DAPHNE POON

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EDUCATION

Harvey Mudd College - Claremont, CA

Expected Graduation: May 2021

Bachelor of Science in Computer Science and Math

3.82 GPA

- · Hong Kong Scholarship for Excellence awardee (> \$30,000 USD per year).
- · Relevant coursework: Autonomous Vehicles, Principles of Computer Science, Engineering Systems, Experimental Engineering (Spring '19), Data Structures and Program Development (Spring '19)

WORK EXPERIENCE

$\textbf{Lab for Autonomous and Intelligent Robotics} - \textit{Claremont}, \ \textit{CA}$

June 2018 - Present

Research Intern

- · Incorporated autonomous navigation abilities into a confidential multinational tractor-trailer company's loader vehicles using Python, producing up to $\sim 80\%$ savings on needed man-hours dedicated to operating the vehicle.
- · Implemented improved path-finding algorithms that eliminate collisions while preserving efficiency.
- · Processed camera data using OpenCV to detect and avoid obstacles, such as pedestrians.
- · Closed a path-following control loop, ensuring accurate vehicle motion and minimizing emissions.

Wong and Ouyang Limited - Hong Kong

June 2017 - July 2017

Civil Engineering Intern - Architectural firm operating in Hong Kong, Macau, and Mainland China.

- · Redesigned hazardous chemical storage at a new Hong Kong Jockey Club building, preventing chemical leaks into a nearby pool.
- · Communicated progress and insured deadlines to Jockey Club executives and other contractors weekly.

Arup - Hong Kong

August 2016

Building Sustainability Intern – Multinational civil engineering company.

- · Annotated and communicated building blueprints to demarcate areas encountering unexpected airflow, and therefore unexpected environmental impact.
- · Wrote an internal report detailing availability of different energy efficient products in Hong Kong, highlighting differences with other markets.

PROJECTS AND LEADERSHIP

Committee for Activities Planning – Harvey Mudd College

April 2018 - Present

Director

- · Organize off-campus activities for students within our \$25,000 USD annual budget constraint.
- · Financially support student activities for at least two thirds of the campus body.

Autonomous Vehicle Competition – Claremont, CA

September 2017 - November 2017

- · Designed, programmed and constructed two autonomous robots over 45+ hours using Arduino.
- · Placed second out of over twenty teams.

SKILLS

Programming Languages

Python, Java, C, C++.

Tools

AutoCAD, SolidWorks.

Native Languages

English, Cantonese, Mandarin.

Other Languages

French (fluent).