

1000 Olin Way, MB 414, Needham, MA 02492

□ 512-993-1005 | ☑ CLepiz@olin.edu | 希 www.CoreyLepiz.com | □ coreyacl | □ corey-cochran-lepiz

Education

Olin College of Engineering

Needham, Massachusetts

May 2021

CANDIDATE FOR B.S. IN ELECTRICAL AND COMPUTER ENGINEERING

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

Experience ______

Impossible Aerospace

Santa Clara, California

May 2019 - Aug. 2019

ELECTRICAL ENGINEER INTERN

- 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 PCBs for safety and functionality of the vehicle and coded a few in AVR C.
- 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 _____

- **Joe Knows**: Wrote a proposal for a beacon-app system we developed to help riders who are blind find bus stops. 2019
- 2018 Enigma Machine Visualization: Created an interactive Enigma Machine experience.
- Analog DC Motor Controller: Modelled an analog DC motor controller using MATLAB and Mathematica. 2018
- Coffee Bar: Runs a coffee bar serving and teaching people how to make milk-based espresso drinks. 2018
- 2018 Facial Recognition: Developed a facial recognition program in Matlab using Bayesian statistics.

Skills

Software Altium, Kicad, Confluence, Git, LTspice, Google Sheets, Solidworks, Adobe Illustrator

Languages Python, C, MATLAB, Arduino, LINUX command line, ETFX, Spanish

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