TEJAS KAMTAM

Los Angeles, CA 90024 | 972.571.1738 | tejaskamtam@ucla.edu https://github.com/tejaskamtam | https://www.linkedin.com/in/tejaskamtam

EDUCATION

University of California, Los Angeles

Los Angeles, CA

Sep 2021 - Jun 2025

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

- Academics: <u>GPA</u>: 3.4/4.0; <u>SAT</u>: 1550/1600 Math: 780, English: 770
- Courses: C++ Programming, Computer Architecture (x86-64, MIPS)
- Honors: Alpha Lambda Delta, Phi Eta Sigma
- Certifications: DeepLearning.Al TensorFlow Developer; Microsoft 98-364 DBA

PROJECTS

Humpback Whale Identification - 50whales

Los Angeles, CA

Machine Learning Engineer - PyTorch

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

Desktop Web Application - HomeBase

Coppell, TX

JavaScript Developer - Node.js

Nov 2020 – Mar 2021

- Worked in a team of 4 to design a Windows desktop web application to help elderly easily access important information using Google weather, email, and calendar APIs built using Node.js
- Utilized a MongoDB database to store user information and provide the same experience which is accessible across devices and locations by dynamically creating personalized UIs

Simple Stock Predictor

Coppell, TX

Machine Learning Engineer - TensorFlow

Mar 2021 – May 2021

- Collaborated with a high school AI club to develop a time series forecasting ML model to predict short term (1h) changes in closing prices of various companies 1 month forward using TensorFlow in Python
- Utilized sequential LSTM layers from the Keras RNN library to create a robust neural network to validate predictions on real-time data visualized by line charts using MatPlotLib, Pandas, and NumPy libraries

EXPERIENCE

Bruin Stock Group

Los Angeles, CA

Quantitative Analyst

Sep 2021 – Present

- Identified over 15 options contracts each with a high probability of increasing open interest over 1–3-month intervals for over 30 companies by creating PineScript algorithms on TradingView
- Incorporating time forecasting ML strategies to predict future premiums for current OTM options by analyzing stock option metrics such as Greeks, IV, and reverse engineered intrinsic values

Bruin Spacecraft Group

Los Angeles, CA

Software/Operations Design

Nov 2021 - Present

- Designing software for "Rapid" in C++ over 3 years for the launch of a muon detector into Low Earth Orbit using a cube satellite by analyzing star patterns and gyroscopic orientation
- Analyzing data for "Overseer" from high altitude balloon simulations to predict optimal launch conditions using pattern recognition techniques (ML) on positional and directional data
- Collaborated with communications, electronics, and design teams to incorporate necessary functions by creating presentations to clarify the design process and limitations of resources

PROGRAMMING

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

Experienced: JavaScript (NodeJS, React), HTML5, CSS, Java

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