Randy Deng

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Objective Dedicated and motivated undergraduate computer engineer with technical experience in software development, network programming, and parallel computing. Strengths include excellent C/C++, Java, and Python programming techniques and extensive leadership experience in student organizations.

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

Technical Skills

Programming Languages: C/C++, Java, Python, MIPS, MATLAB, LabView, HTML/CSS, JavaScript Tools/Libraries: AWS, Arduino, mbed, FPGA, Latex, Flask, Beautiful Soup, MPI, OpenGL, jQuery Foreign Languages: Mandarin Chinese

Work Experience

Software Engineer Intern at EuroAvionics

May 2017 - Aug. 2017

- Developed software to retrieve data from remote server using REST and display map overlay on aircraft vehicle
- Expanded functionality of current system by providing near real-time data to pilots and configuration options to network administrators

Software Test Engineer Intern at ASML

May 2016 - Aug. 2016

- Developed LabView software to interface with National Instrument modules to increase efficiency of data acquisition in clean room environments and verify integrity of moving frame tester
- Upgraded computer hardware/software and identified issues with sub micron motor controller to improve reliability of company systems

Projects

Struct (HackGT) Fall 2017

- Developed a code visualizer in Python to display GitHub code files in a graph structure with two teammates
- Web scraped Github Repositories in order to perform depth-first-search and parse through the code files using Regex to find key words that would constitute a node or edge in the final graph

Parallel Programming

Spring 2017

- Implemented code in C++ to efficiently generate Mandelbrot set using pthreads, OpenGL
- Programmed 2D DFT using Danielson-Lanczos Algorithm and pthreads to reduce computing time

5 Stage Pipelined Microarchitecture Simulator

Spring 2017

• Implemented pipelined microarchitecture simulator (LC-3b ISA) in C, reducing instruction processing time

Autonomous DE2Bot for Object Detection and Tagging

 $Fall \ 2016$

 Developed code in assembly and VHDL to autonomously control ultrasonic radar finders and motors to sense and tag surrounding objects in addition to keeping track of relative location within specified arena

Leadership

The Hive: ECE Makerspace Assistant Director of Communications

Sept. 2017 - Present

- Hosted TI workshop events, soldering workshops, and social events for students
- Advertised events using flyers, email, and Facebook

Eta Kappa Nu (ECE Honor Society) Vice President, Initiation Chair

Aug. 2016 - Present

- Hosted information sessions for companies and social events to encourage networking among ECE students
- Organized community 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 to increase public interest in Astronomy