### Education

Rutgers University 2015 - Present

BE, Mechanical Engineering BA, Computer Science

Expected Graduation: May 2019 GPA: 3.85/4.00

### **Technical Skills**

• C#, C/C++, CLI, Java, Javascript, PHP, HTML, Bash

Visual Studio, Eclipse

Solidworks, Matlab

AJAX, SQL, HTML

# **Experience**

# Quadcopter Communication under Professor Jingang Yi

10/2015 - 3/2016

- Worked with Engineering graduate student to build and design quadcopters
- Programmed quadcopter in C++ and PX4 Autopilot to communicate with room sensors

# **SteerSuite** under *Professor Mubassir Kappadia*

6/2016 - 11/2016

- Coordinated with a team of PhD students to optimize SteerSuite, a crowd simulator written in C++
- Developed an algorithm that outputs the optimal evacuation plan for a floor in a building
- Built a C# plugin to incorporate SteerSuite into Autodesk Revit

### **Projects**

### Orkestra at HackPrinceton Spring 2014, top 3

Led a team to develop a google glass application to control house appliances through Electric Imp

### PrePark at PennApps 2014, won Internet Of Things Award

Used magnetic readers and a phone app to manage and help find open parking spots

#### C# Raytracer

 Built a raytracer from scratch that renders on a web server based on the book Physically Based Rendering by Matt Pharr.

#### **Extracurriculars**

### **IEEE** - Robotics Projects

- Built a portable printer using an arduino and a Canon cartridge. Used C to communicate with the cartridge using company specified commands to trick the cartridge into acting like it's in a printer.
- PacBot for Harvard University PacBot Competition built an algorithm for the bot in python to navigate a
  maze and avoid the ghosts. The robot was designed from scratch with the body 3D printed and a custom
  PCB circuit that's controlled by Raspberry Pi Zero.

#### **ASME** - Robotics Team

• Leader of programming team. Designed the main software that runs on a Raspberry Pi in python. The robot had to perform complicated tasks such as climbing stairs, hitting a golf ball, and launching a tennis ball.