Kevin Tran

Montclair, CA | (909)282-0875 | kevinat347@gmail.com | LinkedIn | Github | Portfolio

Projects

Snap Chef | *React, Bootstrap, Node.js, Flask, PostgreSQL, AWS S3 Bucket* June 2024 – Present

- Utilized Hugging Face's t5-recipe-generation model to engineer a full-stack ML web application that identifies ingredients from user uploaded images or text and generates over 2.2M+ unique recipes with detailed cooking instructions
- Used Meta's object detection model (detr-resnet-50) that was trained over 120k+ annotated images to develop an API that leverages computer vision to detect objects from user uploaded images with over a 90% confidence rate
- Incorporated Dizex's named entity recognition model (InstaFoodRoBERTa-NER) that was trained over 400 Instagram posts to engineer an API that extracts food related items from a set of detected objects
- Developed Flask and Express microservices to process images using computer vision models to generate detailed recipes with cooking instructions
- Implemented an LRU cache strategy to reduce database I/O operations reducing reads from 10,665 ms to 5 ms, achieving a 99% performance increase

League Insights Dashboard | *React, Bootstrap, Node.js, PostgreSQL* December 2024 – Present

- Created a comprehensive League of Legends dashboard using the Riot Developer API that allows users to query detailed player statistics for over 180 million users
- Leveraged React and Bootstrap to visualize metadata for over 169 unique champions, including detailed metrics such as player level, rank, win/loss rate, and champion mastery
- Utilized PostgreSQL for query caching, improving data retrieval speeds and reducing API call latency from 1000 ms to 15 ms, achieving a 99.5% performance improvement

AI Trading Agent | *Python, Numpy, Pandas, Matplotlib* August 2024 – Present

- Created a fully operational AI trading agent that uses historical stock data from S&P 500 to train a machine learning model that uses stock indicators to generate stock trades, maximizing stock returns compared to a benchmark model by over 50%
- Leveraged 3 feature indicators such as Simple Moving Average (SMA), Bollinger-Band Percentages (BBP), and Moving Average Convergence/Divergence (MACD) with a n = 20-day lookback period
- Incorporated an ensemble Random Decision Tree learner with n = 30 bags to reduce model overfitting and to generate favorable target values (stock trades) based off indicator features (historical stock prices)

Experience

Graduate Research Assistant | Smart Stadium Applications July 2024 – Present

Georgia Institute of Technology *Remote*

- Developed Fanplay, a mobile application using Swift, Springboot, and SQL to deploy smartphone apps to enhance game day experiences for fans
- Implemented a RESTful API that enables chat features using websockets to allow for communication between two users
- Engineered a report message feature using RapidAPI to filter explicit texts using a pre-trained ML model

Coding Instructor May 2024 – Present

Stemtree *Diamond Bar, CA*

- Taught over 100 students how to code using Scratch, Scratch Jr., and EduBlocks, providing them with a strong foundation in computer science fundamentals
- Developed and delivered curriculum that covered basic programming concepts such as loops, conditionals, variables, and event handling

Technical Skills

Languages: C, C++, Python, Java, SQL, PostgreSQL, JavaScript, HTML, CSS
Frameworks: React, Node.js, Bootstrap, Flask, JUnit, gRPC
Developer Tools: VS Code, Git, Linux, Docker, IntelliJ, Android Studio
Libraries: pandas, NumPy, Matplotlib

Education

Georgia Institute of Technology Remote

Master of Science, Computer Science | GPA: 3.85/4.0 *August 2023 - December 2025*