

KUNAL GOSRANI

kunalgosrani@gmail.com | <http://www.chrec.org/~gosrani/> | (404)-751-8603
3921 SW 34th Street, Apt #118, Gainesville, FL 32608

OBJECTIVE

Seeking a full time position as an engineer, in the field of Computer Engineering, where my application development & HW/SW skills can be applied and expanded in a dynamic & high paced environment.

EDUCATION

University of Florida, Gainesville, FL

- Master of Science, Electrical and Computer Engineering.

May 2009
GPA: 3.6 / 4.0

Georgia Institute of Technology, Atlanta, GA

- Bachelor of Science, Computer Engineering.

May 2006

Relevant Coursework:

Reconfigurable Computing, Parallel Computer Architecture, Computer Architecture, Computer Vision, Embedded Microcontroller Design, Digital Signal Processing and Digital Filtering,

EXPERIENCE

Funded Research Assistant, CHREC - University of Florida, Gainesville, FL

Aug 2007 – Present

- Developed kernels such as 2D Convolution, CFAR, FFT, FIR and Matrix Multiply for FPGA's (Altera and Xilinx), PowerPC, and Multi-core devices (Tilera's Tile-64).
- Focused on benchmarking using analytical and simulation modeling, as well as experimental analysis.
- Formed a productivity metric framework for devices based on tool maturity/frustration index/etc.
- Formulated application metric to classify performance of applications, independent of hardware.
- Worked on bridging application metric (CI) to device metrics (CD, CD/W, EMB, IMB) and benchmarking.

Full-Time Technician, Neuro Lab - Georgia Institute of Technology, Atlanta, GA

Jun 2006 – Jul 2007

- Assisted graduate & post doctorate candidates with gathering & evaluating data for research purposes.
- Developed a working interface between MATLAB's Simulink and a Xilinx FPGA, so as to improve the efficiency and speed of electroplating Multi-Electrode Arrays.
- Utilized test equipment; logic analyzers, digital multimeters, & oscilloscopes to observe, analyze, and interpret data signals.

Student Assistant, Neuro Lab - Georgia Institute of Technology, Atlanta, GA

Jan 2005 – May 2006

- Designed PCB's for graduate students using Protel, Eagle and ExpressPCB software.
- Performed soldering, debugging, testing, & assembling of PCB's. Machined enclosures using the CNC mill.
- Managed inventory for COTS components needed for populating PCB 's.
- Facilitated and guided workshops for new users to the soldering station, band-saw and the CNC mill.

PUBLICATIONS

- J. Williams, A. George, J. Richardson, K. Gosrani, and S. Suresh, "Computational Density of Fixed and Reconfigurable Multi-core Devices for Application Acceleration," Proc. of RSSI, Urbana, IL, July 2008.
- J. Williams, A. George, J. Richardson, K. Gosrani, and S. Suresh, "Fixed and Reconfigurable Multi-Core Device Characterization for HPEC," Proc. of HPEC, Lexington, MA, Sep. 2008.
- J. Williams, A. George, J. Richardson, K. Gosrani, and C. Massie, "Characterization of Fixed and Reconfigurable Multi-Core Devices for Application Acceleration," ACM TRETs .

SKILLS

Tools and Platforms: Xilinx ISE, ModelSim, Quartus II, Cadence (Spectre, Virtuoso, APD), MATLAB, PSPICE, Protel, Eagle, Tilera's Tile-64 MDE, NI LabVIEW, NI ELVIS and DIMETalk, MicroCap.
Languages: C, Perl, VHDL, MPI, UPC and Java.
Operating Systems: Windows 9X/2000/XP/Vista/7, Linux, Sun and UNIX environments.