Corey Cochran-Lepiz

Electrical and Computer Engineer

1000 Olin Way, MB 414, Needham, MA 02492

512-993-1005 | CLepiz@olin.edu | www.CoreyLepiz.com | coreyacl | 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 with 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**: Ran a coffee bar serving and teaching 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, LaTeX, Spanish
Proficiencies	Arbin test equipment, EDA, Rapid Prototyping, Iterative Design, User Oriented Design, Data Visualization