Qian Wu

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EDUCATION

University of California Berkeley, Berkeley, California Aug. 2023 – May. 2024
M.Eng. in Mechanical Engineering*(Cumulative GPA:3.53 /4.0)*

- Courses: Control and Dynamics of Unmanned Aerial Vehicles, Advanced Control Systems, Capstone Project-JetBot

University of California Los Angles, Los Angeles, California Sept. 2020 – Mar. 2023
B.S. in Physics *(Cumulative GPA:3.58 /4.0)*

- Courses: Quantum & Static Mechanics, Analytic Mechanics, Thermodynamics, Machine Learning, Math Methods-Physics

Foothill College, Los Altos, California Sept. 2017 – Jun. 2020
A.S. in mathematics for transfer *(Cumulative GPA:3.75 /4.0)*

- Courses: Linear Algebra, General Physics, OBJ-Orient Prog Method in C++, Calculus
- Awards and Honors: Dean's List (multiple quarters), Graduation with High Honors

PROFESSIONAL EXPERIENCE

The Royal Melbourne Institute of Technology, Melbourne, Australia Aug. 2019 – Oct. 2019
Research Analyst Intern

- Outlined and presented the forms of radiation and the appropriate materials for detecting radiation in laboratory collection, contributing to 25% of the research knowledge base
- Reviewed and prepared a 15-page report on nuclear physics and directions for improving the scintillator detector

Hangzhou Zhinuo Technology Co., Ltd., Hangzhou, China Sept. 2016 – Dec. 2016
Software Engineer Intern

- Maximized the use of pattern recognition technologies in C++ programming functions
- Assessed the suitability and compatibility of the mechanical design component with the software
- Wrote and implemented Python code while explaining software functionality to corporate customers and ensuring that mechanical designs were compatible

RESEARCH EXPERIENCE

Advanced Microscopy Application in Biophysics (3D vision), UCLA Jun. 2022 – Mar. 2023
Senior Member – supervised by Professor Katsushi Arisaka

- Built an Epi-Fluorescence Microscope to observe fluorescent beads and used MATLAB to analyze the point spread function
- Modified a 3D printer with Python (finding and fixing code so that it could move with people's heads using a VR headset)
- Applied the Line-Confocal Microscope theorem to build a Line-Confocal Microscope; observed zebrafish eye motion with the Labview app
- Constructed the Transverse-Sheet Illumination Microscopy detective part and converted the design to actual hardware for Drosophila observation

Influence of Angle-of-Attack on Drag Force, ICAMAM 2022 Jul. 2021 – Sept. 2021
Co-Author

- Introduced the elements of the "T- 11" parachute and "T- 11 reserve" parachute system
- Studied the influence of the angle of attack on the drag of the parachute system

EXTRACURRICULAR ACTIVITIES

Volunteer at the Lawrence Hall in Ingenuity Challenge, Berkeley, California Jun. 2019 – Aug. 2019

- Supported participants in creating and building their projects, integrating problem-solving skills and imagination
- Helped facilitate hands-on activities and material preparation, ensuring readiness in all aspects

Engineering Club, Pujiang, China Jun. 2013 – Aug. 2016

- Developed competition projects for the club that enhanced implementation efficiency using physics and engineering tools
- Enhanced the construction process of fixed-point robots, analyzing the battery-walking distance relationship, and achieving straight-line walking and stopping in high-grade areas

COMPETITION AWARDS

- 3rd place in the California PBL Awards Programs Mar. 2019
- 3rd place in the 2017 China Innovative Robot Competition May. 2017
- 1st place in the competition of amateur robot skills in Pujiang County Dec. 2015

SKILLS & OTHERS

- Languages: Native Chinese (Mandarin), Professional English
- Programming and Software: C++, Python, Matlab, Solidworks, Auto CAD, Image J, Microsoft Office
- Finite Element Analysis, Simulation and Modeling Tools, Experimental Techniques, Prototyping and 3D Printing