Andrew Liang

Innovative computer science undergraduate with multiple years of team leadership experience and hands-on programming skill seeking internship to expand understanding of the industry.

Work Experience

Computer Science Undergraduate Researcher
Autonomous Vehicle Laboratory - UCSD
October 2019 - Present

Researching and building analysis on autonomous vehicle navigation algorithms, particularly object tracking and sensor fusion. Containerized development (Docker)

- Created Python pipeline to automate image inferencing for semantic segmentation
- Experimenting with multi object detector to find best fit for consistent traffic sign detection (C++, Python)
- Learning literature review strategies

Web Application Developer (Intern)
Nordson ASYMTEK
June 2017 - August 2017

Automated diagnostics processing with a web application designed to parse data from log files and display it in a user-friendly interface.

- Created using MEANStack, a JavaScript/TypeScript web dev stack
- Programmed in a team of 5, agile meeting structure

Projects

Philanthropy Connect (Software Architect)
October 2020 - December 2020

- Created a social media app to connect philanthropy with volunteers
- Researched/implemented technology (React, Firebase, REST API), developing best practice for software engineering in a team setting

Dungeons and Dragons Utility Tool (Primary Developer)
March 2020

- Created a character/item database (Python, JS) for my D&D group

FTC Robotics 9261 Level Up (Hardware/Software Design Lead)
August 2014 - June 2018

- Self learned Java to both program and teach teammates to program
- Self learned CAD (Inventor/Solidworks) to guide hardware design
- Integrated hardware and software by serving as link between both teams
- Implemented HAL and PID, localizing errors and improving readability
- Self learned computer vision and ML to provide robot with object detection, as well as SLAM (simultaneous localization and mapping)

Contact Details

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linkedin.com/in/andrew-liang-2022/

Education

University of California, San Diego (graduation June 2022)
B.S. Computer Science
Management Science Minor
GPA 3.71

Languages

Python
Java
C/C++
Javascript

Technical Skills

Object Oriented Programming
Machine Learning
Computer Vision
Control Systems
Networking (TCP/IP)
A/B Testing

Personal Skills

Leadership
Fast learner
Teamwork
Communication
Flexibility
Problem Solver

Coursework

OOP/Data Structures: CSE 12, 100
ML: CSE 151A
AI: CSE 150B
Software Engineering: CSE 110
Algorithms: CSE 20, 21, 101, 105
C/C++: ECE 15, CSE 30, 100
Comp. Architecture: CSE 140, 140L, 141, 141L
Computer Vision: CSE 152A
Networks: CSE 123

Personal Interests

Transcribing music
Gaming