

OBJECTIVE

C++ or C software development on a Linux or UNIX platform forms my immediate employment goal.

PROFESSIONAL QUALIFICATIONS

- Eight years experience C++ programming in a UNIX environment, including Standard Template Library
- Three years experience Linux kernel development (device drivers)
- Twelve years experience C programming in a UNIX environment
- Five years experience performing System Administration of Linux networks
- Languages/Protocols/Libraries: C++, C++ Standard Template Library, C, Perl, TCP Sockets, Rogue Wave Tools++, T_EX, HTML, Java, Ada, Pascal, Fortran 90, Assembler
- Operating systems coded on: Linux, Mac OS X, IBM's AIX, Sun's Solaris, SGI's Irix, and Cray's Unicos
- Configuration management tools: CVS, RCS, Clear Case, and SCCS
- Solid knowledge of algorithms, complexity, and computer science theory

EXPERIENCE

Systems Interface Developer Ticketmaster, August 2002–Present

Implemented network applications on Linux. Ported network applications from Windows and VAX to Linux.

- *statCentral*: Implemented a C++ network server. *statCentral* caches data from dozens of production servers, providing custom views of thousands of pieces of data for hundreds of simultaneous clients.
- *Persephone*: Implementing a C++ Linux ticketing application, replacement for the 25 year-old VAX systems, working as part of a team of 3 developers. *Persephone* is the core of Ticketmaster's business.
- *Atlas*: Porting a C++ Web engine from Windows to Linux. Apache-based web applications interact with *Atlas* via TCP/IP. *Atlas* interacts with the ticketing system (VAX and *Persephone*) via UDP/IP.
- *TMLib*: Modified a Windows-only C++ service and utility framework so it is now cross platform, running on both Linux and Windows. *TMLib* is used in most other Ticketmaster applications.

Software Engineer VoiceViewer Technologies, Inc., and Gordon Minns & Associates, October 2000–August 2002

The VoiceViewer is a cell phone with integrated microdisplay; resolution of 800x600 pixels with 24-bit color

- Implemented Linux device driver and Linux kernel frame buffer in C to abstract the microdisplay for application use (e.g., XFree86)
- Modified XFree86 for compatibility with the microdisplay
- Implemented image processing utilities in C++ to pre-process bitmaps for use on the microdisplay

Software Engineer Sensory Science Corporation, May 2000–September 2001

The EDGE Media Appliance project (convergence entertainment device on a Linux platform)

- Detailed software design and C++ implementation of the media appliance software
- Created the software build system of Makefiles which compile the software over a hierarchy of directories
- Designed, implemented, and administered the Linux development network, including nightly backups, revision control software (CVS), firewall, NFS File server, NIS (yp), and Domain Name Server (DNS)

Senior Staff Analyst Compuware Corporation, August 1998–May 2000

Under contract to American Express Corporation, International Risk Management Automation

Member of the Infrastructure Team. Responsible for creating C++ tools for the development and maintenance of *Virtual Analysts* (VAs) which automate human analysts' tasks on American Express mainframes.

- Implemented utilities in C++ and Perl to secure VA login passwords using strong cryptography
- Designed and implemented a C++ application which monthly changes the passwords of 1500 VA IDs on 22 heterogenous mainframe systems. The application replaces a nine-hour manual procedure. Supporting additional mainframe systems requires only linking in new code; existing code needs no recompilation.
- Examined and repaired legacy C++ code for Y2K problems

Software Engineer Lockheed Martin Tactical Defenses Systems—Arizona, May '96–August '98

- Participated in high-level and detailed software design of the C++ application. Called upon to make critical design decisions
- Researched and Prototyped calls to commercial and vendor libraries to discover their best application
- Created the software build system of Makefiles which compile the software over a hierarchy of directories

Systems Programmer Lunar & Planetary Lab, University of Arizona, June '95–May '96

The NASA Imager for Mars Pathfinder (IMP) project created a CCD stereo imaging device which traveled with the NASA Mars Pathfinder mission to the Martian surface.

- Developed real-time, embedded software in C to control the imager and interface with the lander. The system on the lander was VxWorks on a VME platform.
- Created Open GL application on a Silicon Graphics IRIX machine to display the stereo images in 3D.

Graduate Teaching Assistant, CSC342 (Data Structures and Algorithms) Computer Science Department, University of Arizona, spring semester of 1995

EDUCATION

Master of Science, Computer Science, May 1996. GPA 3.40
University of Arizona, Tucson, Arizona

Bachelor of Science, Computer Science, August 5, 1994. Cumulative GPA 3.63

Bachelor of Science, Mathematics/Minor, Physics, August 5, 1994.
Southwest Missouri State University, Springfield, Missouri