Daniel Xiong

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Education

University of California, Santa Cruz - Computer Science B.S.

2018 - 2022

- Dean's Honor List 2018 2019
- GPA: 3.90/4.00

Work Experience

Software Development Intern at UAES Shanghai

Summer 2019

- Developed a license plate detector using Python's OpenCV module.
- Learned and applied various Machine Learning algorithms, specifically Convolutional Neural Networks, to improve upon the OpenCV license plate detector script.
- Worked with my team on an Inertial Navigation System for vehicles in an underground parking lot environment.
- Developed a Python script that automated the extraction, analysis, and transfer of compressed files from one machine to another through SSH.

Projects

Weather Update script

- Wrote a Python script that sends a weather report as a text message to any phone number.
- Implemented the DarkSky Weather API to get weather data and used Amazon's AWS SNS API to send a weather report as a text message to users.

Remake of Flappy Bird game

- Created a Java Swing and Java AWT remake of the popular game Flappy Bird.
- This remake varies from the original in that at certain score thresholds, the gravity and colors become inverted.

Drum set app

- Created a Java Swing application that mimics a drum set.
- Includes a snare drum, hi-hat, crash cymbal, tom-toms, and kick drum. Plays sounds from audio files downloaded online.

Extracurriculars

Lockheed Martin CodeQuest

Spring 2018

Competed in the CodeQuest programming competition at Lockheed Martin in Sunnyvale, CA.

Stanford ProCo

Spring 2018

Competed in the ProCo programming competition at Stanford University.

2016 - 2018

Competed in the USA Computing Olympiad at the Bronze, Silver, and Gold levels.

Irvington High School VEX Robotics

2016 - 2018

Was the engineer and programmer for high school VEX robotics competition team.

Skills

USACO

Python, Java, C/C++, Git.

Experience with:

- Computer Vision and Machine Learning algorithms in Python (OpenCV, TensorFlow, SciKit-Learn, Keras).
- Competitive programming and problem solving.
- Algorithms such as greedy, sorting, depth first search (DFS), breadth first search (BFS), flood fill, dynamic programming (DP), and graph theory (SSSP and MST).