

# Prava Dhulipalla

pdhulipalla@olin.edu | 508-233-0321  
<https://github.com/prava-d> | [www.linkedin.com/in/prava](https://www.linkedin.com/in/prava)

## EDUCATION

### FRANKLIN W. OLIN COLLEGE OF ENGINEERING

Bachelor of Science in Electrical and  
Computer Engineering

2016 - 2020 | Needham, MA

GPA: 3.94

Activities and Societies: Student  
Government, Society of Women  
Engineers, Honor Board, IgniteCS, Olin  
Autonomous Boat Project Team Lead

## COURSEWORK

Modelling and Simulation  
Quantitative Engineering Analysis I, II  
Software Design  
Principles of Engineering  
Computer Architecture  
Data Science  
Data Structures and Algorithms  
Computer Networks  
Foundations of Computer Science  
Discrete Mathematics  
Databases  
Technology, Accessibility, and Design  
Software Systems  
Nonlinear Programming  
Convex Optimization  
Advanced Algorithms

## SKILLS

**CODING** Java • Python • C++  
C • OCaml • ROS • Verilog • R  
Swift • Matlab • Mathematica  
**COMPUTER** Arduino • Raspberry Pi  
Linux • Ubuntu • Android • iOS • Git

## PROJECTS

### CLEW APP | SPRING 2019

Worked with Professor Paul Ruvolo  
to iterate upon an indoor navigation  
iOS app for people who are blind or  
visually-impaired. Worked in **Swift**.

### ROBOTIC GRIPPER | FALL 2017

Worked with a multidisciplinary team  
of engineering students to build a  
robotic gripper capability of variable  
grip strength. Worked in **C++**.

## TECHNICAL EXPERIENCE

### SONOS | PROJECT MANAGER AND TECHNICAL MEMBER

August 2019 - August 2020 | Needham, MA

- Worked with a team of five Olin students and a variety of company engineers to optimize the Sonos product manufacturing test process
- Utilized a variety of data science and machine learning tools
- Project culminated in the design and implementation of a software pipeline in **Python** to provide test optimization insights

### AMAZON ROBOTICS | SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2019 - August 2019 | North Reading, MA

- Worked on the Robotic Movement Control and Coordination team, responsible for the allocation and usage of fulfillment center robots
- Developed a feature in **Java** to allow for specialized robotic movement to optimize fulfillment center space and time utilization
- Performed the role of both a feature designer and developer to ensure success in both emulated and simulated platforms

### VISIBLE LIGHT COMMUNICATIONS LAB | STUDENT RESEARCHER

June 2017 - June 2019 | (Olin College) Needham, MA

- Worked on a hybrid RF-visible light communications system under the guidance of Professor Siddhantan Govindasamy
- Research culminated in two research papers presented at two different communications conferences
- Worked on a variety of algorithms in **Matlab** to further functionality of the hybrid system, which required knowledge of communication theory and signal processing

## OTHER EXPERIENCE

### EDUCATOR ROLES | STUDENT INSTRUCTOR AND TEACHING ASSISTANT

Fall 2017 - Spring 2020 | (Olin College) Needham, MA

- Served as a teaching assistant for: Introduction to Sensors, Instrumentation, and Measurement, Quantitative Engineering Analysis I and II (comprised multivariable calculus, linear algebra, mechanics, signals and systems, and dynamics), Machine Learning, and Software Systems
- Served as an instructor for a student-led class in Data Structures in Algorithms taught in Spring 2019
- Served as a curriculum developer and instructor for an Advanced Algorithms course taught in Spring 2020
- Roles required knowledge of **Matlab, Python, Java**, and **C**

### RESEARCH AT OLIN COLLEGE | STUDENT RESEARCHER

Fall 2016 - Spring 2020 | Needham, MA

- Worked in the student robotics lab on a variety of semester projects, including underwater autonomous submersibles, autonomous robotics to traverse areas near volcanoes, and a multi-sensory robotic arm project
- Worked with Professor Samantha Michalka on brain-computer interface research, primarily revolving signal processing and machine learning
- Research required knowledge of **Matlab, Python, C++**, and **C**