# **JACOB HOFFMAN**

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## Portfolio Website - https://jacobhoffman.tk/

#### **EDUCATION**

- Senior at Carnegie Mellon University.
- Computer Engineering Major Class of 2020.
  3.38 GPA
- Deans List Spring 2018

I am currently taking OS and Intro to Machine Learning. I have taken DSP

#### Work

General Motors | Control Systems | Summer 2019 | Stability Of Vehicle

I applied control theory concepts to design a brake system for a trailer. The system included ABS and ESC safety features. The system detected the sway of a trailer in real time and dampened sway oscillations by engaging the brakes appropriately. This will prevent trailer accidents and save lives.

CMU ECE | Signals Research | Summer of 2018 | Ultrasonic Positioning Systems

Professor Sankaranarayanan and I worked on close range ultrasonic positioning systems for blind person navigation. Chirps, STFTs, and FFTs are some of the DSP concepts used to implement the system.

• CMU ISR | Software Research | Summer of 2017 | Data Mining for Automatic Program Repair

I mined data on GitHub and contributed this data into existing SQL databases to be used for automatic program repair. I analyzed this data in R to verify coding practices which contribute to projects with less errors.

#### **SKILLS**

• Programming languages: Python, C, C#, Java, R,MATLAB, Javascript, HTML, CSS, and MYSQL.

#### **MERITS**

## **Personal Projects**

- **Design :** I have a successfully backed Kickstarter product called the Chochin Wall Lamp. I accrued \$1,500 of Kickstarter backing over 39 days. (robustinnovations.org)
- Web Development/Entrepeneurship: I am a cofounder of Optimist Track NYC. My web development skills made the running club grow to over 20 athletes. (jeffteta.tk)

### **Athletic Achievements:**

I Ran a New Balance Nationals Championship Qualifying time of 35.19 seconds in the 300m.