Ziyi (Andy) Peng

linkedin.com/in/ziyipeng22
github.com/ghuser1023

www.zyipeng.com
ziyipeng@g.ucla.edu
(408) 391-3891

Education

Sept. 2018 - June 2022

University of California, Los Angeles

B.S. Computer Science and Engineering • GPA: 3.89

- Coursework (taken and current): Algorithms, Operating Systems, Programming Languages, Networks, Machine Learning, Intro to AI • Multivariate Calculus, Linear Algebra, Discrete Structures, Real Analysis • Systems and Signals

Experience

Aug. 2020 - Present

Visual Machines Group • Los Angeles, CA

Undergraduate Research Assistant

- Working on computational imaging methods

June 2019 - Sept. 2019

Uber Advanced Technology Group • San Francisco, CA

Software Engineering Intern | SDV Platform

- Collaborated to design and build distributed map generation pipeline (Spark/Airflow) for use by road network extension tool, replacing manual process spread across several teams
- Implemented parts of gRPC/Go backend related to querying/filtering resulting data

Jan. 2019 - Dec. 2019

Physics of Amorphous and Inorganic Solids Lab at UCLA • Los Angeles, CA

Undergraduate Research Assistant

- Analyzing and modeling the sorption curves of porous materials via neural networks and Monte Carlo methods implemented with NumPy/Keras

June 2018 - Aug. 2018

Wynd Technologies, Inc. • Redwood City, CA

Backend Software Development Intern

- Doubled extent of dynamic air quality database, adding pollen/weather data
- Maintained Node.js/MongoDB scraping backend, updating scripts to ES6

Activities/Honors

Sept. 2018 - Present

Bruin Spacecraft Group

Project Reach Chief Engineer, Project Rapid Software Lead

- Designing and implementing flight software and sensor integrations for two projects: Reach's modular amateur cubesat (using MRAA/C++), and Rapid's URSa, a cubesat built around an experimental ion thruster (using KubOS/Rust)
- Helping maintain club website (bruinspace.com)

Sept. 2018 - Present

Unmanned Aerial Systems at UCLA

AVIATA Principal Investigator, Vision Subteam Lead

- Working on computer vision models (e.g. CNN shape classification, K-means color segmentation) using Keras/OpenCV for use at AUVSI competition
- Developing AVIATA, a NASA-funded student research project, involving a fleet of drones autonomously docking to and lifting a central frame/payload

Spring 2019 — UCLA Upsilon Pi Epsilon Inductee

Spring 2017 — USA Mathematical Olympiad Qualifier, USA Computing Olympiad Platinum

Skills

Languages	Python, C/C++, Java, Bash, MATLAB, HTML/CSS, JavaScript/Node.js
Other	Git, CMake/GNU Make, Protobuf, NumPy, Keras, LaTeX