

Alex Ray

Objective

A challenging summer internship at a company on the cutting edge of new technology where I can bring passion into solving problems that will improve peoples' lives.

Education

2007-2012 (expected) Computer Engineering & Textile Engineering, NCSU, Raleigh, NC, Overall & Major GPA: 4.0.

Computer Skills & Languages

Programming: C, Assembly, Verilog, Go, VBA, Java
Parallelization: OpenMP, PThreads, MPI, OpenCL
Scripting: Python, Bash, SQL, Tcsh, Vim
Software: Git, Subversion, Apache, PostgreSQL, \LaTeX ; Linux, OS X, Windows; GDB, Eclipse, CScope/CTags, vim, gcc

Experience

- 1 Semester Teaching Assistant-Principles of Electrical Engineering, Dr. Masnari, NCSU.
 - Assisted students with homework and example problems & Provided supplemental instructional support
- 1 Summer Cisco Choice Internship, Cisco, Morrisville, NC.
 - Developed low-level tools to aid in the debugging of enterprise-domain routers.
 - Implemented device drivers to monitor performance events on chip
- 2 Semesters Computational Software Developer, Optoelectronics & Lightwave Engineering Group, NCSU.
 - National Science Foundation funded Research Project
 - Developed modelling software to simulate and verify experimental finding
 - Optimize runtime using multithreading, multiprocessing and GPU computing on multiple platforms
- 1 Summer Open Source Developer, Google Summer of Code, Amsterdam, Netherlands, remote.
 - Integrate hardware drivers for on-processor performance registers
 - Develop unit tests and integrate them into the existing unit test framework
 - Support the software community and other developers throughout the project
- 2 Years Computational Lab Assistant, Computational Chemistry Research Group, NCSU.
 - Maintain and update Linux computational lab machines' hardware and software
 - Build, install, test and debug new software, contributing back to the community where applicable
 - Develop utility programs and scripts to aid lab members and automate/manage simulations

Relevant Extracurriculars

- Active Member & Presenter for the NCSU Linux User Group
- Lead Software Developer - North Carolina Aerial Robotics Competition Team
- Triangle Arduino Hackers - local microcontroller development group
- Contributor to open source projects - see <http://github.com/ajray>