

## LINKS

Github: @vhshen  
Devpost: @vhshen  
Linkedin: @vhshen

## SKILLS

Python	★ ★ ★ ★ ★
C++	★ ★ ★ ★ ★
Matlab	★ ★ ★
C	★ ★ ★ ★ ★
CAD	★ ★ ★ ★ ★
ROS	★ ★ ★ ★
Embedded Systems (Arduino/RPI)	★ ★ ★ ★ ★
Java	★ ★ ★
JavaScript	★ ★ ★ ★
HTML	★ ★ ★ ★
CSS	★ ★ ★ ★

## Other

UNIX/Linux, RTOS  
Jira, Github

## AWARDS

Microsoft Diversity  
Sponsorship (2018)  
  
Facebook f8 Hackathon  
Fellow (2018)  
  
Ada Lovelace Fellow (2017)

## LEADERSHIP

Woodenfish Monastic  
Program President (2019)  
  
DevFest Hackathon  
Organizer (2016-2018)  
  
CodePhil NonProfit  
Coordinator (2018)

## EDUCATION

<b>Carnegie Mellon University</b>	Started Fall 2020
- PhD in Robotics	
<b>Columbia University</b>	Class of 2019
- BS in Computer Science	<u>GPA</u> : 3.5

## WORK EXPERIENCE

**Control Systems Intern @ Walt Disney Imagineering** Spring 2020  
Worked on the GUI for a HUD on an in-park ride system. Focused mainly on integrating the front and back end, as well as troubleshooting the ride.

**Product Intern @ Conservation X Labs** Fall 2019  
Lead software developer working on edge artificial intelligence frameworks and embedded systems products for conservation purposes

**Research Volunteer @ San Diego Zoo Global** Fall 2019  
Researching a smart computer vision system for autonomous animal monitoring.

**Lab Associate @ Disney Research** Summer - Fall 2018  
Worked on a research project creating software for a hybrid RF and computer vision system, focusing on the latter.

**Robotics Intern @ NASA Jet Propulsion Lab** Summer 2017  
Designed and implemented all the electronics and programming for a mechanism on a Mars orbiter. Worked on improving sensor fusion for computer vision.

**Researcher @ Creative Machines Lab** Jan 2016 - May 2018  
Designed, built, and implemented the nozzle system of a food 3D printer.

**Computer Networks Head TA** Spring 2018  
Head TA of Columbia's computer networks class, taught by Henning Schulzrinne.

## PROJECTS

**SmartTrax - Microsoft Prize @ Capitol360** June 2018  
Built a flask web app that performs sentiment analysis on user inputted text and a list of song categories, and creates a soundtrack for the story.

**Xperience - Finalist @ VHacks** March 2018  
Built a VR live streaming app hosted on a Heroku server with a React frontend. 3rd place in the social inclusion category of the premier hackathon in the Vatican.

**Smart Bike - Top 10 @ HackMIT** Sept 2017  
Built an embedded systems kit that adds various tail-light/distance functionalities and computer vision/image recognition technologies to an average bike.

**Piano Glove - 2nd Place @ PennApps** Jan 2017  
Built a glove that plays the piano based on finger presses and uses ultrasonic range finding to emulate an invisible piano, outputting corresponding frequencies.