

Alphabetical Keyword Summary

- Languages:** Ada, APL, BASIC, C, C++, COBOL, FORTRAN, Forth, HTML, Informix ESQ-C, Java, JavaScript, JSP, LISP, Pascal, Perl, PHP, Prolog, ObjectPAL, Object Pascal, ObjectVision, Oracle Pro*C, SNOBOL, SQL, Tutor, 4th Dimension 4GL, XML, XSLT, XSchema
- Assemblers:** 6800, 6502, Z80, 8080, 8085, 68000, 8086, 88000, Applicon GAS, DEC Macro 10/11/20, CDC Compass
- Systems:** ADABAS-M, AIX, Apache, Apple II Dos, CDC Kronos, CDC PLATO, CP/M, DB-Vista, DCE, DataViews, RSX-11M, DEC Tops 10/20, DG AOS, DGUX, EJB, Epicentric, FileMaker, HP HPE/MPE, HPUX, Informix, Jakarta, JRun, J2EE, Linux, MacApp, Macintosh, Motif, MPW, MS-DOS, MS-Windows, MySQL, Oracle, Paradox, Progress, Solaris, Sybase, UCSD p-system, Unix, UnixWare, VMS, X windows
- Skill Areas:** AI, assembler, audits/controls, BIS, BPA/BPR, CAD, CIM, cellular, compilers, computational geometry, databases, design patterns, education, Enterprise Portals, graphics, GUI, hardware interfacing, Internet, MRP/DRP, mainframe, manufacturing, marketing, middleware, MOM, object-oriented design & programming, project management, protocols, QA/QC, real-time control, simulation, telecommunications, World Wide Web, workflow

Chronological Client Summary

April 1980 thru present: President & Principle Consultant
PolyGlot, Inc.

Concurrently with the major projects listed on the following pages, the projects below were completed on a short-term or part-time basis.

Gamelan.com	Wrote article on Javascript Class Emulation appearing in Feb 2007 Gamelan Magazine
OnJava.com	Wrote article on Javascript Mutual Exclusion appearing in the March 2006 OnJava Magazine
Gamelan.com	Wrote article on AJAX Mutual Exclusion appearing in the March 2006 Gamelan Magazine
OnJava.com	Wrote article on Explicit Programming appearing in the March 2003 OnJava Magazine
Gamelan.com	Wrote article on Design Markers appearing in the March 2003 Gamelan Magazine
JavaPro Magazine	Wrote article on design patterns appearing in the March 2001 JavaPro Magazine
Byte Magazine	Wrote article on computer animation appearing in the May 1981 Byte Magazine
QWIZ, Inc.	Member of expert panels developing online tests for Java 2 and HTML 4.0
Quality Software	Developed/Published "Asteroids in Space". Considered a classic by Softalk Magazine
Quality Software	Developed/Published "Meteoroids in Space" (sequel to Asteroids)
Othello Championship	Developed entry in North Amer. Computer Othello Championship Tournament
MIDS	Developed Java applets for visualizing Internet Network Traffic
ADC Associates	Developed/Published VisiTran data translator for the Apple II
PolyGrafX	Developed a set of Java/XML utilities for publishing resumes
Digital Enterprises	Developed system to monitor/log RAID disk status notifying alerts via digital pagers
Georgia Power	Developed reporting apps for Board of Directors using ObjectPAL (Paradox for Windows)
BenefitWare	Developed insurance direct reimbursement program using ObjectVision
Pillar Corporation	Developed MacApp objects to read/write Lotus & DBase files
Schlage Electronics	Developed electronic lock controller firmware
Formaster	Developed disk copy protection software for Macintosh
Bullwinkles Pizza	Developed graphical customer pickup reminder system
LeCroy, Inc.	Developed laboratory equipment device drivers
Strobe, Inc.	Developed Pen Plotter device drivers for Apple II and CP/M
GenRad S.T.I.	Ported FutureData systems from C to Z80 assembly language
Leon County Schools	Developed test evaluation and reporting programs on CDC mainframe
DCM, Inc.	Developed multi-threaded controller for telephone cable test equipment
Lockheed Missles & Space	Helped test & debug ERIS launch control console software
Hoge, Fenton, Jones, & Appel	Helped develop client database system for law firm
Ruocco & Saucedo	Wrote plan to implement new office LAN in a small law firm
Federal Express	Wrote a white paper on X GUI interoperability & style guidelines
National Info Systems	Wrote market evaluation of Pascal-Plus compiler
MasterPlan, Inc.	Taught in-house classes on MacApp and OO development
Pizza Time Theatre	Taught in-house classes on Apple Pascal

KEYWORDS: AJAX, Java, XML, XSLT, HTML/DHTML, Design Patterns, Design Markers, Explicit Programming, MacApp, FileMaker, Ada, Apple II/Macintosh, DEC 10/20, 6800, 6502, Z80, 8085, 68000, UCSD p-system, Object Pascal, marketing, GUI, graphics, hardware interfacing, education, QA/QC, DataViews, X, Motif, MRP/DRP, telecommunications

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

HEADCOUNT: Supervised 4 other team members.

KEYWORDS: AJAX, REST web services, Java, J2EE, XML, XSL, WSAD/Websphere, HTML, DHTML, CSS, Javascript, MQ, CVS, iPlanet, Win2000, HP-UX, Solaris, Oracle, TOAD, ANT, shell scripting, PL/SQL, SQL, Unix, BPA, MDB, EJB, JMS

As architect and lead developer, I helped gather Basel II business requirements and led translating them into technical requirements, design, and managed myself and 4 other developers for implementation of two rich-client banking applications using AJAX, REST web services, J2EE, XML, XSLT, Javascript, DHTML, and Oracle technology. Also helped convert persistence servers from standalone Java application to EJB based server..

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

KEYWORDS: Java, J2EE, XML, XSL, WSAD/Websphere, HTML, DHTML, CSS, Javascript, MQ, CVS, iPlanet, 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, 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 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, Win2000, Apache, Batik, SQL, UML, architect, Unix, JBuilder 8

Developed the reXume and GanttMagic XML languages and tool suites to publish and display resumes. Interactive J2EE web apps (using XSLT and Java hook functions) filter and display XML resume data as plain text or HTML. Graphical experience summaries can be embedded via the GanttMagic web app.

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

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: Java, J2EE, EJB, XML, XSL, XSchema, JUnit, JBuilder, BES, Win2000, Solaris, Oracle, JAAS, Design Patterns, UML, QA/QC, JNDI, LDAP, Struts, education, SQL, RUP, Rose, Unix, BPA, 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 biometric information system using Struts. 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: Consultant
Grassroots Girls, Atlanta, GA
Renee Izadi, Supervisor

HEADCOUNT: Supervised one other team member.

KEYWORDS: XML, XSL, DTD, XSchema, XHTML, HTML, CSS, Java, J2EE, education, workflow, XALAN, XERCES, JAXP, JRun, Apache, ANT, Linux, PHP, Win2000, Internet, e-commerce, UML, architect, Unix, BPA

Site architect and developer of a set of Java/XML/XSLT utilities for automating the generation of dynamic pages on their web site. Also, taught in-house classes on XML/XSLT. 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, GPro, Win2000, image mgmnt, 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 Mgmnt 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 (over 500 tests) unit test suite using the open std JUnit test framework 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, CSS, Perl, Solaris, Linux, TCP/IP, ICMP, XML, Epicentric, JRun, MySQL, Apache, architect, Win95, SQL, UML, Unix, BPA, QA/QC

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, CSS, WinNT, Linux, TCP/IP, network admin, firewalls, XML, Epicentric, WebLogic, Apache, SQL, UML, Unix, BPA

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

HEADCOUNT: Supervised 22 other team members.

KEYWORDS: management, e-commerce, BPA/BPR, workflow, data modeling, data mining, database admin, Filemaker, Access, Oracle, Java, Javascript, Perl, HTML, Cold Fusion, network admin, WinNT, Win95, Linux, architect, SQL, UML, Unix

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

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

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

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

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

5/1995 thru 2/1996: Consultant
BellSouth Wireless, Atlanta, GA
Steve Cleary, Senior Manager

KEYWORDS: C, C++, UnixWare, message oriented middleware, telecom systems, IS41, SS7, PERL, DGM&S, Pascal, Booch, Unix

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.

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.

Took over as a hands-on CTO of a small startup that 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, outsourced and licensed, as well as technical architecture development and support. Web sites included retail stores for clients like Hancock Fabrics, Java-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.

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.

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.

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.

Designed software architecture & implemented multi-threaded / multi-process message routing kernel of the Cellemetry system for performing telemetry transparently over existing cellular phone systems. This effort included development of fault-tolerant middleware and inter-system protocols. The system was written in C/C++ using the DGM&S Omni toolkit and IS41/SS7 network interface. Also programmed HP IS41 protocol analyser in HP Pascal.

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

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: C++, AIX, HPUX, Sybase, DCE, SNMP, NetView, SM/6000, distributed systems, X Windows, SQL, education, Unix, BPA

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 HPUX 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 Booch method 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, Booch

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++.

1/1993 thru 2/1993: Consultant
Raytheon, Marlborough, MA
Martin Greenstein, Supervisor

KEYWORDS: C, DGUX, SunOS, Unix, X, Motif, DataViews, real-time, twm, mwm, graphics, embedded

Helped develop a rapid-prototype of an air-traffic control system. The system was used to demonstrate the capability of developing an ATC system built with open systems components (Unix, X). DataViews middleware was chosen as the rapid prototyping tool. Interfaced with actual ATC radar data from Frankfurt, Germany (DERD) and drove custom Sony 2K by 2K pixel color displays.

1/1992 thru 10/1992: Consultant
V.I. Corporation, Northampton, MA
Earl Billingsley, Supervisor

KEYWORDS: C, C++, Unix, X, XDesigner, Motif, DataViews, real-time, SunOS, HPUX, DGUX

Helped develop interactive GUI editors for Commonwealth Edison, Hitachi, and Talarian using DataViews middleware, Unix, C, and X windows/Motif. The user could easily produce screens with real-time input & output elements that were linked via shared memory to user application programs. These editors were built with the DataViews GUI development package from V.I. Corporation as well as Xt & Motif. Also, developed a real-time digital radio GUI for ITT using DataViews rapid-prototyping tools on top of Open Look.

7/1991 thru 11/1991: Consultant
Chevron Oil, Richmond, CA
Rick Scheuerman, Supervisor

HEADCOUNT: Supervised one other team member.

KEYWORDS: VAX, VMS, C, FORTRAN, DataViews, Ingres, DecNet, real-time, graphics, client/server, embedded

Overhauled an oil refinery pilot plant monitoring system using DataViews middleware, Ingres, Vax VMS, C, and FORTRAN. This real-time system included several processes, distributed over DecNet, which communicated via message and file passing. Object-Oriented techniques were used in the redesign and implementation. System made extensive use of the DataViews GUI development package from V.I. Corporation.

11/1989 thru 5/1991: Consultant
Orbital Engine Co., Perth, West Australia
Mark Norman, Supervisor

HEADCOUNT: Supervised 3 other team members.

KEYWORDS: AOS, DGUX, FORTRAN, C, C++, Progress 4GL, X, Xlib, Motif, graphics, QA/QC, MS-DOS, real-time, relational database, education, architect, embedded, Unix

Developed an automobile engine test & measurement system in DGUX, C, Progress 4GL, and X windows based on an existing system in DG/AOS FORTRAN. I developed a multi-threaded real-time middleware system which managed communications and synchronization via System V IPC. Object-Oriented development techniques were used in the design and implementation. System used HP75000 and HP3852 GPIB bus mainframes, IDEC Izumi PLCs, and Ono Sokki flow meters. Taught in house classes on Object Oriented development. Used Business Rules approach to configure system with rule scripts rather than hard coded logic.

4/1989 thru 9/1989: Consultant
Operations Control Systems, Palo Alto, CA
Derek Evans, Supervisor

KEYWORDS: HP3000, MPE, Pascal/3000, Unix, architect

Developed an object-oriented UNIX-like make facility for HP3000 systems to be marketed as a stand-alone product OCS/Make as well as being integrated into the OCS/Librarian product. Also produced maintenance & upgrade changes to OCS/Librarian.

1/1989 thru 3/1989: Consultant
Stanley-Vidmar, Cincinnati, OH
Kit Fitzpatric, Supervisor

KEYWORDS: Macintosh, MPW, C, DB-Vista databases, MS-DOS, IBM PC/AT, real-time, manufacturing, protocol design, communications, AppleTalk, embedded

Helped port and extend a real-time manufacturing controls system from an MS-DOS environment to the Macintosh. This version of the system was specifically for use in Apple Computer's Flexible Manufacturing System (FMS) in Fremont, California. The system controlled 1500 rotary storage locations along with assorted robot extractor/inserters and conveyors. It also updated part inventory and daily production schedule databases. The control system communicated with controllers from other vendors over AppleTalk network links.

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.

7/1987 thru 2/1988: Consultant
Verilink, San Jose, CA
Starry Chan, Supervisor

HEADCOUNT: Supervised 3 other team members.

KEYWORDS: communications, OSI, T1 (D4/ESF), protocol design, real-time, IBM PC/AT, C, DB-Vista databases, MS-DOS, QA/QC, architect, embedded, 8052

Developed the multi-threaded software for a network management system for interfacing to Verilink's several types of T1 span monitoring equipment using D4/ESF protocols. The system allowed interactive access to individual nodes in the network as well as out-of-service testing (e.g. loopbacks). Background processing included alarm logging and performance data gathering. Wrote a complete OSI based transport system to implement secure communications between nodes over open phone lines with modems.

3/1987 thru 6/1987: Product Manager
BAM, Sydney, Australia
Mike Bolan, President

HEADCOUNT: Supervised 4 other team members.

KEYWORDS: Macintosh, marketing, management, BPA

As product manager for this Macintosh time management program, I organized the development team consisting of people in Silicon Valley and Sydney, Australia. The main competition for this product was Apple MacProject.

11/1986 thru 4/1987: Network Transport System Manager
Australian Associated Press, Sydney, Australia

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: communications, VAX, VMS, C, Ethernet, Decnet, protocols, design, management, embedded

Performed a system design review of AAP's national satellite communications network. This involved analysis of the protocols of the various communication layers as well as software design. The system is VAX based written in C involving satellite, microwave, and phone line segments for interactive distribution of financial and wire-service data.

3/1986 thru 9/1986: Consultant
FMC, San Jose, CA
John Tope, Supervisor

KEYWORDS: IBM PC/AT, Pascal, LANs, simulation, military systems, distributed database

Developed military vehicle simulations to demonstrate a distributed electronic control system implemented on a custom hardened local area network. Ten IBM AT computers were used to simulate various subsystems of trucks, tanks, APC, etc. and communicated over fiber-optic based network using distributed database techniques. Integrated modules produced by 2 other subcontractors.

3/1985 thru 2/1986: Consultant
Hewlett Packard, Cupertino, CA
Jean Danver, Manager

KEYWORDS: QA/QC, HP3000, Pascal, Modcal, C, HPE, MPE, HPUX, Unix, HP Image database, compilers

Developed test suite of spec compliance and regression tests for Pascal and Modcal compilers for HP3000, HP9920, and HP Spectrum computers on MPE, HPUX, and HPE operating systems. Developed tools to automate QA/QC process. Also performed some compiler maintenance.

3/1984 thru 2/1985: Consultant
Applicon, Inc, Santa Clara, CA
David Ross, Supervisor

KEYWORDS: VLSI CAD/CAM, PDP-11, VAX, RSX-IIM, VMS, C, computational geometry, design maintenance, FORTRAN, Macro-11, FLECS, Pascal, device drivers, embedded, assembler

Prototyped, in VAX C, an expert-system to extract electrical circuit schematics from raw VLSI fabrication data. Also performed maintenance and upgrade programming for a multi-threaded VLSI CAD/CAM system based on PDP-11 & custom hardware. Development was on VAX VMS. Produced a new release in 8 weeks (no releases having been made in 2-1/2 years).

1/1983 thru 2/1984: **Chief Scientist/Product Manager**
Management Blueprint Software, Los Gatos, CA
Mike Lodge, Vice President

HEADCOUNT: Supervised 4 other team members.

KEYWORDS: IBM PC/XT, UCSD Pascal, artificial intelligence, management, database kernel, architect, BPA

Developed a general purpose semantic-network (aka EAV entity-attribute-value) database system based on AI general knowledge database techniques to facilitate implementation of MBS's application packages for various professions. Integrated the system with subcontracted software modules and user applications. Managed 4 other developers.

3/1982 thru 1/1983: Consultant
Management Blueprint Software, Los Gatos, CA
Mike Lodge, Vice President

HEADCOUNT: Supervised 2 other team members.

KEYWORDS: Apple II, Apple III, IBM PC, TRS-80 II, Pascal, management, compilers, CAI, architect

Developed PolyForm, a general purpose forms processing system with a form definition language interpreter, to facilitate implementation of the MBS customizable application package Presidents War Plan. Managed 2 other developers.

6/1981 thru 5/1982: Consultant
OMEX, Santa Clara, CA
Rob Spade, Project Leader

HEADCOUNT: Supervised 3 other team members.

KEYWORDS: Omsi Pascal, PDP-11/70, RSX-11M, management, design, ADABAS-M database, BPA

Team Leader in charge of design and implementation of the Batch Posting portion of the nations's largest automated title insurance system. Taught in-house Pascal seminars for other project teams. Designed high and low level database transaction languages and wrote a compiler for the HOL and an interpreter for the LOL which drove the ADATABASE-M system.

4/1980 thru 2/1981: Consultant
Aydin Energy Division, Palo Alto, CA
Art Laursen, Supervisor

HEADCOUNT: Supervised 10 other team members.

KEYWORDS: Z80, Pascal, CP/M, O/S kernals, real-time, management, device drivers, architect, embedded, assembler

In charge of software design and implementation for a \$25 million subcontract to a Lawrence Livermore Labs fusion reactor experiment. The contract called for 24 10-megawatt power supply control systems and 4 maintenance consoles interfaced to the power supplies. Wrote an entire multi-threaded multi-tasking system in Z80 used as the kernel and interfaced an off-the-shelf Pascal compiler to the custom operating system. Managed 10 other programmers on the project.

10/1979 thru 3/1980: Software Development Manager
Personal Software (Visicorp), Sunnyvale, CA
Peter Jennings, Chairman

KEYWORDS: APPLE II, TRS-80, PET, management, QA/QC

Managed several independent authors of microcomputer software. Performed QA/QC and porting activities for entire product line. This was during the time that VisiCalc was introduced. Mitch Capor took this position when I left. He left 6 months later to start Lotus.

9/1978 thru 9/1979: MAXBASIC Project Manager
National Info Systems, Cupertino, CA
Arden Scott, President

HEADCOUNT: Supervised one other team member.

KEYWORDS: DEC-10/20, TOPS-10/20, BASIC, Macro-10/20, compilers, management, QA/QC, assembler

Took over managing the MAXBASIC compiler project for DEC-10 and DEC-20 computers when it was two thirds complete with over 200 extant bug reports. Instituted a bug report/enhancement request system used by entire product line of company.

3/1978 thru 9/1978: Programmer/Analyst
Control Data Corp, Sunnyvale, CA
Jen Bryant, Group Manager

KEYWORDS: FORTRAN, CDC NOS, CDC Star, supercomputers, operating systems, mainframe

Member of Operating System Group for CDC Star supercomputer. Developed tools in FORTRAN-like language in which O/S was written. Learned structured development methodology and source code control systems.

9/1974 thru 1/1977: Programmer/Analyst
Applications Group, FSU, Tallahassee, FL
Don McEwen, Manager

KEYWORDS: CDC 6000, KRONOS, COMPASS, FORTRAN, COBOL, graphics, data processing, education, mainframe, assembler

Designed/implemented applications for clients contracting with the Florida State University computing center in the following areas: Industrial Regression Model, Census Data Processing, Resource Use Projection, Pollution Monitoring Data Processing, Felony Caseload Data Processing, Student Evaluation Data Processing. Taught graphics seminars for FSU computing center.

1/1974 thru 12/1977: Student
Florida State University, Tallahassee, FL
Math/Computer Science, Major

KEYWORDS: APL, Basic, CDC 6000, KRONOS, COMPASS, Pascal, FORTRAN, TUTOR, PLATO, compilers, language design, simulation, LISP, SNOBOL, COBOL, education, graphics, mainframe, assembler

Design and implementation of the EXLAX language/compiler used in a numerical analysis class. Implementation of discrete event simulation of queue network. Design/implementation of graphic 3-D maze game on PLATO system. Completed every computer course offered in the FSU curriculum with a 3.6 GPA. Tutored computer science students for extra money.