

# Corey Cochran-Lepiz

ELECTRICAL AND COMPUTER ENGINEER

1000 Olin Way, MB 414, Needham, MA 02492

☎ 512-993-1005 | ✉ CLepiz@olin.edu | 🏠 www.CoreyLepiz.com | 📱 coreycl | 🌐 corey-cochran-lepiz

## Education

### Olin College of Engineering

Needham, Massachusetts

CANDIDATE FOR B.S. IN ELECTRICAL AND COMPUTER ENGINEERING

May 2021

- Recipient of 4-year, 50% Tuition Olin Merit Scholarship

## Experience

### Impossible Aerospace

Santa Clara, California

ELECTRICAL ENGINEER INTERN

May 2019 - Aug. 2019

- Designed and tested a PCB for a quadcopter handset using Altium and LTspice.
- Designed, simulated, and chose components for a buck-boost power supply for robust charging.
- Measured discharge curves using a battery data capture system for the purpose of building a battery model.

### FSAE Electric - Olin Electric Motorsports

Needham, Massachusetts

SENIOR ELECTRICAL ENGINEER

Sep. 2017-Present

- Designed and tested the battery management system using LTC chips for safety and functionality of the battery pack.
- Developed on the fly troubleshooting proficiency with PCB prototyping.
- Worked with mechanical engineers on tightly integrated projects such as the dashboard and the battery pack.

ELECTRICAL DESIGN LEAD

Jun. 2018 - Jun. 2019

- Lead a team of students to design, fabricate, and test an electric race car for the Formula SAE competition.
- Responsible for system level architecture design decisions and implementation of the vehicle.
- In charge of ensuring good documentation use and availability to all members on the team via Confluence.

### Olin Rocketry

Needham, Massachusetts

ELECTRICAL ENGINEER

Jan. 2018 - Jun. 2018

- Founded the avionics subteam to design a flight computer responsible for telemetry and apogee detection.
- Worked under an accelerated timeline under strict design requirements.

### Texas Panic Room

Austin, Texas

SOFTWARE DEVELOPER INTERN

May 2015 - Feb. 2016

- Designed, coded, and installed Arduino-based electronics for new escape room.
- Performed preventative maintenance of electronics after installation to ensure long-term functionality.

## Projects

- 2019 **Joe Knows:** Wrote a proposal for a beacon-app system we developed to help riders who are blind find bus stops.
- 2019 **Electric Van:** Designed the high-level system for a sustainable electric van.
- 2018 **Analog DC Motor Controller:** Modelled an analog DC motor controller using MATLAB and Mathematica.
- 2018 **Coffee Bar:** Runs a coffee bar serving and teaches people how to make milk-based espresso drinks.
- 2018 **Facial Recognition:** Developed a facial recognition program in Matlab using Bayesian statistics.

## Skills

### Software

Altium, Kicad, Confluence, PLECS, LTspice, Google Sheets, Solidworks, Adobe Illustrator

### Languages

Python, C, MATLAB, Arduino, Git, LINUX command line,  $\text{\LaTeX}$ , Spanish

### Proficiencies

Arbin test equipment, EDA, Rapid Prototyping, Iterative Design, User Oriented Design, Data Visualization