

TEJAS KAMTAM

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EDUCATION

University of California, Los Angeles

B.S. in Computer Science & B.A. in Business Economics

Los Angeles, CA

Sep 2021 – Jun 2025

- **Cumulative GPA:** 3.330
- **Courses:** Software Construction (Python, React, Bash), C++, Computer Architecture (x86-64, MIPS)
- **Certificates:** DeepLearning.AI - TensorFlow Developer; Microsoft 98-364 – Database Administrator

EXPERIENCE

Innexgo

Backend Engineer

San Jose, CA

May 2022 – Present

- Developed the backend for a primary React webapp using Rust on a microservice architecture to operate on received and transmitted commands over WebSocket and HTTP for a network of RFID card scanners
- Created SQL query schemas using PostgreSQL. Implemented multiple microservices on AWS EC2 instances to assemble attendance reports presented on the React webapp using a RESTful API
- Collaborated with sponsors and management to discuss financials, organize a pilot program at a local ISD, and evaluate the performance and durability of the microservice architecture

Bruin Spacecraft Group

Overseer Chief Engineer

Los Angeles, CA

Sep 2021 – Present

- Developed software in C++ to analyze star position and orientation for the operation of a 3-unit cube satellite in Low-Earth orbit hosting a Xenon ion for an on-campus aerospace and propulsion research lab
- Designed a Python program hosted on a Raspberry Pi to analyze GPS data collected aboard a High-Altitude Balloon to transmit data packets to HQ and initiate cutdown and parachute deployment

PROJECTS

50Whales - Humpback Whale Identification

Machine Learning Researcher

Los Angeles, CA

Jan 2022 – Mar 2022

- Worked with a group of 3 to develop a machine learning model to accurately classify over 25,000 whales into 5,000+ categories by integrating a Siamese convolutional neural network
- Incorporated transfer learning from ResNet18 and preprocessing techniques including object detection, image segmentation, color masks (grading, grayscale, etc.) in Pytorch using Pillow
- Achieved a 32% validation accuracy on the first epoch (cross-entropy) and utilized an Adam optimizer with a triplet loss to work up to a 65%+ accuracy across 10+ epochs

Home Base - Desktop Web Application

Frontend Developer

Coppell, TX

Nov 2020 – Mar 2021

- Worked in a team of 4 to design a Windows desktop web application using Node.js and Electron to help the elderly more easily access important information using Google weather, email, and calendar APIs
- Utilized a MongoDB database to store user information and, later, presented the same user experience accessible across multiple devices and locations through automated cataloging of UIs

Bruin Stock Group

Quantitative Analyst

Los Angeles, CA

Sep 2021 – Jun 2022

- Identified over 15 options contracts each with a high probability of increasing open interest over 1-to-3-month intervals for 10+ blue chip companies by creating algorithms on TradingView using PineScript
- Incorporated time series forecasting ML models to predict future premiums for current OTM options contracts by analyzing mean-reversion in Implied Volatility, Theta, Delta, and open interest

PROGRAMMING

Proficient: Python (TensorFlow, PyTorch), C++, C, React

Experienced: JavaScript (NodeJS), Rust, PostgreSQL, MongoDB

Interests: NLP/NLU, time series forecasting, quantum computing, ARM ISAs, information theory