JACOB HOFFMAN

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Portfolio Website - https://jacobhoffman.tk/

EDUCATION

- Junior at Carnegie Mellon University.
- Computer Engineering Major Class of 2020.   3.52 GPA
- Deans List Spring 2018

WORK

Paid Research:

- **CMU ECE | Signals Research | Ongoing Since Summer of 2018 | Ultrasonic Positioning Systems**

  Professor Sankaranarayanan and I are developing a low cost high accuracy close range ultrasonic positioning system. The invention has potential to impact both navigation for blind persons and precision timing of athletes.

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

  I mined large quantities of data on GitHub, and then contributed this data into professor Bogdan Vasilescus existing SQL databases in order to be eventually used for automatic program repair. I also analyzed this data in R to verify coding practices which contribute to projects with less errors.

SKILLS

- I can program using C, C#, Java, Python, R, Javascript,HTML,CSS, and SQL.
- I have video, photo, and audio editing experience.

MERITS

Engineering Pursuits

- **Patenting :** I have a pending patent on a technology for the guitar industry. It is a technology that takes advantage of the resonance of a body of a guitar to allow guitars to double as a bluetooth speaker.

- **App Development :** I have an app on the Google Play Store - "Math Dash - Learn Multiplication". The idea of the app is to subliminally teach younger children their multiplication tables through casual gameplay. The application was developed in Unity and C#.

- **Software Development :** I am working on a marketplace for Python code. The motivation for the software is to provide more incentive for casual programmers who only know Python to write and sell their own software. My role in the project is to manage the SQL database and developer security.

Athletic Achievements:

- Ran an indoor 300m time of 35.19 seconds. 46th Fastest in U.S. high schools in 2016
- Tied the CMU 100m school record of 10.7 seconds.

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