US Citizen

# Randy Deng

rdeng30@gatech.edu
randydeng.com

## Education

**Georgia Institute of Technology, Atlanta GA** *Aug. 2015 - Present*
BS in Computer Engineering, GPA: 3.83/4.00 *Expected Graduation: Fall 2018*

- Current Coursework: Senior Design, Advanced Malware Analysis
- Relevant Coursework: Dependable Distributed Systems, Cloud Computing, Data Structures & Algorithms

## Technical Skills

**Programming Languages:** Java, Python, C/C++, JavaScript, MIPS, MATLAB, LabView, HTML/CSS
**Tools/Libraries:** AWS, Heroku, Google Cloud, Flask, Arduino/mbed, Boto3, Bootstrap, Beautiful Soup, Latex
**Foreign Languages:** Mandarin Chinese

## Work Experience

**Software Development Engineer Intern at Amazon AWS Kinesis** *May. 2018 - Aug. 2018*

- Developed and deployed feature to track and bill customer usage of AWS Kinesis in Java using a distributed job scheduler and custom test automation framework
- Exercised professional software practices including agile and scrum methodology, code reviews, and pipeline deployment

**Software Engineer Assistant at GTRI CIPHER** *Jan. 2018 - May. 2018*

- Developed Python Flask software for Apiary, an automated malware analysis and threat intelligence framework
- Simulated man-in-the-middle attack to spoof TLS connections using virtual machines

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

- Developed full-stack application using Java servlets, Bootstrap, and Javascript Ajax to communicate with specialized aircraft hardware and provide a web interface
- Expanded functionality of aircraft system by providing near real-time network and map overlay data to pilots

**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

## Projects

**Quotebook AWS Web Application** *Fall 2017*

- Web application that allows users to add, edit, and view quotes by other users (http://18.216.218.79)
- Application uses DynamoDB to store data, EC2 to run a Python Flask server, Boto3 to interact with AWS in Python, Bootstrap templates for front-end development, and Nginx and uWSGI for deployment

**Struct (HackGT)** *Fall 2017*

- Developed code visualizer using Python Flask to display GitHub code files in graph structure where each node was a file and each edge represented a link between files using similar methods or classes
- Performed depth-first-search on Github repositories and web scraped using Beautiful Soup to retrieve file data

**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

## Leadership

**The Hive: ECE Makerspace** President *Sept. 2017 - Present*

- Oversee all operations of the makerspace including workshops, hiring, elections, corporate events, and meetings
- Organize and foster a makerspace community centered around advocating and supporting student ideas

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

- Organize and support all club events such as stargazing trips, public nights, guest speakers, and socials

**Eta Kappa Nu (ECE Honor Society)** VP, Corporate Sponsorship, Webmaster *Aug. 2016 - May. 2018*

- Hosted corporate events, social events, and community service for HKN members