Randy Ruiyang Deng

randydeng.github.io   US Citizen

Objective Dedicated and motivated undergraduate computer engineer seeking a software engineering internship position for the summer of 2018.

Education

Georgia Institute of Technology, Atlanta GA *Aug. 2015 - Present*
BS in Computer Engineering, GPA: 3.82/4.00 *Expected Graduation: Fall 2018*

- Current Coursework: Network Security, Cloud Computing, Mobile & Wireless Networks
- Relevant Coursework: Data Structures & Algorithms, Computer Networking, Computer Architecture, Digital Signal Processing

Technical Skills

Programming Languages: C++, C, Java, MIPS Assembly, MATLAB, LabView
Tools/Libraries: Arduino, mbed, FPGA, oscilloscope, Latex, MPI, GMP, OpenGL
Foreign Languages: Mandarin Chinese

Work Experience

Software Engineer Intern at EuroAvionics *May 2017 - Aug. 2017*

- Develop mission control software to increase situational awareness for helicopter and plane pilots

Software Test Engineer Intern at ASML *May 2016 - Aug. 2016*

- Developed LabView software to interface with National Instrument modules for data collection
- Tested and verified integrity of moving frame tester machine using collected data
- Upgraded computer hardware/software, identified issues with QueensGate Submicron Motor Controller, worked with NI-RIO FPGA and DIAdem

Engineering Intern at Barden Corporation *May 2015 - Aug. 2015*

- Updated ball bearing manufacturing processes and engineering change notices
- Archived gage machine tool blueprints into local network database

Projects

Parallel Programming *Spring 2017*

- Implemented code in C++ to generate Mandelbrot set using pthreads, OpenGL
- Programmed 2D DFT using Danielson-Lanczos Algorithm and pthreads to increase efficiency

5 Stage Pipelined Microarchitecture Simulator *Spring 2017*

- Implemented pipelined microarchitecture simulator for LC-3b ISA in C

Autonomous DE2Bot for Object Detection and Tagging *Fall 2016*

- Developed code in assembly and VHDL to autonomously detect and tag objects

Missile Command Game on ARM mbed *Fall 2016*

- Programmed missile command game using online mbed C compiler and relevant hardware

Arduino Projects *Fall 2016, Spring 2016*

- Built multifunctional alarm clock using state machine logic
- Built music player to play different songs through piezo buzzer

Leadership

Eta Kappa Nu (ECE Honor Society) Vice President, Initiation Chair *Aug. 2016 - Present*

- Hosted information sessions to encourage ECE students to join HKN
- Organized service project and initiation banquet for new initiates

Georgia Tech Astronomy Club Vice President *Aug. 2016 - Present*

- Organized and participated in public nights and stargazing trips
- Coordinated with other officers to plan events with guest speakers for members