

RICARDO R. GARCIA

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Campus Address

Permanent Address

4210 Red River St. Apt. 218, Austin, TX 78751

901 Wellridge Dr., Arlington, TX 76017

Education: The University of Texas at Austin Austin, TX

Department of Electrical and Computer Engineering

Bachelor of Science Degree expected May 2007 GPA: 4.0/4.0

Undergraduate Research Advisor Dr. Brian L. Evans

Course Work: Communication Systems, Wireless Communication Laboratory, Embedded and Real-Time Systems, Real-Time Digital Signal Processing, Digital Signal Processing, Computer Architecture, Digital System Design Using VHDL, Digital Logic Design, Linear Systems and Signals, Probability and Random Processes, Introduction to Microcontrollers, Solid State Electronics, Circuit Theory, Electronic Circuits

Experience:

6/06 to 8/06 Texas Instruments Incorporated DSPS Dallas, TX
Dallas DSP Design: Verification Intern

- Modified memory test sequences to reduce test time for DSP memories
- Evaluated formal verification methodologies and software on existing DSP modules
- Developed Perl scripts to automate formal verification process for DSP memory hardware
- Created assertions in both Open Verification Libraries (OVL) and Property Specification Language (PSL)

6/05 to 8/05 Texas Instruments Incorporated DLP Plano, TX
DLP ASIC Development Intern

- Verified operation of VHDL video processing designs
- Modified VHDL code for implementation on FPGAs
- Tested performance of embedded processors within an Altera FPGA
- Developed utilities in C to support verification of video processing designs

10/04 to 5/05 Texas Research Experience Program Austin, TX
Undergraduate Research Student

- Created a wireless acoustic modem through LabVIEW
- Designed a method of asynchronous communication with acoustic tones
- Implemented signal processing techniques, including Goertzel filtering
- Software release available online at <http://www.utexas.edu/~rrgarcia>

6/04 to 8/04 TXU Electric Delivery Ft. Worth, TX
Network Design Intern

- Created and implemented a prototype of a remote data monitoring system for power system monitoring through twisted pair lines
- Developed circuit to computer interface for monitoring equipment
- Created software for test and monitoring equipment
- Implemented A/D and D/A converters for data acquisition

Skills:

Test and measurement: Signal generators, oscilloscopes, spectrum analyzers, LabVIEW

Hardware description languages: VHDL, Verilog

Field programmable gate arrays: Altera Stratix, Xilinx Spartan-3

Assembly languages: Motorola 6812, TI TMS320C6000 VLIW DSP

High-Level Languages: C, C++, Perl

Software development environments: Metrowerks Code Warrior, TI Code Composer

Algorithm development environments: LabVIEW, MATLAB

Design automation tools: Quartus, Modelsim, PSpice, Multisim

Verification Tools: Incisive Formal Verifier, Synopsys VCS

Standards implemented: v.22bis modem

Honors:

GEM PhD Fellowship sponsored by Texas Instruments

Engineering Scholar - Top 5% of Junior Class

Engineering Honors Program

Member of Tau Beta Pi Engineering Honor Society

Member of Eta Kappa Nu Electrical Engineering Honor Society

Member of Institute of Electrical and Electronics Engineers (IEEE)

Recipient of Elizabeth L. & Russell Hallberg Presidential Scholarship

Recipient of Emory T. and Ella E. Peterson Unrestricted Endowed Presidential Scholarship