

## EDUCATION & HONORS

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### UC BERKELEY: MASTER OF ENGINEERING

Expected: May 2020

#### MECHANICAL ENGINEERING – CONTROLS OF ROBOTIC & AUTONOMOUS SYSTEMS

- Further technical expertise in both hardware and software robotic designs

### UNIVERSITY OF ROCHESTER: BACHELOR OF SCIENCE

Graduated: May 2019

#### MECHANICAL ENGINEERING – ABET ACCREDITED

- Major GPA: 3.84, Dean's List, International Baccalaureate Scholarship
- Studied abroad at Chinese University of Hong Kong

## EXPERIENCES

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### CONTROL ENGINEER

September 2019 – Present

#### UC BERKELEY – SWARM OF UNMANNED UNDERWATER VEHICLES FOR WIRELESS COMMUNICATION

- Construct feedback control algorithm in Python for underwater wireless communication
- Design metrology setup for lasers testing and implementation using OnShape

### SOFTWARE ENGINEER

November 2019 – December 2019

#### UC BERKELEY – MPC FOR URBAN AERIAL MOBILITY

- Simulated real life public transportation over the Bay Area of an Unmanned Aerial Vehicle (UAV) using MATLAB
- Formulated Model Predictive Control algorithm to optimize input power while complying with various constraints

### SYSTEM ENGINEER

September 2019 – November 2019

#### UC BERKELEY – AUTONOMOUS TRANSPORTATION OVER OBSTACLES OF UNMANNED AERIAL VEHICLE

- Fully designed controller in C++ for UAV to accurately fly from one point to another while avoiding obstacles autonomously
- Recognized as the best performing controller among 16 different groups in flight stability, displacement accuracy and obstacles avoidance

### LEAD CAD ENGINEER

January 2019 – May 2019

#### UNIVERSITY OF ROCHESTER – COLLINS AEROSPACE: UNIVERSAL WINDOW METROLOGY MOUNT

- Collaborated in a team of four to develop the first universal precision aluminum mount for optical metrology purposes
- Designed and integrated over 100 parts into assemblies, and conducted Finite Element Analysis using Siemens NX
- Created drawings in NX and performed tolerance analysis in MATLAB to ensure final product quality and reduce manufacturing cost

### MECHANICAL ENGINEER

June 2018 – August 2018

#### HONG KONG – LSCM R&D CENTRE: ROBOTICS TEAM

- Developed commercial smart robots for logistic purposes with multidisciplinary engineers
- Designed and 3D printed customized mechatronic components using SolidWorks and Rhinoceros for commercial smart robots
- Translated codes from third party sources to STM32 board compatible codes

## LEADERSHIP

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### SOCIAL REPRESENTATIVE

August 2019 – Present

#### UC BERKELEY

- Organized social events to promote diversity and inclusion within the engineering community
- Managed a budget of \$1,000 to raise cultural awareness in an annual Cultural Fair

### NEW MEMBER EDUCATOR

#### UNIVERSITY OF ROCHESTER – AKPSI: BUSINESS PROFESSIONAL FRATERNITY

August 2018 – May 2019

- Mentored six new members to develop high professional interest in business
- Provided efficient communication platform that bridges current members with new members

## SKILLS

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- Programming: MATLAB, C++, Python, LabVIEW, Nastran, Patran, SigFit, C, Arduino, HTML, JavaScript
- CAD Software and FEA: Siemens NX, SolidWorks, Creo, Rhinoceros, OnShape
- Languages: Speak fluent English, Cantonese and Mandarin