

Ali Ghorashi

6350 Fallriver Dr
Colorado Springs, CO 80198
(719)268-1694 (*Home*)

e-mail: aghoras@gmail.com
web: home.pcisys.net/~aghorash

OBJECTIVE To create.

EDUCATION

8/2000-5/2003

The University of Colorado in Colorado Springs, Colorado Springs, Colorado
Masters of Science in Electrical Engineering, Circuit Design Option (GPA 3.8/4.0)

Thesis title: Post SPICE Simulation Tool For Deep Sub-Micron Transistors.

Completed courses in the following subject areas:

- Digital Circuit Design and Synthesis using VERILOG (6hrs)
- Analog, VLSI, RF, and Mixed Signal Design (12hrs)
- Digital Signal Processing (3hrs)
- Advanced Electromagnetic (3hrs)

1994-1998

The University of Southwestern Louisiana, Lafayette, Louisiana
Bachelors of Science in Electrical Engineering, Computer Option (Cum Laude)

- Major GPA 3.92/4.0 (Cumulative GPA 3.69/4.0)
- Member of Tau Beta Pi (Engineering Honor Society), IEEE, ACM.

1993-1994

Louisiana School for Math Science and the Arts, Natchitoches, Louisiana
High School

HONORS AND ACHIEVEMENT

- Recipient of Lockheed Martin's STAR award (June 2002)
- The Instrument Society of America Scholarship (Fall 1997)
- Second place in MAA Southern Math Competition
- Competed in IEEE Fire Fighting Robotics Competition

EXPERIENCE

1/2005-Present

DRS Signal Solutions, Colorado Springs, CO
Senior Member of Technical Software Staff

- Developed drivers and software for data distribution on a VME chassis based Linux cluster capable of 1.7TFLOPS in a cross-compile (x86/MIPS) development environment.
- Designed and implemented several Linux Drivers for interfacing with a high speed (16Gbps) switched fabric back-plane (VME).

- Designed and implemented drivers for data transfer over SPI4.2, Hypertransport (HT), and Packet over Hypertransport (PoHT) ports.
- Developed software utilizing a 3-node Cache Coherent Non-Uniform Memory Access (ccNUMA) system.
- Developed code on Linux for a 4-CPU core 1GHz 64-bit MIPS based Symmetrical-Multi-Processing System on a Chip (SMP SoC BCM1480).
- Architected the data flow mechanism over a back-plane (VME) integrated Giga-bit Ethernet using Broadcom StrataXGS (BCM5690) and Broadcom Multi-port HiGig Switch Fabric (BCM5670) chips.
- Designed, developed and debugged several C++ application under Linux using BOOST libraries.
- Developed and Maintained the delivery schedule (MS Project) for 10 Engineers during the initial software release cycle.
- Organized and created the initial list of deliverables and requirements for the first article of delivery.
- Developed a detailed system test plan and procedure base on the requirements for the first article of delivery.

5/1998-1/2005

Lockheed Martin, Houston, TX/Colorado Springs, CO
Hardware Engineer, Software Lead (4/99-1/2005)

- Using SNMP, developed Control and Management modules under Windows NT for Wide Area Network Interface Unit (WANIU)
- Designed, developed and maintained several extensive GUI/MFC based applications for controlling the WANIU.
- Designed and developed software using Winsock 2.0 to establish ATM connections (SVC point-to-point and point-to-multipoint, PVC) through a FORE ASX-200BX switch.
- Developed various device/NDIS drivers for cards connected to a CPCI bus .
- Developed firmware applications under QNX.
- Developed multi-processor distributed applications to emulate an Ethernet network on a CPCI backplane.

1/1997-9/1997

Microelectronics Research Laboratory, Lafayette, LA
Undergraduate Research Assistant

- Designed and assembled PC Boards and other circuitry for a Magneto Resistive Credit Card Reader under the supervision of Prof. M. R. Madani.
- Debugged and modified programs for signal frequency measurement on an MC68HC11 microcontroller.

TECHNICAL SKILLS

Software

- C/C++, JAVA, FORTRAN, Assembly(x86, z80, 68HC11)
- C#, .NET Technology, ASP.Net
- NDIS and device driver development under Windows NT
- Visual C++, MFC

- SNMP agent and manager development
- QNX (RTOS) application development
- UML, XML
- SQL, Relational Database, Microsoft Access
- Linux Device driver development
- ClearCase, Source-Safe, CVS
- Eclipse CDT
- L^AT_EX

Hardware

- Design and Assembly of microcontroller based systems
- VERILOG, SILOS III, PSPICE
- ModelSim, Cadence Design tools, MATLAB, MathCAD

CLEARANCE Department of Defense Secret Clearance

CERTIFICATES FAA Certified Instrument Multi-engine Land Flight Instructor

REFERENCES References available upon request.