

Software Tool Developer

I love developing custom software tools from scratch, addressing challenges, joining a team and existing projects.

A Few Interests

Specialized Software Development, Tools, Custom Algorithms & Improving Performance
CPU Architecture Verification (Developed Test Software for VAX, MIPS, PRISM & Alpha)
Custom Programming Languages and Interpreters (created 3, ported another)
Interfaces, Information Access & Design for Non-Technical Users
Search Tools, Simulation, Minimizing Synchronization Primitives
Computer Science Education

Areas of Expertise

C, Porting Code, Multi-Threading, Parallel Processing, QA, Automated Testing,
Interaction of OS, CPU & Hardware, Mentoring, Teaching, Communication Skills
Extensive Awareness of Consumer Level Issues in Technology

Positions

Software Developer, Millburn, NJ 1995-Present

Developed email tools, an Apache gateway, a custom multi-threaded NoSQL geographic database server, two custom programming languages and interpreters, static and adaptive search tools, a subscription-based web publication, web apps, payment gateways, shopping carts, web games and contests, app prototypes, interactive books and apps, education & training titles, and managed software projects with CD-ROM & Web delivery.

Consultant to Consumers and Businesses, Millburn, NJ 1995-Present

Began consulting lightly in 1989, and in 1995 focused on building a substantial Apple Macintosh & iOS consulting practice: MillburnMac.com. From this work I developed a strong background in consumer use and perception of technology (i.e., what works in tech for “non-tech” people).

InterActions Media, a division of NCI Advertising / Publicis, New York, NY 1998-2002

Co-Founder & Director Internet Strategy; VP, Technology — an Internet & Interactive Startup.
Created and managed 25 projects over four years with a peak team size of 10 people.

Ehrlich Multimedia / Times Mirror Multimedia, Park Ridge, NJ 1993-1995

Software Developer — Interactive CD-ROMs in Macromedia / Adobe Director and created custom development tools.

Graphex Imaging Systems, Yonkers, NY 1991-1993

Software Developer — Developed computer graphics solutions and ported a PostScript RIP from Windows to Mac OS and Unix. Also created a front end to a custom parallel graphics engine.

Symantec / Peter Norton Product Group, Santa Monica, CA 1991

Consultant — Developed components and tools for The Norton Desktop™ for Windows 3.

Citicorp / Transaction Technology, Inc., Santa Monica, CA 1989-1991

Consultant, ATM QA — Developed and implemented test plans for Automated Teller Machines (ATMs). Proposed and Designed a novel Goal-Seeking programming language to model an ATM and developed an interpreter for that language to automate a Robotic ATM testing.

Digital Equipment Corporation, Boxborough, MA 1985-1989
Senior Software Engineer — Developed software to validate RISC and CISC CPUs (VAX, MIPS, PRISM, and Alpha). Original architect and developer for The RISC Architecture Exerciser at DEC. Researched, prototyped, and developed innovative automated testing strategies and focused Monte Carlo test models for CPUs, concentrating on testing FPUs and highly pipelined CPUs. Required understanding of OS, Kernel & CPU interaction to create testing environments.

Wang Laboratories, Lowell, MA Summers 1983-1984
QA Associate — Developed interactive and automated tests for various peripherals.

Education

University of California, Los Angeles, CA 1989-1991
Advanced to Candidacy for a M.S. in Computer Science (ABD), GPA 3.71
Studied Advanced Computer Architecture, Fault Tolerant Computing, and Parallel Simulation. Developed a multi-threaded simulation engine for use on a Shared Memory Parallel Super Computer. Member of the UCLA ACM Programming Competition Team for two years.

University of Massachusetts, Amherst, MA 1981-1985
B.S. in Computer Science, GPA 3.92, elected to Phi Beta Kappa, Cum Laude
Dean's list every semester & named an Alumni Scholar. Concentration in operating systems, numerical computation, and computer graphics. Though still an undergraduate, I served as a full-salaried graduate teaching assistant my last semester.

Non-Tech Interests

Active in community theater and a cappella since 1985. I hold a gold medal from International Barbershop Chorus Competition and have appeared in quartets on live and recorded radio & television, as well as in film. Also a photographer, focusing on 3D and panoramic techniques long before there were apps for them.

Awards / Selections

Apple.com ZipBurst, a geographic NoSQL database engine licensed to run "Where to Buy" for the Apple.com website in the US 2003-2008 & Canada 2003-2009, the "Apple Consultants Locator" for 2001-2010 as well as the Apple Seminar Locator.

Communications Arts: Best Interactive Design (1998)

MacWorld Expo Developer Greenhouse MailBurst selected and recognized (1997)

Macromedia Shockwave Site of the Week for AT&T Olympic Shockwave Games (1996)

New Media Invision Multimedia Business Week 1000 CD-ROM — Bronze Medal (1994)

Digital Equipment Corporation Special recognition for contributions to Verification of the Aquarius CPU Design, VAX 9000 (1989)

Sample Commercial Software Developed

ZipBurst, Apache-Apple Event Bridge (AAEB), MailBurst, FaxBee & CodeBurst.