US Citizen

# 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
**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*

- Developed software to retrieve data from remote servers and display map overlay on aircraft vehicle
- Improved functionality of current system by providing near real-time data to pilots and configuration information regarding connection settings

**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 other officers to plan events with guest speakers for club members