

## SUMMARY

### Full Life-Cycle Sr. Software Engineer

- Backend, Middleware, Frontend Layers
- Real-time Data Acquisition & Control Systems
- Network Device & System Management
- Microcontroller Firmware & Desktop Applications
- Embedded OS, Unix, Windows
- MIDI, Digital Audio, SMPTE, SNMP
- Design Patterns ,Object Oriented Design (OOD/OOP), Unified Modeling Language (UML)
- C++, PHP, SQL, Python, Javascript, J2EE
- MSVS, Xcode, Eclipse, NetBeans, Git, CVS, Perforce

## EXPERIENCE

### **Children's Hospital Boston**

#### Senior Software Engineer

- Sole engineer. Created a multi-user web application system for the entire emergency room department to track patient readmissions as part of the [cms.gov](http://cms.gov) HRRP. Reported directly to the Director of the ER department. Requirements analysis, scheduling estimates, design, coding, test, and end-user documentation. Database design and dynamic website development. (*Linux, Apache, MySQL, PHP, Javascript*) 2009-2016

### **Certeon** (Network Security/Acceleration)

#### Senior Software Engineer

- Sole engineer. Requirements analysis, designed, coded and tested a proof of concept project of network management applications and network data transfer using multi-socket programming in a multi-threaded environment. (*SQL RDBMS, J2EE, Windows, C++, Linux*) 2005-2006

### **M-Audio/Avid/Digidesign**

#### Senior Software Engineer

- Small remote engineering team. Debugged the UI of a OpenGL/GLUT "GarageBand for Windows" application, designed and coded an entire subsystem engine for categorizing and searching sound loops, and assisted with user interface programming. (*MS Visual Studio, Perforce, C++, Windows*) 2004-2005

### **Comtrol** (NTE/eCos embedded serial interface controller)

#### Senior Software Engineer

- Small engineering team. Designed and coded features and extensions for an embedded cross-platform framework library. (*C++, STL, Socket programming, J2EE, ASP, Javascript, Windows, Cygwin, Unix, Rational Rose UML, Together C++ UML CASE tools, Source Safe, MS Visual Studio*) 2003-2004

### **Allaire/Macromedia**

#### Senior Software Engineer, ColdFusion Server Group, Visual Tools COM Group

- Sole engineer. Requirements analysis, design, coding, test, documentation for the entire Search Subsystem for the Macromedia ColdFusion J2EE application. Custom Java gateways, full-text searches, database query result sets, and Verity K2 Full-Text Search Engine technologies. (*NT, Solaris, HPUNIX, Linux*) *multi-lingual, Java, C++, STL, JNI, JDBC, XML, MS Visual Studio* 2000-2003

### Stratus

Software Engineer Technical Lead, Windows NT System Management Group

- Small engineering team. Requirements analysis, scheduling, design, coded, tested, architected the entire software system, created functional and design specifications, mentored team members in object-oriented design, C++, COM, and WBEM/WMI. (*UML, MS Visual C++, NT services, CIMOM providers, MMC GUI, STL, ATL, and COM/DCOM interfaces*) 1998-2000

### Digital Equipment Corporation

Principal Software Engineer, Network Products

- DEC RADIUS Server with management capabilities using various authentication protocols in a client/server architecture. The Topaz project is an open systems solution for RAS migration to VPN using AltaVista Secure Tunneling and Microsoft "Steelhead" technologies. 1997-1998 (*sold to Cabletron*)

### Bay Networks

Principal Developer/Software Manager, Optivity Enterprise SNMP Network Management System

- System Architect for WAN diagnostic applications, created specifications, designed, presented, and implemented exploratory applications using Java and C++. Promoted to Software Manager after 3 months of service. Managed a team of 10 engineers, 2 concurrent projects, coordinated Optivity releases, facilitated team collaborations between the east and west coast offices, and performed requirements analysis by visiting customer installations throughout the country. 1996-1997 (*projects relocated to CA*)

### Microcom

Software Engineer Technical Lead, SNMP Network Management System: expressWatch

- Network Management System for the Microcom remote access hubs using ISDN and cable modems, HDMS and remote LAN access server devices. SNMP over IP and IPX was the mechanism used to control these devices by reading and writing MIB objects from the remote SNMP agent software. System requirement analysis, project scheduling, software architecture, software design and implementation, MIB design and implementation. Coordinated with technical writers, testing, and the software development group. Developed in C++, MS Windows SDK 3.1, Borland C++ OWL and Applications Framework class libraries. Utilized Novell's SNMP Data Server for ODI support of IPX and UDP/IP, GUI tool kit, and IPX C-library for development. 1993-1996

### Crest Audio

Software Engineer Technical Lead, Network Management Multimedia Control System: NexSys

- Multimedia real-time data acquisition and control system for remote monitoring and control of power amplifiers, impedance plotting for speaker diagnostics, and MIDI control. These systems are used in the *Russia Kremlin Palace, Disney Sound Studios*, Broadway theaters, and sound contractors for live sound productions. Developed in C++, MS Windows SDK

3.x, Borland C++ OWL and Applications Framework class libraries. Participated in the MIDI Show Control standards committee. 1991-1993

## EDUCATION

- Berklee, Boston, MA  
Masters Certificate Film Scoring, 2004-2014, GPA 4.0
- ACCIS  
Computer Science, 1989
- BCSI, Brick, NJ  
Computer Science

## CERTIFICATIONS

- “Developing J2EE Applications (Servlets, JSP, EJB) With JRun”, “Java For Enterprise Systems Development”, “Java For C++ Programming”, “Java Programming Language Course”
- “Microsoft WBEM/WMI”, “Microsoft NT Internals”
- “Advanced Network Configuration of Bay Routers”

## AWARDS

- Recipient of Macromedia’s technical achievement and excellence award bonus for Verity Full-text Search Engine Framework in ColdFusion 5.0
- Recipient of Microcom's employee "Top Gun" award, given to top 1% of company project developers in recognition of excellence
- Network Computing comparative review chose HDMS "...took top honors because of its expressWATCH management utility...excels in statistics gathering and chassis reporting”
- CommWeek Max Award: "...excellent Windows-based management console software”

## RECOMMENDATIONS

**Cathy Cunningham**, *Manager/Director of Network Management Development at Microcom/Compaq Computer, 1992-1999*: “Zane worked for me for 3 years at Microcom and was the first hire into my group responsible for developing a network management Windows application to monitor and control Microcom’s data communication devices. He brought extensive Windows and C++ development expertise to the group, and was the lead developer responsible for defining the product architecture as well as developing a significant amount of the code. Zane was an invaluable resource in helping me grow the group (participating in hiring decisions and mentoring new engineers) while also delivering high quality code against tight deadlines. He is adept at learning new technologies and tools, as well as applying solid software development methodologies. Zane could always be counted on to work with minimal supervision to get projects done and work collaboratively with other teams in the organization”.

**Bushan Byragani**, *Engineering Manager, Macromedia*: “Zane was a part of a different (UI) group and I convinced him to join my team as my interactions with him were very positive. As anticipated, Zane proved to be very good hire. He is extremely detail oriented, very good at verbal/written communication skills, presenting alternative solutions and seeking input. What stands out the most is

the reliability as I could delegate/task and not have to worry about it being done to my expectations. Zane also a good team player who was constructive in meetings with peers and other groups such as QA and documentation. Zane was of course technically very proficient and the assumption would be that he has continued to improve and can be counted to contribute at architect level. I would recommend Zane without any hesitation as you will end with an employee who is a consummate professional requiring very little if any management.”

**Jason McClinsey**, *Software Product Manager, M-Audio*: “I worked with Zane on the M-Audio Session project. He was an excellent contributor to the success of the project, and my only regret was that we were unable to work together for a longer period. Zane is highly talented, extremely loyal, and 100% dependable, and I would not hesitate to recommend him in the field of software development.”

**Richard Bachur, MD**, *ER Director, Children’s Hospital Boston*: “I have worked with Zane Kuchera over the last year to develop a web-based database for a healthcare quality improvement initiative. He is professional, conscientious, reliable and skilled. The project timeline was realistic and followed. He remained very responsive throughout the process. Based on his performance, we plan to continue working with Mr. Kuchera on a new effort.”

**J.T. Maki**, *Sr. Sw Engineer, Allaire/Macromedia (Manager)*: “It was my pleasure to work with Zane at Allaire/Macromedia. He has genuine passion for technology, willingness to tackle any and all problems and assignments, capacity to absorb new information and turn that into workable, solid solutions. In addition, he is an easy going, pleasant individual who’s easy to get along with.”

**Lorinda Boyd**, *Quality Assurance Engineer, Macromedia*: “As a Quality Assurance Engineer at Macromedia, I worked closely with Zane on a number of software projects. I regard Zane as one of the best IT professionals that I have ever had to pleasure to work with. Zane’s software projects were complex and critical to the software application. He took great care to understand the business requirements. He delivered excellent software code based upon his equally excellent technical specifications and code documentation. Zane always did extensive testing of his software programs prior to delivering the programs for formal quality assurance testing. Zane’s efforts were instrumental in enabling the IT, Quality Assurance, and Product Managements teams to deliver quality software applications on time.”

**Tak Wong**, *Principal Engineer, Certeon*: “Zane was a colleague at Certeon. His work with the company was crucial and unique. As I remember, both the management and fellow engineers valued his contribution to the project, and we had a great relationship, both at the professional and personal level. His personal style was rather laid-back, and mild-mannered, but his work ethics were excellent – punctual, effective, and very much a team player. As I understand, Zane also has other talents in music, writing, and graphics, besides his technical expertise. It is my pleasure to provide this recommendation for him.”

**Pirooz Ehsassi**, *Software Engineer, Comtrol*: “Zane was real helpful in mentoring and helping the more junior software engineers to understand their tasks and objectives.”