Vedant Saran

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University of California, Berkeley

M.S. Electrical Engineering & Computer Science

August 2018 – May 2019

B.S. Electrical Engineering & Computer Science, GPA: 3.7

August 2015 – May 2018

Relevant Courses: Operating Systems, Networking, Security, Algorithms, AI, Machine Learning, Advanced Computer Systems (Grad), 3D Reconstruction and Recognition (Grad)

Work Experience

German Aerospace Center, Data Engineering Intern

Summer 2018

• Worked with the human factors team to analyze human driving behavior in lane-merge situations. Results used to guide the development of new assistance systems for L2/L3 autonomous vehicles.

VMware, Distributed Systems Intern

Summer 2017

- Designed and developed a distributed architecture for real-time machine learning from network traffic flow in a software-defined data center.
- Created machine learning process to measure firewall rule coverage and decrease firewall rule proliferation. Presented poster at internal R&D conference, and received two patents.

Illumio, Software Engineering Intern

Summer 2016

- Built 'Explorer', an analytics dashboard and visualization platform that analyzes network traffic to provide visibility into micro-segmentation policy.
- Released as one of the two major features in the next product launch, and demoed at major conferences.

Research

Hybrid Ecologies Lab, UC Berkeley

Fall 2018 – Spring 2019

• Under Prof. Eric Paulos, designing augmented reality interaction paradigms for shared workspaces.

Center for Augmented Cognition, UC Berkeley

Fall 2015 – Spring 2018

- Under Prof. Allen Yang and Prof. Claire Tomlin, <u>developed a novel SLAM solution</u> to segment high and low dynamic objects in real time.
- Built infrastructure in ROS to generate 3D maps from drone sensors and test optimal control algorithms.
- Developed applications on the Hololens and Oculus to control a swarm of drones in AR/VR.

Lead Instructor, CS 198-80 [Design and develop for VR]

Fall 2017, Spring 2018, Fall 2018

• Teach a twenty student class on VR development. Designed curriculum, labs and homework assignments. Delivered lectures, graded assignments, held office hours and supported student projects.

Select Projects

Pengram Inc.

2018

- Cross-platform VR+AR platform for remote collaboration in industrial settings. [pengramar.com]
- In tests, reduced task completion time by 55% compared to paper instruction manuals.
- Backed by Skydeck incubator. Deployed across continents in pilot study with enterprise customers.
- Won <u>first place at Microsoft ImagineCup Worlds</u> in the Mixed Reality Category, won first place at ImagineCup US Nationals.

Getting ARround

2017

- Using computer vision and spatial sound, enables the blind to navigate the world entirely through sound.
- Won three awards at MIT Media Lab hackathon.

Global News

2016

- WebGL based web application to visualize real-time news propagation internationally.
- Won first place in the data category at CalHacks, the largest collegiate hackathon in the country.