

Saurabh Sinha

Objective

- Obtaining an internship position in microelectronics industry.

Education

- MSE in Electrical Engineering at Arizona State University starting Fall 2006.
- CGP: 3.53
- Bachelor in Technology in Electronics and Instrumentation Engineering from National Institute of Technology, Rourkela, India with Honors in 2006.

Relevant Courses

- VLSI Design
- Advanced VLSI Design
- Analog Integrated Circuit Design
- Advanced Analog Integrated Circuit Design

Computer Aided Design/ Simulation Knowledge

- **Operating Systems:** Windows, Linux, UNIX.
- **Programming and CAD Experience:**
 - Cadence (Virtuoso Layout, Schematic Design and Simulation), Tanner Tools, Magic, SPICE and basic VHDL.
 - C, C++ and MATLAB (DSP Toolbox, Neural Network Toolbox)
 - Basic scripting using Tcl/Tk, Perl and creating Tcl API for C++.
 - Basics of Code Composer Studio for programming Texas Instruments TMS320C54XX DSP.
- **Hardware Programming:** 8085, 8086 and 8051.

Projects and Relevant Experience

- Transistor level design of a 32-entry Translation Lookaside Buffer supporting multiple page sizes using NAND matchline in TSMC .25u process.
- Transistor level design of a synchronous 8kB SRAM bank functional at 300Mhz in TSMC .25u process as a part of the first Advanced VLSI Project.
- Designed a 32-bit ALU to be integrated in a mixed signal chip and optimized it for speed and low power as a part of VLSI Design Class Project. I was involved in the design and implementation of the multiplier.
- Currently employed as Web Designer/Teaching Assistant for online course content management at the Dell E. Webb School of Construction (CREATE) under Dr. Allan Chasey.
- Modeling Partial Discharge phenomenon of Insulators using Radial Basis Functions Neural Networks and ANFIS (Adaptive Neuro Fuzzy Inference System) in MATLAB (Undergraduate Senior Year Project, 2006).
- Six weeks Summer Internship in June 2004 at Lucent Technologies Bangalore, India (CDMA – RNC Group). Project involved modifying call simulation program with Tcl APIs.

Significant Achievements

- **Was one of the three Indians to be awarded the Lucent Global Science Scholar Award 2003.** Received one time scholarship of \$5000 and a week's trip to Bell Laboratories, Murray Hill, NJ, USA. Made a presentation on "MOLECULAR BEAM EPITAXY: Present Research and Scope" under mentor scientist, Dr. Ken West.

Extracurricular Activities

- Was the drummer of the Institute Band "Euphony".
- Have six years training in Tabla, an Indian percussion instrument.