

Seeking Opportunities for Growth and Impact in Software Engineering

Work Experience

Rivian

Software Engineer Intern - Computer Vision/Android

06/2024-09/2024

Palo Alto, CA. Created a computer vision application to improve user experience with already-existing media videos in Java, Kotlin, and Python for Android applications with 90% less computational power required. Built full video processing pipeline for offline rendering. Additional work involving embedded systems programming and machine learning model compression for use in low-power settings. Patent pending.

Toyon Research Corporation

Software Engineer Intern

06/2023-03/2024

Goleta, CA. Reduced false readings in computer vision project by 25% with a linear interpolation algorithm. Created software for the Android Tactical Assault Kit (ATAK). Experience implementing computer vision (OpenCV) and machine learning (TensorFlow) models and algorithms in Android. Created a SQLite database for a plugin with full frontend and backend support, mostly in Java. Fixed a camera orientation issue involving the YOLOv7 CNN and Tencent's Android Camera code.

Patents

Patent process pending as a result of software written at Rivian involving image processing in electric vehicles in low power settings. More info to come.

Education

University of California, Santa Barbara

Computer Science (B.S.), Statistics and Data Science (B.A)

09/2021-06/2025

CMPSC 130A, B (Data Structures and Algorithms), CMPSC 165B (Machine Learning), CMPSC 181 (Intro to Computer Vision), CMPSC 165B (Machine Learning), CMPSC 154 (Computer Architecture) CMPSC 190I (Natural Language Processings) CMPSC 160 (Compilers), CMPSC 170 (Operating Systems), CMPSC 174A (Databases)

Loyola High School of Los Angeles

National Merit Finalist, 1580 SAT

University of California, Los Angeles (enrollment during high school)

CS 31, CS 32, Math 61 (Discrete Mathematics)

Projects

Tunnel Man - UCLA CS 32 final project - Designed and implemented a video game similar to 1980's Dig Dug using principles of object-oriented design and maze solving algorithms

Selenium Development Project - Utilizing Selenium and Tkinter libraries to scrape a website and input in the information into a Google Cloud SQL storage database, also automated text messaging system, currently creating React frontend

Personal Regression/ML Labeling Modeling Project - Currently working with compiling different datasets of stock movement around earnings reports and using different variables to look for possible trends

Skills

C++, Java, UNIX, Swift, Linux, React, HTML/CSS, OCaml, Python, Valgrind, Spring Boot, NodeJs, SQL, APIs, Selenium web development tools, Tensorflow, Keras, Docker, OAuth, Android development, Git