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 a brake system for trailers. The system included ABS and ESC safety features. The system detected 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, 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 SQL.

MERITS

Engineering Experience

- **Design :** I have a successfully backed Kickstarter product called the Chochin Wall Lamp. I accrued $1,500 of Kickstarter backing over 39 days. I have a sole proprietorship called Robust Innovations (robustinnovations.org)

- **Web Development/Entrepeneurship :** I am a cofounder of Optimist Track NYC. My web development skills helped the running club grow to 25 registered athletes. (jeffteta.tk)

- **Doing Good:** I am developing Commoncorefree.com, a free math curriculum for low income students.

Athletic Achievements:

- Ran an New Balance Nationals Championship Heat Qualifying 300m time of 35.19 seconds.