

Rich Knox

Résumé

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Overview

I'm a mobile application developer who enjoys the challenges of working with cutting edge platforms such as iOS and Android. My expertise includes user interface design, network communications, web services, SQLite databases, and location based services. I have good organizational skills and can easily "switch gears" between platforms, languages, and development environments. I'm a well rounded generalist who can bring immediate value to an organization while quickly learning the particular technology and application domain at hand.

Employment

2011- **Senior Software Development Engineer, DreamBox Learning, Bellevue, WA**

Responsible for maintaining and enhancing in house development tools based on Eclipse and ANTLR.

2009-2011 **Senior Software Development Engineer, RealNetworks, Seattle, WA**

I worked on Android and iOS clients for a cloud based service to catalog media content on user devices. I worked with UI designers to give the Android client a consistent look and feel. I improved tolerance for temporarily dropped connections when switching between cellular and Wi-Fi. I implemented code to keep client caches synchronized with metadata in the cloud. For the iOS client I wrote code to index the camera roll and upload photo metadata to the cloud. I also wrote application startup code to properly handle thread synchronization, avoid blocking the UI, and deal with background/foreground transitions.

2009-2009 **Senior Mobile Developer, Ontela, Seattle, WA**

I worked on a photo uploader application for Android, BlackBerry, Java ME, and BREW handsets. I worked on user interface and back end software. I also set up build scripts for Android and improved build times for our other platforms.

2005-2008 **Senior Software Development Engineer Lead, UIEvolution, Bellevue, WA**

I worked on the core technology team, developing cross platform middleware to run on a variety of mobile and embedded platforms including Java ME, BREW, iPhone, embedded Linux, and other platforms. I was responsible for maintaining the byte code compiler for UJML, a proprietary markup and scripting language. I also designed and developed a component based architecture for UJML. My work involved meetings with customers, carriers, and OEMs. Our technology enabled UIEvolution to develop mobile applications such as AT&T Media Mall 2.0, MySpace Mobile, ESPN MVP, and others.

1998-2005 **Software Development Engineer, Microsoft Corporation, Redmond, WA**

I worked on Visual SourceSafe and other developer tool products. I managed several contract developers on sustaining engineering tasks. I analyzed network throughput for Visual SourceSafe and achieved a 30% performance improvement.

1997-1998 **Software Development Engineer, SolutionsIQ - under contract to Microsoft Corporation, Redmond, WA**

Implemented new features and fixed bugs for Visual SourceSafe.

1995-1996 **Contract programmer, Educational Fontware Inc., Bainbridge Island, WA**

Developed an RTF parser that inserted proper ligatures for hand writing character fonts.

1995 **Contract programmer, Sensory Circuits Inc., Port Orchard, WA**

Ported an IEEE floating point library for an embedded microcontroller application.

1988-1997 **Software engineer, DLI Engineering Corporation, Bainbridge Island, WA**

I worked on a team developing machinery vibration data collectors for predictive maintenance applications. I implemented test fixtures and procedures for maintaining quality control and improving fault tolerance. I optimized a Fast Fourier Transform (FFT) algorithm to cut processing time in half. I designed digital hardware, programmable logic, and firmware for several data collection products. I facilitated communication between hardware, software, and marketing teams to insure a smooth product roll out.

1987-1988 **Contract programmer, The Microperipheral Corporation, Redmond, WA**

Implemented database manipulation and repair utilities for a UNIX based call center system.

1986-1987 **Contract programmer, M & R Services, Seattle, WA**

Wrote software for a desktop pension valuation and administration system.

1981-1985 **Consultant, Liberty Bay Computing, Poulsbo, WA**

I was involved in engineering support and product design. My initial responsibilities involved production test of disk controllers and CPU boards. I developed test plans, fixtures, and software. I also did fault diagnosis, tracking, and repair. This evolved into an automated circuit board test and burn in fixture that we used in house and sold to other companies. I built a simple bus state analyzer for 68000 microprocessors and wrote an object code disassembler for in house debugging efforts.

1981-1988 **Proprietor, HiTech Computer Support, Bainbridge Island, WA**

Computer repair and services for computer dealers, school districts, and small businesses.

1979-1981 **Technician, Byte Shop Computer Service, Seattle, WA**

Field and depot repair service for personal and business computer systems.

1974-1975 **Programmer-analyst, M & R Services, Seattle, WA**

Wrote actuarial programs for pension and life insurance applications.

1972-1973 **Programmer, School of Business, University of South Dakota, Vermillion, SD**

Wrote financial analysis programs for a study of the tax structure of South Dakota.

1971-1972 **Laboratory Assistant, Computer Center, University of South Dakota, Vermillion, SD**

Assisted computer science students in using the facilities of the USD Computer Center.

Education

1969-1973 **University of South Dakota, Vermillion, SD**

BA in mathematics with minors in computer science and history.

1973 **Northwestern University, Evanston, IL**

Graduate study in mathematics.

1976-1977 **University of Washington, Seattle, WA**

Graduate study in computer science, probability, and statistics.

1978-1979 **North Seattle Community College, Seattle, WA**

Electronics, digital and microprocessor circuits.

References

Available upon request.