

SHRENIK MEHTA

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OBJECTIVE:

To improve technical expertise and contribute significantly in organization as an electrical and computer engineer

EDUCATIONAL QUALIFICATION:

University of North Carolina at Charlotte

M.S. Electrical and Computer Engineering GPA 4.0/4.0 Charlotte, NC
Dec 2008

Project: Line Extraction Algorithm using Lidar for an Autonomous Robotic Vehicle

Advisor: Dr. James M Conrad, Associate Professor, ECE Dept., UNC Charlotte

L.D. College of Engineering at Ahmedabad

B.E. Electronics and Communication engineering GPA 3.8/4.0 Gujarat, India
May 2006

WORK EXPERIENCE:

UNCC Dept. of Electrical and Computer Engineering

Teaching Assistant (Electrical Engineering Design Course) Charlotte, NC
Jan 2008 to May 2008

- Assisted students in laboratory exercises and assessed homework and exam.

e-Infochips Limited(www.infochips.com), Ahmedabad

ASIC Verification Engineer Gujarat, India
Jan 2006 to July 2007

- Developed and enhanced verification test plan for various system on chip (SoC) such as Multi port PCI Express networking switch, Communication Controller chip, I²C Bus and PS2 Controller
- Designed verification environment and test cases using reference verification methodology (RVM)
- Developed and enhanced regression scripts and handled regression activities at full chip level

TECHNICAL SKILLS:

Operating Systems: Linux, Unix, Windows

Languages: C, C++, SystemVerilog, Vera, Verilog, VHDL, Shell, Perl, Bash.

Tools: Verilog-XL, Simvision, VCS, Questa6.2, Modelsim, Xilinx XPS, Mentor Graphics ADK, HEW.

Hardware: 8086, 8085, Renesas MC16P62C, TI MSP430, Cypress CY3210 PsoC, Xilinx ML310.

RELEVANT COURSES:

Embedded Systems, Advanced Embedded Systems, Computer Arithmetic, Research Tools and Techniques in Computer Engineering, Fundamentals of Reconfigurable Computing, Multicore Computing, Digital System Testing, Introduction to VHDL, VLSI System Design.

PROJECT WORK:

Cache Simulator (Course: Computer Architecture, Fall 2008)

- Implemented cache simulator and used it to design different data caches suited to the SPECint2006 benchmark.

Linux Device Driver and Application for CRC (Course: Fundamental of Reconfigurable Computing, Fall 2008)

- Designed CRC hardware core using VHDL and build root file system with a device driver and an application to use it.

Autotools based Library for Graph Theory (Course: Research tool and techniques, Fall 2008)

- Designed adjacency list and adjacency matrix graph structures and created an autotools based library which performs depth first search and breath first search for given graph.

Hacking the iRobot Roomba (Course: Embedded System, Advanced Embedded Systems, Spring 2008)

- Designed an algorithm to improve the Coverage Area of Roomba.

Memory Testing using March Algorithms (Course: Digital System Testing, Fall 2007 Spring 2008)

- Studied March Algorithm and implemented a few of the March tests to detect stuck at faults of Memory.

Multithreaded code of LU Decomposition Problem (Course: Multicore Computing, Spring 2008)

- Developed multithreaded code for LU decomposition using posix thread and analyzed speed up gained by parallel version over sequential version of LU decomposition problem.

REFERENCES:

- Available upon request.