Jeff Dommenge

Firmware Engineer

Cedar Park, TX

-Email me on Indeed: http://www.indeed.com/r/Jeff-Dommenge/bef07c62f484a661

Versatile and accomplished professional, highly skilled in firmware programming and project management with ability to leverage experience, education, and talent to contribute significantly to organizational initiatives in the role of Embedded Systems Engineer; related expertise includes:

♦ Solution Development: Adept at firmware development life-cycle spanning requirements definition/ analysis, solution design/modeling, programming, testing, defect management, integration, and launch.

♦ Training & Presentation: Superior presentation, instructional, coaching, and mentoring techniques, and rapidly engaging participants. Outstanding student, trainee, team, partner, stakeholder, and public relations. Experienced speaking to customers and teams.

♦ Testing & Analytics: Outstanding acumen in analysis, with experience utilizing a wide range of concepts, techniques, tools, and methodologies in the manipulation, quantitative analysis, and management of test data.

Technical Proficiency Highlights

Embedded Processors: PowerPC-405, PowerPC-440, MIPS-32, PSOC-3, ARM
RTOS: ThreadX, Nucleus
Tools: Multi, Cypress PSOC Creator, RealView, RISCWatch, Eclipse
Programming: C, C++, Assembly, HTML, Perl, Python
Interfaces: SAS/SATA, PCI, PCI-E, I2C (Inter IC)

Authorized to work in the US for any employer

Work Experience

Software Engineer

Hewlett Packard Enterprise - Austin, TX

January 2017 to December 2018

Responsibilities include fourth level support for server management software. Debug issues, issue recreation, communicate with firmware engineers, review CVEs, analyze security risks, and manage customer advisories.

R&D Test Engineer

Avago Technologies - Colorado Springs, CO

June 2015 to January 2017

Responsibilities
Creating customized, in-house firmware routines to validate new IC products in C language.
Working in a multi-threaded RTOS environment using processor probe, UART communication, and logic analyzer on new board designs.

Accomplishments

Design intuitive test routines in RTOS based firmware to validate LED and SGPIO capabilities of new silicon designs.

Skills Used
Use of JTAG ICEs and Oscilloscopes to debug issues and bus traffic. Programming in C and ASM to create tests and analyze issues.

Firmware Engineer
International Business Machines - Austin, TX
October 2012 to February 2015

Primary responsibilities include managing firmware issues from investigation, analysis, resolutions, testing, delivery, and launch; required to demonstrate a keen eye for identifying systems issues to debug using processor probes, Perl scripting, and advanced error logging techniques.
Key skills in this position as Firmware Engineer include mastery of embedded C++, Linux, and custom debug tools for event analysis. Manage projects of code improvements and add features to existing code base.
Selected Contributions:
* Maintain physical device code and investigate reported coding defects to determine root cause and recommend further action.
* Manage project to migrate code from 32-byte LBA to 64-byte LBA support.
* Develop high-level design documents for new projects and maintain schedule updates during development.

Firmware Engineer
Dell Computers - Round Rock, TX
January 2009 to September 2012

A key task and duty in this role included utilizing my effective ability to design, code, and test new features for enclosure management systems in a multi-threaded real-time environment; additionally required to debug using processor probes, I2C analyzers, SAS analyzers, and oscilloscopes.
A vital role as Firmware Engineer includes handling the encompassing task of creating code to support multiple architectures, including PSOC-3, and MIPS-32 processors. Modified code to support multiple single- and multi-threaded real-time operating systems. Developed and modified new and existing support tools to interface with embedded controllers.
Selected Contributions:
* Created I2C bus recovery algorithm for hung busses.
* Debugged and modified peer's code to improve efficiency, reliability, and functionality.
* Performed as the sole point of contact with off-site team diagnostics testing.

Firmware Engineer
Hewlett Packard - Houston, TX
January 2001 to January 2009

As an embedded systems firmware engineer was responsible for the development and implementation of firmware for industry-specific applications and systems.
Handled multiple facets which included designing, creating code, and testing new features for SAS & SATA RAID controllers in a multi-threaded real-time environment.
Identified issues and debug using processor probes, I2C analyzers, SAS analyzers, PCI-PCI-E analyzers, and other tools.

Strategically created code to support multiple architectures, including PowerPC-405, PowerPC-440, and MIPS-32 processors.

Modified code to support multiple multi-threaded real-time operating systems.

A key task included creating, developing, and modifying new and existing support tools to interface with embedded controllers.

Modified assembly files to adapt to new environments.

Worked with test teams to identify root causes of issues and improve test plans for future testing.

Selected Contributions:

* Added replaceable layer for quicker real-time operating system migration.

* Developed idea to minimize read cycle wait time on RAID volumes.

* Worked with test team to identify issues, root cause, and resolve in a timely manner.

* Helped test team improve test plans for vulnerabilities.

* Created protocol to support licensing purchasable features.

Field Engineer

Invensys/Compaq

October 1998 to January 2001

Quality Assurance Engineer

Texas Instruments

January 1997 to October 1998

Education

Bachelor of Science in Electrical Engineering

Texas A&M University - College Station, TX

Skills

- Python
- C
- Embedded
- Driving
- Linux
- Scripting
- Java
- Git

Additional Information

Recently attended 2 years of medical school