

Employment History

- July 1995 to October 1999** **3Com Corporation. Design Engineer**
HPNA USB Adapter (Wireless and Home Networking Division)
- Architected and implemented USB to HPNA adapter:
 - Firmware, 8051 based USB core.
 - Host side driver, WDM/NDIS Miniport Driver for Windows 2000/98.
- Fibre Channel (Storage Networking Division)*
- Architected Fibre Channel to ATM bridge product.
 - Fibre Channel SCSI Miniport implementation (QLogic ISP2100).
 - Fibre Channel NDIS Miniport implementation. (QLogic ISP2100).
- ATM Software/Hardware (PCI) (Advanced Products Division, High Speed LAN)*
- Architected and implemented:
 - Next generation ATM adapter card. (layout & schematics) Also implemented fully portable device driver for new card. (IDT 77252, IDT 77211 ATM SAR)
 - Microsoft certifiable ATM NDIS Miniport Driver for Windows NT/95/98. (NDIS 4.0 & NDIS 3.0) (Windows NT Intel as well as Windows NT Alpha)
 - Utilities for ATM adapter card under Microsoft NT/95/98 (system tray icon, runtime diagnostic program, and driver installation DLLs)
 - Novell Netware certifiable ATM Thin Server driver.
 - Utilities for ATM adapter card under Novell Netware. (runtime diagnostic NLM, installation script)
 - User Management Entity (UME) module.
 - SNMP agent for ILMI MIB.
 - Responsible for the integration of the driver stack to the Novell Netware operating system.
 - Performed performance analysis and enhancement on the ATM driver using both hardware and software tools.
 - Debugged other parts of the stack, including LEC, Signaling, System Services, Layer Manager, and Connection Manager
 - Worked closely with the hardware layer, including the SAR, Framer, and PCI interface.
 - Wrote test harness code to simulate driver environment for LEC, UME, Signaling, Layer Manager, and Connection Manager.
 - Developed test procedures and defined necessary equipment and configurations. Also responsible for purchasing such equipment.
- FDDI Software (PCI) (Advanced Products Division, High Speed LAN)*
- Responsible for maintaining and testing FDDI adapter drivers for distribution.
- FDDI Software/Hardware (EISA) (Advanced Products Division, High Speed LAN)*
- Assisted in debugging driver issues escalated from customer service.
 - Performed modifications to existing FDDI adapter card design.
- April 1998 to March 1999** **Mayan Networks, Incorporated. Contractor**
Information Technology Specialist
- Responsible for setting up and maintaining Altigen PBX system.
 - Responsible for setting up and maintaining network infrastructure.
- December 1994 to December 1997** **On-Line Copy Corporation. Contractor**
CopyConnect Software
- Developed PC based software used to transmit diskette images over a serial data link.
- June 1994 to December 1994** **Interval Research Corporation. Contractor**
Engineering Design Team

- The team was responsible for implementing designs submitted by researchers using a range of different hardware and software platforms, including 68hc11, 8051, 16Cxx, and 17Cxx series microcontrollers.
- Programmed user interfaces for hardware designs using Apple Macintosh based systems.

Education

August 1991 to May 1995 University of California at Berkeley
 B.S. Electrical Engineering and Computer Sciences
 Relevant Course Work in Digital Design, Graphics, Database, Compilers, Computer Architecture, Software Design, and Robotics.

Technical Skills/Experience

- Programming Languages: C/C++ SQL OpenGL Tcl/Tk
 UNIX Shell HTML JavaScript Assembly (80x86, MIPS)
 Perl
- Programming on Microsoft Windows (NT, 95/98, 3.xx), expertise with Microsoft Foundation Classes (MFC), NDIS Miniport, and SCSI Miniport.
- Programming on Microsoft DOS, UNIX, and Macintosh based systems.
- ATM protocol stack (Signaling, UME, LANE, Connection Manager, and Layer Manager).
- Networking protocols: TCP/IP, NetBIOS, NetBEUI, SNMP, and IPX/SPX.
- Networking technologies: Fibre Channel, Ethernet, FDDI, Token Ring, and ATM.
- PCI and E/ISA bus architecture.
- Design and debugging of digital and analog circuits, including FPGAs and microcontrollers (68hc11, 8051, 16Cxx, and 17Cxx).
- Powerview, Xilinx tools, and Synopsys.