# RISHABH JAIN

# **EDUCATION**

**Carnegie Mellon University** May 2022

B.S. in Electrical and Computer Engineering, GPA: 3.7/4.0

Relevant Courses: Parallel Algorithms + Data Stuctures, Embedded Systems, Computer Systems, Computer Security

# **EMPLOYMENT**

#### Applied Intuition, Software Engineer, Mountain View, CA

Vehicle Platform

- - · Bringing up embedded reference boards (BSP, cross compilation toolchain, SDK components)
  - Optimizing and benchmarking ML model performance on embedded HW
  - Reverse engineering and integrating automotive systems

#### Apple, Hardware Engineering Intern, Sunnyvale, CA

Camera and Depth Architecture

- Devised objective and subjective metrics characterizing image quality
- Designed and conducted end to end experiments correlating as built designs to simulations
- · Developed software tools for analyzing performance and driving hardware improvement

#### Tesla, Software Engineering Intern, Palo Alto, CA

**Autopilot Sensing** 

- Developed regression testing tool for signal processing algorithms
- Streamlined sensor signal processing simulation workflows

#### Lyft, Hardware Engineering Intern, Palo Alto, CA

Autonomous Vehicle Sensors

- Simulated and optimized Image Signal Processor (ISP) pipelines based on perception metrics
- Tested image processing pipeline and data logging system on an embedded linux board
- Optimized fleet image data capture pipeline for increased quality and reliability

#### Carnegie Mellon University, Teaching Assistant, Pittsburgh, PA

Introduction to Computer Systems (15-213)

- · Developed, deployed and maintained core course infrastructure with over 500 users
- · Taught recitations and held office hours on systems topics including memory, networking, and concurrency
- · Led exam question development team generating question objectives and templates

# ACTIVITIES

#### **Tartan Autonomous Underwater Vehicle**

- Leading perception and autonomy software development
- Testing and integrating sensors with the NVIDIA Jetson embedded computer
- · Fabricating and assembling the AUV and test environments

## **PROJECTS**

Aug. 2020 - Aug. 2021 Torby

Delivering frictionless audio lounges with a simple interface built around the call itself

# **ACHIEVEMENTS**

Top 10 Hack, Best Hardware Hack, Best Health Hack, PennApps Sept. 2019

Summer Undergraduate Research Fellowship, Carnegie Mellon University

May 2019

Finalist, Intel International Science and Engineering Fair

May 2017

## **SKILLS**

Languages: Python, C/C++, MATLAB, Verilog, SML

Aug. 2022 - Current

Apr. 2021 - Aug. 2021

Jan. 2021 - Apr. 2021

June 2020 - Dec. 2020

Sept. 2018 - Aug. 2022

Jan. 2020 - May 2020