

## Dave Olson

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I am seeking a lead software position, with a focus on system architecture, design, and product implementation, working with hardware-based products.

**Experience:** I have many years of experience working on the Unix/Linux kernel. I have done extensive system infrastructure design, implementation, and debug. I have been a lead in hardware bringup and chip architecture, device drivers, schedulers, interrupt handlers, filesystems, networking (TCP), and system boot (BIOS, proprietary and linuxbios). I have developed products based on servers, workstations, embedded systems, and consumer appliances. I have used and coded for Unix, NetBSD, Linux, QNX as servers, desktops and real-time appliances, with heavy use of C, assembler, scripting (Python, shell, tcl), using Perforce, RCS, SCCS, CVS, bitkeeper (bk), Mercurial (hg), and git for source code control. I am familiar with low level processor details including x86\_64 (AMD and Intel), MIPS, and PPC.

### **2010 - Present: Cisco, Security Business Group - Technical Lead II**

As a Technical Lead my overarching responsibility is to act as a S/W Architect, working on infrastructure, overall system architecture, and development processes, and manage technical aspects of large projects. I am the lead architect and engineer on a low end security appliance, incorporating multiple SoC's. I meet with engineering and program management teams on development strategy and methods, tools, security processes. I am a resource for system security issues, resolve performance issues, help set development priorities, and evaluate vendors (software and hardware).

### **2003 - 2010: QLogic Corp - Consultant Engineer (Principal engineer equivalent)**

I was the lead architect for InfiniBand ASICs (4 generations), driver and library software, chip and board bringup, release planning and content, etc. I was the lead software engineer, writing drivers, low level libraries, and tools. I created and implemented engineering processes, and mentored both senior and junior engineers. I also provided engineering support to the sales and support teams. I developed and applied for 6 patents; 4 granted to date.

### **2001 - 2003: Tahoe Networks - Technical Lead**

I worked on design and implementation of a fault tolerant GGSN/PDSN (cell phone data and management) platform. We used QNX, a commercial UNIX-like micro-kernel RTOS. I was responsible for overall system architecture, including reliability, serviceability, and performance. I worked closely with the hardware team on the system design. I helped select, ported, and debugged the QNX OS, and was the designer and implementor of the failover infrastructure.

### **1999 - 2001: Geocast systems - Senior Engineer**

I worked with the team that delivered a MIPS-based consumer appliance for digital data broadcast, running NetBSD. My job duties included system architecture, hardware bringup, performance, and drivers (Digital TV, USB, satellite), as well as providing engineering support to partners, including negotiations.

## **1988 - 1999: Silicon Graphics - Principal Engineer**

I designed and coded kernel subsystems, mostly focused on design and implementation of I/O subsystems (including the core crossbar ASIC in the desktop and SMP systems). I was one of 3 principal engineers with Intel red-book access for IA64 for use in SGI SMP servers. I led the team that converted the IRIX kernel to use fully preemptible threads for real-time multimedia (audio/video). I was the lead on the redesign and implementation of the company-wide software development and release process, working with VPs, directors, managers and senior engineering staff. This process was used for over 8 years, resulting in greatly improved quality and schedule predictability. I also worked closely with the customer support escalation team to resolve difficult customer problems. Co-inventor of high speed data crossbar ASIC.

### **Other activities:**

Vice-Chair, Midcoast Community Council (<http://midcoastcommunitycouncil.org>)

Board Member, Committee for Green Foothills (<http://greenfoothills.org>)