

Resume of **Dave Spotts**, Software Architect & Engineer
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Table of Contents ([toc](#))

[Contact Info](#)
[Description/Objective](#)
[Keywords](#)
[Education](#)
[Skills Matrix](#)
[Organizations/Memberships](#)
[Recent Professional Experience](#)

Additional Information

[Bio](#)
[Continued Professional Experience](#)
[Related Experience](#)
[Hobbies, etc.](#)
[References](#)

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[toc](#)

Description/Objective

I am a Computer Engineer with 20+ years professional experience, working from my SOHO (Small Office / Home Office), currently located in Rochester, NY. By doing so, I can provide high quality, high value contract/project Java, Servlet, JSP, SQL, & Database web applications, internet services, & Software Engineering at extremely competitive prices. My SOHO is equipped with DSL, 3 Mac OS X (unix) laptops and a Win2KPro server, all running Apache, Tomcat, Resin, & MySQL for rapid project development & prototyping. For deployment, I operate a commercial Linux/Apache/Resin/MySQL server if your project needs hosting. I also work with a team of very high caliber SOHO Java, Web, & Marketing professionals for projects requiring additional resources.

[toc](#)

Keywords

Quality, Value, Experience, Contract/Project Web & Internet Services, Applications, Software Engineering, JAVA, JSP, Servlets, Applets, RMI, JDBC, J2EE, WebStart, JNLP, Database, SQL, MySQL, Apache, Resin, Tomcat, JAMES, JavaScript, XML, Jakarta, Axis, phpMyAdmin, CVS, ANT, ODBC, PERL, PHP, ASP, IIS, C, C++, TCP/IP, CGI, OS X, Scripting, Automation, OOP, Components, Reusable, unix, linux, DOS, Windows, Borland JBuilder, Metrowerks CodeWarrior

[toc](#)

Education

Date: August 1983

Location: Rochester Institute of Technology, Rochester, NY

Degree: B.S., Computer Engineering

Date: June 1978

Location: Corning Community College, Corning, NY

Degree: A.S., Engineering Science

[toc](#)

Skills & Technology Matrix

The following table summarizes most of my current areas of expertise and prior experience.

I am an extremely fast learner and able to become productive with new environments and technologies **very** quickly.

As important in today's world, I know how to quickly locate and apply what I need to know when I need to know it!

Technology	SubCategory	Current Expertise			Prior Experience		
		low	med	hi	low	med	hi
.NET	Server Pages	X	-	-	X	-	-
Applications	Adobe Go Live	-	X	-	X	-	-
Applications	Adobe Photoshop	-	X	-	X	-	-
Applications	Adobe Premier	X	-	-	X	-	-
Applications	Microsoft Excel	-	X	-	-	-	X
Applications	Microsoft Word	X	-	-	-	X	-
Applications	Real Producer	-	X	-	X	-	-
ASP	Server Pages (JScript)	-	-	X	X	-	-
Assembly	Intel	X	-	-	X	-	-
Assembly	Motorola 680x	X	-	-	-	-	X
Assembly	PowerPC	X	-	-	X	-	-
Assembly	Z-80	X	-	-	-	-	X
Basic	Language	X	-	-	-	-	X
C	Language	-	X	-	-	-	X
C++	Language	-	X	-	-	-	X
Database	FileMaker	X	-	-	-	-	X
Database	MS-Access	-	X	-	X	-	-
Database	MySQL	-	X	-	X	-	-
HTML	Language	-	X	-	X	-	-
IDEs	BBEdit	-	X	-	X	-	-
IDEs	CodeWarrior	-	X	-	-	-	X
IDEs	JBuilder	-	X	-	X	-	-

IDEs	MPW	X	-	-	-	-	X
IDEs	MS Visual C++	X	-	-	-	X	-
Technology	SubCategory	Current Expertise			Prior Experience		
		low	med	hi	low	med	hi
Java	Applets	-	X	-	X	-	-
Java	AWT	X	-	-	X	-	-
Java	Backend Applications	-	-	X	X	-	-
Java	JAMES	X	-	-	X	-	-
Java	Jar Files	-	X	-	X	-	-
Java	JDBC	-	X	-	X	-	-
Java	JSP	-	X	-	X	-	-
Java	Language	-	-	X	X	-	-
Java	mail.javax	-	X	-	X	-	-
Java	Networking	-	X	-	X	-	-
Java	Resin	-	X	-	X	-	-
Java	RMI	-	X	-	X	-	-
Java	Servlets	-	X	-	X	-	-
Java	Swing	X	-	-	X	-	-
Java	Tomcat	-	X	-	X	-	-
Java	UI	X	-	-	X	-	-
Java	WebStart/JNLP	-	X	-	X	-	-
Technology	SubCategory	Current Expertise			Prior Experience		
		low	med	hi	low	med	hi
JavaScript	Language	-	X	-	X	-	-
linux	OS	X	-	-	X	-	-
Macintosh	Application Development	X	-	-	-	-	X
Macintosh	Code Resources, Inits	X	-	-	-	-	X
Macintosh	MacApp Framework	X	-	-	-	-	X
Macintosh	OS 9	-	X	-	-	-	X
Macintosh	OS X	-	-	X	X	-	-
Pascal	Language	X	-	-	-	-	X
Pascal, Object	Language	X	-	-	-	-	X
PERL	Language, Libraries	X	-	-	-	X	-
PHP	Server Pages	-	X	-	X	-	-
Tools	ANT	X	-	-	X	-	-
Tools	CVS	-	X	-	X	-	-
unix	other	X	-	-	-	-	X
unix	shell, scripting	-	X	-	-	-	X
unix	ssh	-	X	-	X	-	-
VAL	Voice Application Language	X	-	-	-	-	X
VBScript	Language	X	-	-	X	-	-
Windows	2000 OS	-	X	-	X	-	-

Windows	95/98 OS	-	X	-	-	-	X
Windows	Application Development	X	-	-	X	-	-
Windows	DOS / Shell	X	-	-	-	-	X
Windows	MFC	X	-	-	X	-	-
Windows	XP OS	X	-	-	X	-	-
WML	Wirless Markup	X	-	-	-	X	-
XML	Language	-	X	-	X	-	-

[toc](#)

Organizations/Memberships

Apple Developer Connection, Sun Developer Program, Rochester JAVA User's Group

[toc](#)

Recent Professional Experience

August 2000 - present, Founder & Chief Technology Officer (CTO), Clk2 Network Solutions, 456 Pearl Street, Rochester, NY, 14607-3817, <http://www.Clik2.com>, 585.241.9486, eFax: 801.459.3986, dspotts@clik2.com

Web application & Software Engineering for a number of clients. Database-backed web sites, ECommerce, Mailing List Management, Active Server Pages, Web Services, JAVA applets, servlets, JSP & applications.

Recent ASP and database application and web services for <http://www.mymccard.com> to securely transmit customer data from east coast web server to west coast corporate headquarters.

Currently developing proprietary, reusable dynamic content technology that utilizes java servlets, JSP, MySQL to create java servlets "on-the-fly" that encapsulate the result of database queries to eliminate the typical database bottleneck. Technology allows clients to add dynamic "web services/applications" such as Customer Testimonials, User-contributed comments, Knowledge Base, FAQs, Tell-A-Friend, Refer-A-Friend, Mailing List, and more with just a few short lines of html.

[toc](#)

DATE: March 2001 - October 2002

COMPANY: Building Block Software, www.BuildingBlockSoftware.com

POSITION(s): JAVA Architect & Software Engineer

Lead back-end developer for a commercial P2P networking client.

- Developed a PHP and ms-access web-based project tracking system for the group/project
- Got MYSQL up and running under Mac OS X and Win2K Pro, and populated a 600+MB database in use as part of the project
- Developed java RMI-based client/server access to this database
- Integrated an open-source JAR library for JDBC/mysql access into the project

- Integrated a 2nd open-source JAR library into the project and developed command line tools, classes, interfaces, and standalone JAR files to exercise and implement significant portions of the back-end framework
- Developed & tested several WebStart (JNLP) prototypes, and several servlets and JSPs to simulate interaction with a deployment server farm

Unfortunately the project had unexpected funding and legal issues which forced early termination of the contract. Although unlikely, it's possible the project will continue at some point in the future, so I'm unable to disclose other proprietary information.

[toc](#)

DATE: April 2001-February 2002 (part-time)

COMPANY: ITA, Inc. www.ITAInc.com

POSITION(s): Software Engineer

Primarily responsible for upgrading and enhancing Macintosh and Windows (TWAIN) PhotoShop plugins for the Kodak 3570 Rapid Film Scanner Plus. Worked in CodeWarrior and Visual C++ to improve focusing, add optical zoom functionality, develop common code and algorithms where possible, and help provide Installers and CD deliverables.

[toc](#)

Bio

I have had a passion for computers for almost the last 30 years. In high school, I was the proud owner of one of the first programmable calculators, the Texas Instruments TI-59, complete with a roll-based thermal printer ... writing programs to help solve my math problems, and was always in the accelerated math & science curriculums.

I graduated from Corning Painted Post West High School in 1976 with a Regents diploma, and started college at Corning Community College in the Engineering Science program in the fall of 1978. Engineering-related courses included Calculus, Engineering Physics, and I recall the frustration of sitting at a card-punching machine entering Fortran programs for later batch execution, output, testing, and debugging - which took an eternity compared to the interactive IDEs of today.

I became very passionate about computers and electronics, and upon graduating from CCC with honors, enrolled in the Computer Engineering program at Rochester Institute of Technology in the fall of 1980. This was my first time "out on my own" (not living at home), and despite a rocky first quarter at RIT, I was able to weather the storm and keep up with the intense program (I later learned that 50% was the average dropout rate in this program).

RIT Engineering programs are co-op programs, where students alternate between a quarter of classes and a quarter of employment with local companies to get valuable "on-the-job" experience. I was fortunate to have been hired by Xerox corporation, and during some of my co-op time there, ended up working with the Xerox Alto and Star workstations.

These systems were THE pioneers of the "desktop" user interface, ran smalltalk (one of the first object oriented languages), and talked to each other and shared printers via ethernet.

Although I didn't know it at the time, 2 of my supervisors at Xerox, namely Steve Capps and Owen Densmore, would later leave Xerox to work at Apple Computer on the Macintosh. Steve Capps wrote the first version of the Macintosh "Finder" (desktop UI), and Owen Densmore worked significantly on the Macintosh imaging & printing architecture. The Macintosh, which debuted in 1984 with a whopping 128K bytes of RAM, was the FIRST personal computer to offer WYSIWIG (what you see is what you get) word processing and printing, and would soon become THE computer that started the desktop publishing revolution.

I had a brief year off from school due to finances, but returned to RIT, graduating with a Bachelor's degree in August of 1983.

I bought one of the first 128K Macs in 1984, and have been an object-oriented (whenever possible!) software developer ever since. Although I had to give up my Mac(s) for Windows and DOS for several years due to the company I was working with, I recently switched back to the Mac and have 2 laptop Macs, and with OS X, unix,

and JAVA 2 built-in, as well as being able to run Virtual PC and any version of Windows, am once again a Mac evangelist!

I am currently a member of the Apple Developer Connection, Sun Developer program, and when I have time, make occasional visits to the Rochester JAVA User's Group (RJUG) and other Mac and OS X user's groups.

I have played a significant role in Macintosh & other projects for Microsoft (Word, WordFinder), Apple (MacWrite, MacDraw), Kodak (Denver, ColorSense, Creation Station, Scanners), Microlytics (Gopher, WordFinder, SpellFinder), Millennium Computer, Interactive Television Associates, BuySellBid.com (RadioDate, voice personals), dozens of web sites and web applications, and most recently a very exciting distributed computing and P2P JAVA application with Building Block Software.

I have an entrepreneurial spirit, have been involved with many companies and projects including many of my own, and try to live by a few simple (tho cliché!) mottos:

Keep Trying, Never Give up!
NEVER give up on your dreams!
Feel the Fear, But Do it Anyway!
THINK DIFFERENT!

A few of my hobbies (when I have time) include Motorcycling (sport-touring), photography, Home Theater, and warm-water fly-fishing.

A few of my current passions are tele and mobile computing, web and JAVA applications, and just about anything that helps automate repetitive, labor-intensive tasks.

[toc](#)

Continued Professional Experience

DATE: October 1998-July 2000
COMPANY: www.BuySellBid.com
POSITION(s): Vice President of Software Development, Voice & Telephony Division

After a brief layoff in 1998 due to company financial problems, I was reinstated full-time, continuing responsibility for RadioDate Voice Personals, integration with web personals, and research, development, and prototyping of WML and VXML applications that may have been appropriate for the new internet classifieds and advertising directions. The company went through several rounds of venture capital funding, grew to approximately 100 employees, but was forced to downsize tremendously with the "dot com" profitability pressures in early 2000. The company eliminated the Voice Personals & voice-related lines of business.

[toc](#)

DATE: March 1998-October 1998 (part-time)
COMPANY: Interactive Television Associates, Inc. (www.itainc.com)
POSITION(s): Software Developer

Contract position working part-time with Eastman Kodak Image Magic Order Entry (KIMOE) application (Macintosh) and Image Fulfillment System (Sun). Hired to take over development work on the KIMOE application which runs on a Power Mac connected to Sun Image Fulfillment Stations (IFS). Initial direction was to consider creating a localized version of the product for Japan. Some work had been done in this area (resources), but no internal code changes, etc. Management and Kodak partnerships reassigned focus on specification of a maintenance 1.8 release. Created/installed development environment (Code Warrior 11), got previous release building, checked in with MPW Projector for source control, provided several interim releases & installers prior to project shut down @ 7/1/98.

Latest project was a relational database design & implementation for a local market research firm using FileMaker Pro.

[toc](#)

DATE: January 1998 - July 1998
COMPANY: InXSys Broadcast Networks Inc., Longview, WA (www.inxsys.com)

POSITION(s): Vice President of Software Development, Radio Personals Division

Senior engineering position (full-time) responsible for Specification, Design, Implementation, Management, and maintenance of PC-based hardware and software operating Radio Personals for approximately 400+ radio stations, primarily using VAL (Voice Application Language), a multi-tasking run-time environment. Equipment includes high-end PCs utilizing RAID redundant / fault-tolerant SCSI disk arrays and Dialogic voice / telephony boards connected to multiple T1 digital telephone lines.

Entire staff was laid off (7/1/98) due to company financing, funding, and backing activities.

[toc](#)

DATE: May 1996-July 2000 (part-time)

COMPANY: A Sharper Image, Penfield, NY

POSITION(s): Founder, Photographer, Software & Web Developer, Sales, Marketing

Software development, photographic, video, multimedia, and image related business. Past projects included glamour, fashion, and makeover photography and imagery; makeup artistry, instruction, and image consultation with the help of a makeup artist; web site, CGI, & ECommerce development. Responsibilities included market research, management, business planning, financial planning, marketing, sales, advertising & graphic design, Webmaster, development and maintenance, software development, photography, and digital image manipulation.

[toc](#)

DATE: October 1994 - December 1997

COMPANY: Bureau One, BureauCom Corp, RadioDate Corp, InXSys Broadcast Networks Inc., Longview, WA

POSITION(s): VP Engineering, Software Engineer, Consultant, Sales Support

Audiotext & Pay-Per-Call Provider(s). Various responsibilities including database design & development, customer service, sales applications (FM Pro, Access, Word, Excel, WinFax, Maximizer, etc.), setting up client 900 and 800 programs, software design, development and maintenance (primarily in VAL, local development & testing, Remote access for systems integration & testing) for several hundred newspaper, entrepreneurial, and broadcasting clients, DOS scripting, Web site & Internet development. Systems Hardware & Software specification, design, development, maintenance (Pentium PCs, DOS, Dialogic T1 voice boards, SCSI RAID redundant disk array, Novell network, etc.). Languages and tools used included FileMaker Pro, Microsoft Access & Office, C, C++, VAL, Visual Basic, PERL, HTML, and JavaScript.

[toc](#)

DATE: November 1993 - July 1994

COMPANY: Eastman Kodak Company/Butler Service Group, Rochester, NY

POSITION: Software Engineer

Team member working on the Kodak Creation Station. This product used a Power Macintosh, trackball, film, slide, CD, print scanner, and digital printer as part of a walk-up photographic workstation targeted towards consumers and photographic retailers. Product allowed a consumer to input images from print, film, slides, and/or PhotoCD and create hi quality dye-sublimation enlargements (Kodak XL7700 series), photo business cards, greeting cards, combo prints, fun-frames, etc. with no prior computer experience. My responsibilities on this project included being an in-house Macintosh development consultant (the majority of the team had no prior Macintosh experience), developing several objects/classes to support QuickTime and Macromind Director "movie" playback (multimedia is used extensively on this system to entice consumers to use the system and to show them how simple it is to have "fun" with their pictures ... the current product release incorporates an animated "film canister" character that narrates and demonstrates how to use the system). Assisted team members with Macintosh and MPW, C++, debugging techniques, and also helped extensively with source-control oriented scripts and development environment utilities to help this large development team work efficiently together. Although the system ran on a Macintosh, the entire user interface and the majority of the code was designed and written to be platform independent.

[toc](#)

DATE: January 1989 - October 1993

COMPANY: Mountain Consolidated/Bureau One East, Rochester, NY

POSITION(s): Founder, Senior Partner, Director Of Engineering

Computer/service business which provided contract Macintosh software development services (primarily to companies in the Rochester area) and Voice Information Services (Service Bureau voice/call processing, interactive telephony, applications like voice personals, voice classifieds, new/weather, horoscopes, psychic lines, 900/800 numbers, equipment, etc.) to publishing and media companies throughout the US.

Macintosh clients & projects included Millennium Computer Corp. - WordFinder, SpellFinder, Gofer 2.0, etc. - see Millennium Computer, 9/87 - 12/88 below; Interactive Television Associates - Object Oriented applications using MacApp and C for Eastman Kodak - Printer Products, Professional Photography, Clinical Products divisions, Xerox Corporation & others. Software & products developed & worked on using C, C++, FileMaker Pro, HyperCard, MacApp, MPW, Think C: TIFF library, Kodak JPEG library, 24 bit image classes, Macintosh Communications Toolbox support that allows sending/receiving of images, Kodak ColorSqueeze, Kodak 35mm Rapid Film Scanner, Kodak ColorSense & Apple ColorSync.

Part-time researching , acquiring, and installing/maintaining the necessary equipment, software, and tools necessary for high-volume T-1 based call processing, and interactive telephone software development that included the following hardware: 5 analog telephone lines; a Panasonic 6x16 hybrid telephone system; Ethernet & LocalTalk networks with router; a Macintosh SE/30 AppleShare fileserver ; Macintosh development system ; 2 Macintosh SEs; TFLX mac-based single line call processing interface; 2 386/33 MHz PC compatibles; Dialogic voice processing boards (1 4-line, 1 12-line, 1 T1 Interface); a 2000 watt TrippLite UPS; an Apple LaserWriter Plus printer; a Shiva 9600 V.32 network modem.

[toc](#)

DATE: September 1987 - December 1988
COMPANY: Millennium Computer Corporation, Rochester, NY
POSITION: Director of Engineering

Responsible for design & development of several Macintosh related products for various clients, primarily for/through Microlytics, Rochester, NY that specialized in proprietary spelling and thesaurus technologies. Projects included: porting these technologies to the Macintosh for retail and OEM applications, design and enhancements to the Macintosh implementation of WordFinder 2.0, which has been a popular retail and OEM/bundled product (Microsoft Word, Claris MacWrite, Ashton Tate FullWrite Professional, etc.), Macintosh user interface (SpellFinder) to Microlytics spelling engine, which was to be a retail and OEM product. I worked with Claris to integrate this spelling product into MacWrite 5.0. Claris used many of the concepts and the user interface developed for them by us (& Microlytics engines) to build their own spell-checking modules that shipped in the entire Claris product line. Next project was GOfer, a text searching and retrieving utility that could look inside files for pieces of text that everyone remembers writing but can not remember which file it is in. Microlytics had developed it for DOS machines, and I was responsible for designing and implementing it on the Macintosh. It could search in the background, and offered Boolean and wildcard logic. I implemented a stand-alone "filter" mechanism that allowed file specific filters to pull unformatted text out of complex file formats (MacWrite, Microsoft Word, PageMaker, etc.) at very high speeds, and in very little RAM. Version 2.0 featured a powerful file/folder "pick" mechanism that allowed the user a great deal of flexibility in choosing the location(s) and types of files to be searched, saved search sets, export of "found" information, and several other features.

[toc](#)

DATE: March 1986 - September 1987
COMPANY: Eastman Kodak Company, Rochester, NY
POSITION: Senior Development Engineer in the Consumer Products Division (Denver Project)

Responsible for microprocessor hardware design and development of a consumer "home-computer" product. This cost-sensitive design initially included a Motorola 68008 microprocessor, ROM, Dynamic RAM, Serial/Parallel I/O, Sound, Keyboard, Display, Modem, Real-Time Clock, Timer, and Cauzin Softstrip Reader for applications programs loading. The design incorporated a 6805-family microcomputer to perform the RTC, Serial I/O, Sound, and Timer functions. Personally brought the system from conceptualization, through design, breadboard, debug, and prototype software in 3 months (several months ahead of schedule). Presented prototype hardware/software to upper management for a project review in mid June of 1986, giving a go-ahead to the project. Continued on the production design, which involved the definition and a large part of the detailed design of 2 80-pin 3-Micron Standard Cell ASICs. The ASICs would have allowed a system that once had over 100 ICs to be reduced to about a dozen. Several versions of prototype and Engineering Model systems were designed; circuit boards (Multiwire and PCB) were developed; test and diagnostic software written and debugged. Promoted to Senior Engineer in June, 1987, and received a very rarely awarded 7/7 on my performance appraisal. Nearly completed the production design and ASICs in preparation for a Spring 1988 product launch. Due to business case considerations, the product & program were canceled. Offered several excellent job opportunities when the project completed, but Kodak did not at that time have a need for Macintosh software development, which is what I was most interested in doing at that time. I left Kodak and began my work with Millennium Computer

Corp. (above).

[toc](#)

DATE: March 1984 - November 1985
COMPANY: CAMDE Corporation, Rochester, NY
POSITION: Computer Systems Engineer

Computer Systems Engineer developing software for the Apple Macintosh. This start-up organization was formed in March 1984 to develop Fourth-Generation Medical Office Computerization Software based on a LAN (AppleTalk using the 7-layer ISO model) of Apple Macintoshes, Lisas, and Communications/File/Print Servers. Conceptualization, analysis, general/detailed specification (menus, windows, dialogs, screen shots, road map, functional walk-throughs) and architectural design of the Medical Office Product. This required an expert understanding of the Macintosh User Interface and Toolbox. Design, development, and maintenance of tools & building blocks written in C, Neon, and Object Pascal: A data-driven application interpreter; A source printing utility; Debugging tools; A technique that allowed code written in one language to be used from another (e.g. the ability to use a database, written in C, from Neon and Pascal when it was impossible to use conventional linking techniques). These tasks involved management of several junior programmers. Personally authored several demos/prototypes of the Medical Office Product and of an appointment scheduling product. Responsible for administration, allocation, and maintenance of shared resources such as a 40 megabyte disk server running AppleTalk and the Macintosh application, development, and utilities library. Documentation and coding standards. Assisted in the conversion, debugging, documentation, and release of Nutri-Calc(TM) (a nutritional analysis package acquired by CAMDE). Led the development team in selecting an Object-Oriented implementation language (Object Pascal) for the Medical Office Product that resulted in greatly reduced development time. NOTE: The Medical Office Product was 60 days from Alpha test when financial considerations forced the company to terminate entire staff.

[toc](#)

DATE: August 1983 - March 1984
COMPANY: EDMAC Corporation, Fishers, NY
POSITION: Engineer

Designed HW/SW for Z-80 based laboratory analyzer interfaces. Devices combined Real-Time capture of serial/parallel/analog analyzer results, store and forward capability, time-stamping, "smart" host interface/protocols, custom graphic printing, and cassette tape back-up for the medical electronics market. HW/SW design of a proposed Z-80 based multiplexing unit and network (SDLC) that would provide large capacity (hard disk) storage, allow up to 8 interfaces to attach to each multiplexer, and allow up to 255 multiplexers (and attached interfaces) to be controlled from 1 RS232 host line. Responsible for initial HW/SW design and proposal input for a microcomputer controlled 99-channel Sonabuoy Receiver. The new design had to be compatible with existing 31-channel equipment (physically and electrically) yet provide 68 more channels as well as 1553A and B bus compatibility. Part-time consultant doing HW/SW maintenance for medical electronics equipment.

[toc](#)

DATE: June 1981 - November 1982
COMPANY: UNL Photographic Systems, Webster, NY
POSITION: Electronic Technician/Field Representative

Responsible for complete redesign of two package printer control systems incorporating Cromemco Z-80 Single Card Computers. Previous models consisted of the SSP (15-20 TTL boards in a wire-wrapped backplane) and the LSI-1102 (3-4 DEC LSI 11/2 boards and 3-4 custom boards). New designs (models SBC and SX5) utilized 1-3 standard boards on the S-100 bus and 1 proprietary interface board. Conceptualization, specification, design, prototyping (HW/SW), artwork, test, and documentation of: a lamphouse control card; a variable voltage lamp power supply card; the SBC (Single Board Computer) I/O board; SX5 display board; Kodak Digital Data Converter Interface board; SBC/Zyco Roll Film Carrier Interface card. Nation-wide HW/SW field work repairing electro-mechanical-optical equipment. Wrote an EPROM editing, programming, test package to automate procedures that were previously done by hand. Part-time consultant doing specification, standardization, design, and prototyping of HW/SW interfaces between UNL printers and external timing or control devices (Kodak, Minolta, Sargent-Welch, Zyco, etc.) utilizing level conversion, discrete logic, and/or microprocessors. Technical assistance in daily service, test, troubleshooting, and product development areas.

[toc](#)

DATE: March 1980 - June 1980
COMPANY: Computer Consoles Incorporated, Rochester, NY
POSITION: Engineering Coop (1 quarter)

Performed electronic and technical work debugging and prototyping designs, updating documentation.
[toc](#)

DATE: November 1978 - March 1980
COMPANY: Xerox Corporation, Webster, NY
POSITION: Engineering Coop (4 quarters total)

Servicing and upgrading prototype equipment (Alto/Ethernet). Research projects involving sound generation HW for Alto workstations, CAD software. (I worked for Owen Densmore, who wrote the original ImageWriter driver for the Mac for Apple, and with Steve Capps who wrote the original Finder for the Mac). Updating and conversion of documentation; specification and integration of a collating/sort option into a word processing, image enhancing office system (Pirate).
[toc](#)

Related Experience

DATE: Winter 1982

Designed and implemented a prototype computer controlled engraver. System used an Atari 800 computer with custom software (assembly and BASIC). Home-built mechanics and electronics (2 AC synchronous motors and 2 shaft encoders) were controlled from the computer through the game ports. Designed and implemented software for a Real-Time railroad yard control system model using H-O trains, a Z-80 based computer, and a 6809 based computer controlling a voice synthesis device. Software allowed a user to sit down and write a BASIC-like train control program which the software would then "run" to move up to 3 trains simultaneously around the "yard." Required parsing and interpreting of this "program," dead-lock detection and avoidance algorithms, and video and audio (speech) outputs.

DATE: Spring 1983

Designed and implemented an interactive prototype medical electronics system for capturing and analyzing Left Ventricular Ejection Time (an important indicator of heart function usually measured by hand from an EKG). System used an Atari 800 computer with custom software (assembly and BASIC) and some analog/digital circuitry interfaced to the computer through its game ports that allowed capturing ventricular waveforms using an optical transducer.

DATE: Summer 1983

Designed and implemented a device-independent 2D Simple Graphics Package (SGP) in Pascal on a VAX, and later ported the package to an Atari 800 using BASIC.

MISCELLANEOUS

Developed miscellaneous utilities for the Macintosh, including a "picture logo screen saver" , a developer "on-line help" toolkit , as well as a "window organizer" utility for use with the Macintosh Finder.

[toc](#)

Hobbies, etc.

Aquariums, Aviation, Audio/Video, Camping, Computers, Hunting, Fishing, Flight Simulation, Home Theater, Internet & WWW, Motorcycling and Sport-Touring, Movies, Photography, Shooting, Skiing, Video Games (Playstation, PCs).

[toc](#)

References

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