

Kairav Parekh

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EDUCATION

Stony Brook University

Bachelor of Science in Computer Science, GPA: 3.85

- Relevant Coursework: Data Structures, Object Oriented Programming, Discrete Math

Stony Brook, NY

May 2024 (*Expected*)

EXPERIENCE

Google Code-In

November 2019 – December 2019

Student Contributor, Fedora Project

Remote

- Developed a cross-platform Image viewing GUI application using Pygame
- Used Pygame's rendering APIs to display format images, texts and load styled fonts
- Integrated Pygame's continuous mouse and keyboard APIs to record cursor position and keyboard input to make functioning buttons and text fields

PROJECTS

Smart Invest | *Java, Spring Boot, React, TypeScript, PostgreSQL, AWS EC2, Git*

- Built a responsive full-stack web-app that allows users to track their stock investments by displaying current investments, stock performance, portfolio performance, and graphs
- Created a REST API using Spring Boot to serve as a backend server and implemented custom React components with React-bootstrap to display various tables and charts
- Integrated Twelvedata API with the backend to fetch stock ticker data based on user queries
- Populated a PostgreSQL database with user data, and utilized a AWS EC2 Virtual Machine to host the web-app

Algo-Trading Bot | *Python, scikit-learn, Matplotlib, Alpaca Trading API*

- Designed and developed a bot that trades stocks listed in the US market with annual returns over **25%**
- Employed Python's scikit-learn and NumPy libraries to develop a Machine Learning regression-based model and trained using **15 years** of historical stock data
- Processed live stock data at the rate of **20 records/second** using WebSockets connected to Alpaca Data Stream
- Developed a back-testing software using Python that fed historical data to the model which decides buy, sell a stock in a simulated environment

Financial Data and News Aggregator | *Python, Flask, React, TypeScript*

- Engineered a responsive full-stack web-app that fetches all the public information of a company such as financials, stock performance, latest news and displays them using tables and graphs
- Used Python Flask to serve as a backend REST API and implemented React with React-bootstrap to develop custom frontend components
- Integrated Yahoo Finance API with the backend to fetch **10 years** of historical stock data and NewsAPI to fetch latest news

Music Player | *Python, FastAPI, NextJS React, TypeScript*

- Created a responsive full-stack web-app that plays audio files with the ability to pause, rewind, forward and seek
- Utilized FastAPI to serve as a REST API backend server which loads and indexes audio files from storage
- Designed and developed custom React components with React-Bootstrap to display thumbnail, audio bar, pause and play buttons

TECHNICAL SKILLS

Languages: Java, Python, SQL, JavaScript, TypeScript, HTML/CSS

Frameworks: React, Node.js, FastAPI, Bootstrap, Spring Boot

Tools: Git, Linux, AWS EC2, PostgreSQL, MySQL, SQLite

AWARDS

Silver | *USA Computing Olympiad*

December 2020

- Qualified to the Silver Division by solving challenging algorithmic coding problems using C++

Winner | *Game Development, DEWS 2K18, Sindhi Model School*

November 2018

- Won first place out of 10 teams in the hackathon by developing a 3-D Role Playing Game using Unity C#