# Mark Goldwater

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## Education

### OLIN COLLEGE OF ENGINEERING, NEEDHAM, MA

MAY 2021

Candidate for Bachelor of Science in Electrical and Computer Engineering

- GPA: 3.94/4.00
- Recipient of four year half-tuition merit scholarship
- Relevant Coursework: Data Structures and Algorithms, Software Design, Quantitative Engineering Analysis (Multivariable Calculus, Linear Algebra, Signals and Systems, Mechanics)

#### NEWTON NORTH HIGH SCHOOL, NEWTON, MA

JUN 2017

• GPA: 3.96/4.00

# **Skills**

- Python, MATLAB, C, Arduino, Java, JavaScript, Ruby
- Solidworks, 3D Printing

# Experience

TRACK INFORMATION, INC. – Software Engineering Intern

JUN 2018 - AUG 2018

- Designed and prototyped mobile app to track user's health statistics using React Native in JavaScript as well as Ruby on Rails.
- Architected a back end for the mobile app that would allow it to interface with third party APIs.

SENSORS, INSTRUMENTATION, AND MEASUREMENT – Teaching Assistant

AUG 2018 – PRESENT

- Host office hours once a week to assist students with introductory electrical engineering concepts.
- Grade students' lab reports and problem sets.

INTERNATIONAL AERIAL ROBOTICS COMPETITION – Software Developer SEP 2017 – PRESENT

• Developed a simulation of an autonomously controlled quadcopter guiding other autonomous ground robots using Python.

# **Projects**

#### BRAILLE SHEET MUSIC PRINTER

OCT - DEC 2018

- Designed and built printer that could convert digitized music into braille sheet music and print it.
- Designed electrical system and led the integration of our mechanical, software and electrical subsystems.

#### CREATED FACIAL RECOGNITION SOFTWARE

**MARCH 2018** 

- Implemented the Eigenfaces facial recognition algorithm in MATLAB.
- Utilized Singular Value Decomposition to improve the speed of the algorithm's matrix operations and make it computationally efficient.