

Chadrick Kent Ward

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Summary

Professional **Sr. Software Engineer** with a passion for developing reliable software through team work, proven techniques, creative solutions, excellent problem solving skills, and modern design and development methodologies.

Recommendation

"Chad is an experienced senior engineer and project manager with great attention to detail and planning. He did a great job communicating the technical requirements for the project and it was a pleasure to work with him. He is both an excellent project leader and a system architect." – Charles Wilde, Aton International

Skills

Programming Skills:

15 years of software design and development experience.

- C++ (8+ years)
- C# and .NET (2 years)
- iOS Apps (2+ years)
- MFC (2+ years)
- Python (1+ year)
- Win32 API (3 years)
- Visual Basic (4 years)
- Objective C (2+ year)

Additional experience with MPEG TS, MPEG transcoders and packagers, Graphite, Objective C and COCOA for Max OS X, Cocos2d, embedded development, COM, JAVA, HTML, CSS, DOS, Unix, Linux, Toad, SQL Developer, .Net CF, and VBA in Microsoft Access, Word, and Excel.

Current Experience

Nov 2015 – Present

Software Engineer, Content Origination Development. **Comcast VIPER, Denver, CO**



- Responsible for fixing defects and adding new features to the DASH-R component inside of Comcast's Cloud DVR system. DASH-R converts a Comcast proprietary video manifest format into DASH format. DASH-R also returns the MPEG TS video data in small enough chunks for quick download over the internet.
- DASH-R is an Apache Web server module written in C. It uses a REDIS server for saving information about each video asset.

April 2014 – Nov 2015

Software Engineer, Service and Delivery Engineering. **Comcast VIPER, Denver, CO**



- Technical owner of Comcast's TV Everywhere, Live TV, system. The job had three primary responsibilities. One, develop Python scripts for monitoring the test and production environments. Two, overall planning for future improvements to the system. Third, act as the project manager for moving those changes through the process of testing, deployment, and verification. This effort required coordination across five different Comcast groups.
- Create Python scripts that continuously collect data throughout the different environments. These scripts were designed to be fault-tolerant and maintainable.
- Utilized collected data to improve the overall performance of the system.
- Tools and systems used were Centos 6.x, VMware, Python 2.x, and Graphite data server.

Past Experience

Nov 2008 – Dec 2015

**Software Architect and Engineer,
Moose Ware Software LLC, Highlands Ranch, CO**



- Designed, developed and released iPhone and iPad applications.
- Developed arcade-style iOS games for educational and entertainment purposes using Objective C and Cocos2d.
- Implemented a built-in web server, in Objective C, into the iPhone applications, to manage files and folders in the application. The features included upload, download, create directory, delete directory, and directory navigation.
- Developed user Interface and OS specific features in Objective C and Cocoa.
- Created the core application logic using C++ to allow for future expansion onto other platforms.

Oct 2009 – April 2014

Senior Software Engineer, Raytheon, Denver



- Led the effort to embed a Python interpreter, and develop a Python debugger, into an existing C++/MFC application, simplifying future development for the product.
- Used C++ and some scripting to interface the ground status and control software to the hardware, such as up and down converters, the antenna control unit, Matrix Switches, etc. (Transferred to the GPS program in April 2013)
- Previously used C++, MFC, and PL/SQL on Oracle, in the creation of and maintenance of software for the NPP weather satellite system. This software distributes weather data from the ground antennas around the world to multiple processing locations.
- Successfully completed four major software releases and five minor releases in a three-year time span. I successfully made more than a hundred enhancements and fixes with very few of those changes requiring any rework.
- Have previously held a DOD Secret Clearance.

2010, 2011, 2013

Volunteer Software Development for LDS Tech



- Designed and developed an iOS memorization tool for high school aged youth. The project has grown from just me to more than 100 people contributing artwork, testing, language translation and some new software features, all of us working as volunteers. All of the text is available in 3 languages. The app was released in 2011 and has been downloaded more than 212,000 times. The current road map involves adding another 8 languages and several new features.

July 2004 – Sept 2009

**Software Engineer III, Baxa, Denver
Software Engineering and Project Management**



(Now part of Baxter Health Care)

- As a Software Engineer used C++, C# and other languages for new development, internal tools, and maintenance of existing code.
- As Lead Software Engineer, led a new product development team. Our team was tasked with designing and building software and firmware for a new line of pharmaceutical pumps. The software was implemented on Windows CE and Windows XP embedded using .Net, .Net Compact Framework, and C#. The team utilized storyboards, uses cases, and RUP design tools.
- As Technical Manager, led the effort to create a software maintenance department. This included right sizing the process for a small team in an FDA regulated environment.
- As Project Manager, led multiple small maintenance efforts. These projects focused on taking an existing product, changing it, testing those changes, transfer the new software to manufacturing, and releasing the new software version to customers.

May 2001 – July 2004 **Senior Software Engineer, Raytheon, Denver**

Raytheon

- Designed and implemented a server-based fault tolerant system using Windows services and applications. System was required to function 99.93% of the time.
- Participated as part of a team that saved the company \$4 million in costs through excellent planning and execution of design and development.
- Designed and implemented TCP/IP management classes using Windows API and Overlapped I/O.
- Designed and developed other core libraries for Windows, including a C++ Wrapper class for Windows Memory Mapped Files.
- Created several development and test tools using C++ and MFC.
- Wrote software to interface with specific hardware for monitoring and control purposes. Communication via RS232, TCP/IP, and other protocols.
- Enhanced and repaired Unix and VMS X-Windows applications written in C

Aug 2000 – May 2001 **Software Design Engineer, Microsoft, Denver**

Microsoft

- Used C, C++, JavaScript and HTML to fix bugs in the DishPlayer, a WebTV Internet Appliance.
- DishPlayer is WebTV/Echo Star Satellite Receiver with PVR capability, running the WebTV OS, a thin real time multi-thread UNIX operating system.
- Personally worked on the following components:
 - FAT file system.
 - Digital Video System.
 - JavaScript Interpreter.
 - HTML browser.
 - Keyboard handler classes.
- Trouble-shot the MIPS processor, partition system, and the boot sector.

Aug 1999 – Aug 2000 **Software Engineer, Raytheon, Denver**

Raytheon

- Designed and developed a satellite data stream decoder for CCSDS multiplexed data using C++ and Win32 API for a Windows NT server. Software designed for easy portability to the UNIX environment.
- Created GUI application in UNIX, using C++ and Motif on a Solaris workstation, for creating, editing and viewing satellite data dump requests.
- Designed and developed an extensible data viewer for multiplexed data.

Sept 1997 – April 1999 **Software Engineer, Insightek, Idaho**
(Formerly known as Industrial Network Technologies, LLC)

Insightek
The Power of Prediction

- Designed and developed windows applications, which interfaced with custom hardware for status and control purpose. Utilized the following tools and concepts:
 - Visual C++
 - Visual Basic
 - ActiveX Controls
 - Single and Multi-Threaded applications.
 - MFC and COM
- Small embedded development projects on an AMD 186 processor.

Mar 1996 - Sept 1997

Software Engineer, Idaho Opal and Gem Corporation, Idaho



- Designed and developed order entry software on a TELXON PTC-710 handheld computer running embedded DOS. Written in C.
- Designed and developed Windows applications using Visual Basic to download orders created on the handheld by sales personnel.
- Designed and developed conversion tools, using C++, for converting data from the UNIX environment to the DOS environment.

Education

July 1999

Bachelor of Science Degree in Computer Science from Idaho State University.

Continuing Education

Feb 2008

Project Management Certificate Program from Colorado State University.

2012-2013

Graduate level Computer Science Classes from Drexel University.
GPA 3.6.

Additional recommendations and references available upon request.

Updated June 2016