

Eitan Bar-David

Queens, NY 11367 | Eitansbd@gmail.com | (718) 644-1452
www.github.com/eitansbd | www.linkedin.com/in/eitanbardavid

EDUCATION

Grove School of Engineering at City College, New York, NY

May 2019

- Major: Mechanical Engineering, B.S.M.E. (GPA: 3.89)
- Programming coursework: Intro to Comp Sci., Computer Methods in Eng., Advanced Mechatronics, Systems Modeling Analysis and Control, Arduino Teachers Assistant.
- Awards: Zemansky Introductory Physics Prize, Robert and Ruth Gitlin Scholarship, Georgia Aziza Scholarship.

Launch School (Software Engineering Bootcamp)

December 2018 – July 2019

- Completed coursework and projects in Programming Foundations, Object Oriented Programming, Networking Foundations and Applications, and Database Foundations and Applications.
- Averaged 98/100 on essay-oriented written exams and live 1on1 coding exams.

PROGRAMMING SKILLS

Backend: Ruby, Sinatra, Rails, Python

Databases: SQL

Frontend: JavaScript, HTML/CSS

General: Git, Arduino

SOFTWARE PROJECTS

Summer Camp Calendar Management System

- Created a PostgreSQL-backed web app to manage a summer camp's monthly and daily schedules with Ruby and Sinatra backend and HTML/CSS frontend using ERB templating.
- Developed algorithm to generate a daily schedule for each bunk based on scheduling defaults, previous schedule history, and other requirements, such as activity limits, double periods, and multi-bunk activities.
- Implemented MVC architecture and thoroughly tested all components with MiniTest.

Pediatric Knee Exoskeleton (Advanced Mechatronics Final Project)

- Designed a pediatric knee exoskeleton for children with cerebral palsy using Arduino software.
- Developed algorithm to dynamically detect and update gait cycle and percent gait cycle using pressure sensors embedded in the wearer's shoes.
- Implemented position control algorithm to adjust the exoskeleton knee angle based on the gait.

WORK EXPERIENCE

Engineering Intern

June – August 2018

Easy Aerial – Edison, NJ

- Expanded the fleet of Easy Guard Boxes for charging and deploying autonomous security drones from 2 to 7, while improving the layout of the wiring and electronics.
- Increased the durability of the drones by designing and manufacturing custom parts to prevent drones from falling through gaps in the Easy Guard Boxes after landing.
- Ensured systems were shipped on schedule by methodically testing and debugging mechanical and electrical issues.

Youth Programs Director

July 2018 – June 2019

The Riverdale Jewish Center – Riverdale, NY

- Created and ran educational and recreational programming for over 300 children aged 3 through 18, including weekly youth groups, monthly events, and seasonal sports leagues.
- Overhauled baseball league with a new league website, customized jerseys and improved draft and evaluations.
- Increased attendance at events through creative flyers, targeted emails, and social media promotion.