

# ALLEN LAO

al4146@nyu.edu | 1 (205) 568-4011 | allenlao.github.io

## Education

---

**New York University**

**May 2018 (Anticipated Graduation Date)**

***B.S. in Computer Engineering***

Relevant Courses: Data Structures & Algorithms, Design & Analysis of Algorithms, Databases, Computer Architecture, Java and Web Design, Python, Digital Logic, VLSI, Introduction to C++

## Technical Skills

---

**Programming Languages:**

Java, C++, Python, SQL

**Scripting Languages:**

PHP, JavaScript

**Frameworks:**

Node.js

**Operating Systems:**

Windows, iOS, Android

**Web Development:**

HTML, CSS, Bootstrap

**Database Development:**

MySQL, JDBC

**Other Tools:**

Arduino, Processing, Git, XML, FPGA, Xilinx ISE

## Related Projects

---

**Full Stack Meetup Web Application** (PHP, MySQL, HTML, CSS)

**April 2017- May 2017**

- Developed a meetup web application using both front and back end technologies within a team environment
- Implemented security measures such as password hashing and language used to prevent SQL injections
- Connects to a MySQL Database and allows users to create, rate, and RSVP for meetups in the area

**Multithreaded TCP Chat Program** (Java)

**April 2017**

- Created a multithreaded TCP chat server and chat client allowing multiple users to communicate simultaneously
- Implemented a GUI using Java Swing components and programmed chat communication via sockets

**InstaDoc** (Java, XML, Google Maps API)

**February 2017**

- Created an Android application that aids users in life-threatening situations using Java and XML
- Built in Android Studio and utilizes location tracking via the Google Maps API

**Polytechnic Playing Machine** (FPGA, Xilinx ISE)

**September 2016 – December 2016**

- Developed a game on a FPGA board that allows for play between humans and against the machine itself
- Implemented the playing strategy of the machine using digital circuits within a small team environment

**Search and Recovery Robot** (Mindstorms, MS Project, MS Sketchup)

**September 2014 – December 2014**

- Designed an autonomous robot that traversed an obstacle course in order to pick up various nodes
- Managed a team using MS Project to meet benchmarks and also programmed the robot using LEGO Mindstorms
- Nominated for the Nick Russo Award for Outstanding General Engineering Design

## Experience

---

**Software Engineer Intern — Sencity Corp**

**June 2017 – Present**

- Optimized the codebase for sensors engineering and interactive content programming in JavaScript and Node.js
- Developed core software in C and Java for use with microcontrollers, microwave and ultrasonic sensors, and LEDs
- Prototyped and tested products using Arduino and Processing

**Operations Intern — NextGenVest**

**August 2016 – February 2017**

- Managed all data entry regarding customers and compiled statistical reports on customer growth and retention rates
- Collaborated with school administrators across the U.S. to setup workshops and presentations
- Lead presentations on financial literacy in front of 20+ people at various high schools in New York City