Alexander Grubl

gtg408y@mail.gatech.edu · (321) 279-3160 c · (407) 869-6339 h
7305 Renaissance Way · Atlanta, GA 30308

Education

Georgia Institute of Technology, Atlanta, GA — 09/2004 – 12/2009
Candidate for Bachelor of Science in Computer Engineering

Skills

Digital Signal Processing
- LTI/BIBO/Causal Systems, FIR/IIR/LP/HP/BP/BS/Chebyshev filters
- Fourier Transform, Z-Transform, Convolution, Nyquist rate
- Random Processes, Stationary Processes, Auto-correlation

Software
- MATLAB, Microsoft Visual Studio, VMware, MySQL
- Cadence OrCad, Cadence Virtuoso, NI Multisim, Mathcad, Simulink

Programming
- C / C++, MATLAB, Python, Java, Assembly(MIPS), VHDL

Hardware
- Pipelined MIPS datapath, FLEX 10K FPGAs
- Built a working Analog to Digital Converter
- Soldering

Operating Systems
- Windows, Linux (Ubuntu, Red Hat)

Statistics
- Gaussian/Poisson/Binomial distributions, Central Limit Theorem

Microelectronic devices
- BJTs, MOSFETs, P-N Diodes, IGBTs
- Minority Carriers, Mobility Characteristics, Breakdown Voltage

Controls
- P-I-D control, Stability, Root Locus

Circuitry
- Node and mesh equations, Thevenin/Norton equivalents, Superposition
- Laplace Transforms

Instrumentation
- Oscilloscope, Multimeter, Function Generator

Communication
- Presentations, Conferencing, Technical Reports, Project Proposals, Meetings
- Customer Service
- Fraternity rush events

Leadership
- Head of fraternity Judical committee
- Head of fraternity Financial review committee

Experience

Nokia, Alpharetta, GA — 08/2005 - 05/2008 (5 Semesters)
QA Co-op
- Created and ran software functionality/stress testing
- Updated device firmware
- Organized the test lab
- Maintained device rosters
- Reported daily test results using Excel
- Ended with the delivery of an office wide, self-prepared presentation on the VMware hardware virtualization software package and NoMachine's NX Windows client for remote desktop access into a Linux environment

D.R. Horton Construction, Orlando, FL — 05/2003 – 08/2004 (2 Summers)
- Assisted site manager
- Installed basic home furniture (doors, locks, fans)
- Prepared homes for final inspection
- Aided customer home inspection and made on-site repairs

Research

Georgia Institute of Technology *Research Assistant* — 1/2009 – 4/2009 (1 Semester)
- Research project on Exa-scale computing program development
- Worked with one other student to develop a FLOPs bookkeeping program using MATLAB
- Weekly meetings were held to monitor progress and verify independent work