Colin Li

847-323-2385 | cbli@ucsd.edu | LinkedIn | GitHub

Education

University of California, San Diego — San Diego, CA
B.S. Computer Engineering (3.6 GPA) — *Sept. 2021 – Dec 2024*

Experience

Software Engineering Intern — Jul. 2023 – Present
Evil Geniuses — *Los Angeles, CA*

- Collaborating with partnerships to assess the value of a sponsor's logo locations on our jersey by training a custom image detection model (YOLOv5) with PyTorch to measure logo viewership, and implement post-processing to filter out false positives – resulting in cost savings of $75,000 annually.
- Leveraging AWS Lambda, S3, and EC2 to architect and implement an automated data acquisition and storage framework in PostgreSQL for terabyte-sized datasets.
- Developing ETL data pipelines for collecting and storing 100+ GBs of data from 4 APIs from 2 different providers to decrease coaching staff's manual data extraction by 10+ hours a week.
- Creating a responsive data visualization tool using ReactJS, enabling stakeholders to intuitively explore and analyze complex datasets, leading to streamlined decision-making processes and enhanced insights into key trends.

Founder — Jan. 2021 – Present
Macrohard LLC — *Chicago, IL*

- Developing programs perform ETL of big data from professional esports games including a Python program that tracks 300+ players to allow for streamlined scouting.
- Employing APIs, process memory reading, and computer vision to feature engineer new statistics requested by analytic stakeholders.
- Utilizing Python and SQL to create a 50,000+ entry dataset to create a neural network using pytorch that makes live-updating predictions of the outcome of a game.
- Creating a program that utilizes computer vision to read on-screen text from a video game with over 99% accuracy.
- Leading a team of 7 to develop, market, and sell our products to 5 different companies in the esports industry, achieving revenue of over $15,000.

Projects

Explorer | *Node.JS, Express.js, MySQL, EJS* — Sept. 2023 – Present

- Creating a website that tracks and visualizes users travel experiences, automatically marking visited locations allowing them to uncover their journey over time.
- Designing and implementing a custom API to interface with a popular location-sharing application, enabling real-time location tracking for users.
- Engineering efficient algorithms for the MySQL database to expedite the retrieval and processing of over 10,000 datapoints on the server side, enabling instantaneous loading of location data for users and enhancing overall website performance.

Self Driving Car | *Python, Tensorflow, OpenCV,* — Jan. 2023 – Jun. 2023

- Developed a self-driving car prototype using Raspberry Pi as the core hardware platform.
- Implemented lane-following algorithms using OpenCV to enable the car to stay within marked lanes.
- Integrated motors and sensors to control the vehicle's movement and ensure safe navigation.

Technical Skills

Languages: Python, C/C++, Java, JavaScript, HTML/CSS, SQL
Frameworks: React, Node.js, Express.js, Flask, Pillow, NumPy, Pandas, Matplotlib, JUnit, AWS, SocketIO, YOLO, OpenCV, MongoDB, TensorFlow, Github

Accomplishments

UCSD Esports Scholarship - May 2023
Varsity Bowling Coaches' Award - Feb. 2020
Hackridge Hackathon 1st Place - Apr. 2019