Peter Wang

Curriculum Vitae

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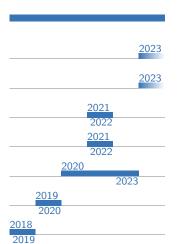✉ pwang649@usc.edu
pwang649.github.io

Educational Background

2020

BS Computer Engineering and Computer Science, *University of Southern California*, Los Angeles, USA
GPA: 3.95/4

2020

BS Applied and Computational Mathematics, *University of Southern California*, Los Angeles, USA
GPA: 3.95/4

Honors & Awards

2023 — **Provost's Research Fellowship**

2023 — **Engineering Honors Program**

2021 / 2022 — **CURVE Research Fellowship**

2021 / 2022 — **Academic Achievement Award**

2020 / 2023 — **USC Dean's List**

2019 / 2020 — **FRC Innovation in Control Award**

2018 / 2019 — **FRC Regional Winner**

Professional Experience

2022

Research Assistant, *Interactive and Collaborative Autonomous Robotics Lab*, Prof. Stefanos Nikolaidis, USC
- Develop simulation software using PyBullet and real-life robotics demo using ROS

2021 / 2022

Research Assistant, *Dynamic Robotics and Control Lab*, Prof. Quan Nguyen, USC
- Worked on the design and control of a light-weight low-cost quadruped robot
- Co-lead the software control sub-team and develop impedance and force control on the robot legs

2022

Software Engineer Intern, *Honeybee Robotics*, Altadena, CA
- Developed an operator console on YAMCS Studio to communicate with the ground station YAMCS for displaying incoming telemetry data and sending control commands to the space mining drill
- Crafted a simulator for the drill using python that's able to emulate responses after receiving telecommand

Research Interests

○ Long-horizon Task and Motion Planning Problems
○ Multi-agent Reinforcement Learning
○ Safety Control and Reachability Problem
○ Meta-Learning

Teaching Experience

Lab Mentor

2023 **EE354 Intro to Digital Circuits**, *USC*, Los Angles, CA
Deliver lecture-style instructions and provide assistance to a group of 30 students in a weekly lab section

Course Producer

2023 **CSCI360 Intro to Artificial Intelligence**, *USC*, Los Angles, CA
Answer Piazza posts and provide informative grading feedback for a 200-student class

2022 **EE109 Intro to Embedded Systems**, *USC*, Los Angles, CA
Provided hands-on help to a 30-student class during office hours and lab sections

Tutoring

2019 **AP Computer Science & AP Physics**
○ One-on-one teaching to four high school students on various subjects
○ Demonstrated significant improvement in class grades and high AP scores

Volunteer Experience

2020 **FRC Team 2659 RoboWarriors Software Mentor**, *Bishop Alemany High School*, Mission Hills, CA
○ 300+ hours dedicated to mentoring high school students robotics team focusing on design, integration, and iteration for electrical, software, and control system equipment for autonomous robot
○ Designed a course titled "Robotics: from Theory to Applications", and deliver a lecture for 2 hrs/week to students

Skills

>5 years   Python, Java, C/C++, JavaScript, HTML, Git

>2 years   PyBullet, ROS, Linux, MATLAB, LaTeX