

OBJECTIVE: To obtain a full-time, computer hardware engineering related position with a company that can utilize my current skills to their fullest potential and provide me with opportunities to learn and advance in my career.

EDUCATION: **UNIVERSITY OF MISSOURI - ROLLA (NOW: MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY)**
B.S. Electrical Engineering, May 2000
B.S. Computer Engineering, May 2000
Minors: Math, Computer Science
Major GPA: 3.50/4.0 - Cumulative GPA: 3.20/4.0

EXPERIENCE: **ITWATCHDOGS** Apr 2010 - Present
Austin, Texas
Senior Hardware Engineer

- Designed sensors and other embedded electronics associated with environment monitoring products and power distribution monitoring and control products.
- Performed all hardware and firmware design, prototyping, and bringup activities associated with products I designed, including schematic capture, board layout, prototype builds, writing firmware and test scripts, and giving guidance to the software team for ecosystem level integration.
- Championed planning, justification, and design of next-generation family of products.
- Mentored junior level hardware engineer.
- Instituted formal design guidelines and parts management procedures required for multiple hardware engineers collaborating on various products.

RIPCODE (NOW: RGB NETWORKS) Mar 2007 - Apr 2010
Austin, Texas
Hardware Engineer

- Responsible for all hardware architecture, design, prototyping, test, certification, procurement, and manufacturing activities as part of a two person comprehensive hardware team which included only myself and the Director of Hardware Engineering in Dallas.
- Directed hardware design and layout activities performed by contractors in India and the US.
- Performed hardware and firmware bringup of new system boards and had significant involvement in initial Linux OS bringup activities.
- Customized firmware and software that included work on U-Boot, Linux drivers, and board support packages.
- Managed lab layout, procedures, procurement, network configuration, and Linux server setup, administration, and maintenance.
- Collaborated with customers to facilitate custom installations, demonstrate systems, and debug problems.

NEWSYS Feb 2003 - Jul 2003, Apr 2004 - Mar 2007
Austin, Texas
Hardware Engineer

- Designed circuit boards including making system design decisions, schematic capture, interfacing with board layout personnel, and coordinating with manufacturing and procurement.

- Performed initial bringup, debug, and testing of multiple products.
- Coordinated design and test activities with teams in Taiwan and India including schematic and layout reviews, test planning, and prototype manufacturing and debugging.
- Participated in cost reduction efforts for multiple projects. This includes part cost evaluation, subsystem redesign, and feature modifications and reduction.
- Executed tests, resolved problems, and recommended and implemented design changes and improvements to our multi-processor AMD Opteron and Intel Xeon based servers.
- Analyzed, debugged, and tested various interfaces including PCI, PCI-X, PCIe, SATA, SCSI, I²C, JTAG, USB, IDE, DDR, HyperTransport, and Gigabit Ethernet.
- Supported FCC, CISPR, and VCCI compliance testing and resolved EMC/EMI problems.
- Provided hardware support and assistance in debugging of BIOS and other firmware issues.
- Wrote and executed test plans and procedures for multiple products.
- Collaborated with manufacturing to determine and resolve manufacturing issues.

DELL

Oct 2003 - Apr 2004

Austin, Texas

Product Test Engineer

- Wrote test plans for Dell server products.
- Supervised execution of test plans.
- Developed test cases for new technologies and applications.

MOTOROLA (NOW: FREESCALE SEMICONDUCTOR)

Jun 2000 - Mar 2002

Austin, Texas

System Test Engineer - Multimedia Systems Division

- Developed and executed tests on PowerPC based consumer set-top box.
- Planned, designed, and performed full audio test suite for the product, including analog and digital input and output performance, and Dolby Digital compliance.
- Designed environmental test suite, including thermal stress, power line EMI tolerance, DC power tolerance, UL conformance.
- Worked closely with design engineering to develop defect resolutions and correct EMC design issues.
- Participated in testing and redesign of analog audio and video (NTSC/PAL) subsystems.
- Performed MPEG standards compliance and device compatibility testing.
- Wrote test automation scripts using a variety of software packages including LabView and Visual Basic.
- Performed Ethernet, ATM, ADSL, and VDSL network testing.