

EVAN R. FARRER

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OBJECTIVE

To obtain a position as a software engineer creating robust systems-level software for a team-oriented company.

SUMMARY

I am a professional, dedicated software engineer who enjoys applying solid engineering principles to create secure software. I am seeking a position that allows me to use my talents and enthusiasm for software engineering.

TECHNICAL SKILLS

- C/C++
- Java
- Kernel development
- Unix device drivers
- XML, DOM, XSLT
- 802.11b, WEP
- Perl
- Common Lisp
- Scheme
- Multi-threaded programming
- PKI, x509 certificates
- Unix shell scripting
- Solaris, Linux, BSD, SCO, Windows
- Network programming
- lex, yacc
- Compiler development
- Security code auditing
- TCP/IP
- JavaScript
- Oracle, Informix, Dbase
- Assembly (MIPS, x86)

PERSONAL PROJECTS

- To gain a greater understanding of kernel design and implementation, I created a simple kernel for the x86 architecture in assembly and C
- To research virtual file systems I implemented a cross platform NFS server with support for plug-ins
- To increase my understanding of the Unix and Windows driver models, I developed multiple pseudo-device drivers
- To develop a better understanding of networking protocols, I developed a tool for disconnecting rogue connections over wireless networks
- To facilitate network mobility I developed software for Unix systems to automatically configure wireless network settings

ACCOMPLISHMENTS

- Developed testing suite in Common Lisp to analyze, replay, and generate messages for a proprietary network protocol
- Initiated security and quality code reviews, discovered and fixed several security and stability bugs
- Initiated redesign of software development process to create greater accountability to developers
- Initiated development of testing tools and test documentation for new features to assist the quality assurance team
- Developed regression test suite enabling developers to quickly find and correct bugs before releasing software to quality assurance

WORK EXPERIENCE

- 08/2005 – Present **Software Engineer** – Applied Signal Technology Salt Lake City, UT
- Developed signal processing software for telecommunications applications
- 04/2002 – 08/2005 **Senior Software Engineer** – Wavelink Corporation Midvale, UT
- Enhanced a client application for WIFI enabled handheld devices.
 - Designed and implemented scripting language for selectively applying firmware updates to wireless devices
 - Developed library for reading, writing, and discovery of RFID tags
 - Developed and enhanced compiler and IDE for developing applications for handheld computers
 - Developed and enhanced C++/Java servers and development libraries for enabling remote access to legacy applications from handheld computers
 - Developed and enhanced application for configuring WI-FI enabled devices and access points
 - Performed security and quality code reviews
- 01/2002 – 04/2002 **Firmware Engineer** – Enterasys Networks Salt Lake City, UT
- Worked with team to port BSD operating system to an embedded architecture for use as a high-end router
 - Developed serial port device driver for an embedded architecture
 - Developed command line interface for remote configuration of router firewall
- 05/2000 – 01/2002 **Software Engineer** – Digital Signature Trust, Co. Salt Lake City, UT
- Developed toolkit for issuing, publishing, and using digital certificates
 - Developed Java scheduling utility for executing dynamically loadable modules
 - Maintained and enhanced server application for publishing status of digital certificates
 - Established coding standards for development team

- Performed security code reviews
- 06/1999 – 05/2000 **Computer Programmer** – Profit Pro, Inc. Draper, UT
- Developed and enhanced Windows server application in C++ to distribute catalog data to third party applications
 - Debugged and enhanced cross-platform (Unix, Linux, Windows) library for providing access to a proprietary database
 - Created a cross-platform memory leak/corruption detection library
 - Developed fast compression algorithm for database fields
- 09/1995 – 06/1999 **Computer Programmer** – HEC Reading Horizons, Inc. North Salt Lake, UT
- Developed software for educational lessons
 - Developed reusable lesson framework which reduced development time for new lessons
 - Coordinated integration of software components written by third-party developers

EDUCATION

Present Candidate of Masters in Computer Science, University of Utah

12/2001 Bachelor's degree, Computer Science, University of Utah

Relevant classes:

- Operating Systems: Operating systems principles and concepts, developed simple Unix-like operating system
- Advanced Operating Systems: Distributed operating systems concepts, read and discuss research papers
- Computer Architecture I II III: Digital logic, assembly language, designed and implemented computer processor
- Data Communications and Networks: Data encoding, internet protocols, infrastructure, security
- Compiler Principles and Techniques: Semantic specifications, code generation, code optimization and intermediate languages, implemented compiler for object oriented language
- Programming Language Concepts: Create interpreters in Scheme that implement closures, exceptions, continuations, and other advanced language features
- Functional Programming: Programming techniques, and design using functional languages (Scheme)
- Artificial Intelligence: Heuristic programming, pattern recognition, theorem proving

References available upon request