# Randy Deng

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Objective Dedicated and motivated undergraduate computer engineer with technical experience in network programming, parallel computing, and embedded systems. Strengths include excellent C++, C, and Java programming techniques and extensive leadership experience in student organizations. Currently 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, MATLAB, LabView, HTML/CSS, JavaScript Tools/Libraries: Arduino, mbed, FPGA, oscilloscope, Latex, MPI, GMP, OpenGL, jQuery

Foreign Languages: Mandarin Chinese

# Work Experience

## Software Engineer Intern at EuroAvionics

May 2017 - Aug. 2017

- Developed software to retrieve data from remote servers 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

## Engineering Intern at Barden Corporation

May 2015 - Aug. 2015

• Increased company efficiency by archiving and updating ball bearing manufacturing processes and blueprints

# **Projects**

## 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

#### Missile Command Game on ARM mbed

Fall 2016

Programmed missile command game using mbed microelectronics kit and online mbed C compiler

# Leadership

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

Aug. 2016 - Present

- Hosted information sessions and social events to encourage ECE students to join HKN
- 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
- Coordinated with officers to host an 80 person camping trip for the Aug. 21, 2017 total Solar Eclipse
- Helped find guest speakers to talk about their research and work to club members