Peter Wang

Curriculum Vitae

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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 learning and planning algorithms for multi-robot and human-robot systems
- Optimize placement accuracy in the task and motion planning problem

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 tele-commands

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

Research Interests

- Reinforcement Learning
- Task and Motion Planning
- Machine Learning
- Control Systems

Courses taken

Computer Science

- CSCI201 Principles of Software Development
- CSCI270 Intro to Algorithms and Theory of Computing
- CSCI360 Intro to Artificial Intelligence (Top 5 student)
- CSCI353 Intro to Internetworking

Electrical Engineering

- EE250 Distributed Systems for the Internet of Things
- EE354 Intro to Digital Circuits (Top 1 student)
- EE457 Computer Systems Organization (Ongoing)
- EE451 Parallel and Distributed Computation (Ongoing)
- EE599 Learning and Control for Safety-Critical Robotic Systems (Ongoing)

Mathematics

- MATH407 Probability Theory
- MATH408 Mathematical Statistics
- MATH447 Mathematics of Machine Learning
- MATH467 Theory and Computational Methods for Optimization
- MATH499 Consulting with Machine Learning through Python
- MATH432 Applied Combinatorics (Ongoing)

Teaching Experience

Lab Mentor

2023

EE354 Intro to Digital Circuits, *USC*, Los Angles, CA

Course Producer

2023

CSCI360 Intro to Artificial Intelligence, *USC*, Los Angles, CA

2022

EE109 Intro to Embedded Systems, *USC*, Los Angles, CA

Mentoring

2020

FRC Team 2659 RoboWarriors Software Mentor, *Bishop Alemany High School*, Mission Hills, CA

Hundreds of hours dedicated to mentor high school students focusing on design, integration, and iteration for electrical, software, and control system equipment for autonomous robot

Private Teaching

2019

AP Computer Science & AP Physics

Private teaching to high school students

Skills

>5 years	Python, java, C/C++, JavaScript, HTML, Git
>2 years	ROS, Linux, MATLAB, LaTeX