Khoa Tonthat

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EDUCATION

University of Minnesota-Twin Cities   Minneapolis, MN
Bachelor of Computer Science, Cumulative GPA: 3.7/4.0   *Aug. 2021 – Dec. 2023*
Relevant Coursework
Algorithms & Data Structures | Software Engineering | Program Design & Principles

PROJECTS

Sumizo   December 2023 – Present
- Developed a full-stack **SAAS** application to allow users to upload various file types and websites that can be interpreted by GPT-3.
- Handled file uploads, text interpretation, user authentication, of different file types with **Flask**. assisted with OpenAI's API
- Designed and created a user-friendly and modern frontend using **React** and **TailwindCSS**
- Utilized **MySQL** to store previous user's chats and uploads.
- Opened to a community of almost 50 users a month, garnering excellent feedback on functionality.

Drone Uber Eats Simulation.   March 2023 – May 2023
- Supervised and led the team as the scrum master in an **Agile** environment. Provided ideas for problems and delegated tasks to ensure that the project was completed on time.
- Implemented a data collection system on an existing **Java** code base with fundamental design principles and patterns to gather real-time information on order details and status.
- Effectively applied development processes including version control, code reviews, documentation, and software testing.
- Presented the implementation through a YouTube video that was able to impress the product owners and receive excellent feedback.

Stock Market Forecasting   November 2022 – December 2022
- Designed a Long Short-Term Memory model in Python with core **deep learning** and **machine learning** principles to solve a time series regression problem.
- Extracted close prices of stock prices using yfinance, utilizing Panda, Numpy, and SciKit frameworks to transform the data into input accepted by the model
- Developed a LSTM model with **TensorFlow** frameworks. Plotted and analyzed predictions with **Matplotlib** functions.
- Able to predict tomorrows closing price of all stocks in the SP 500 with a price **94%+ accurate** to the closing price.

Game-Hub   October 2021 – December 2021
- Built an application in Java to simulate a game-hub of related games with focus on **object-oriented programming principles** and engineering best practices to easily add more games.
- Implemented a system to track and present the wins and losses of each game separately in a menu

TECHNICAL SKILLS

Languages: Python, Java, C++, Solidity, SQL, C, Javascript, Typescript
Frameworks / Libraries : React, Next.js, TailwindCSS, Redux, Vite, Truffle, Node.js, Web3.js, Tensorflow, Keras, Pandas, Numpy
Developer Tools: Spark, Map-reduce, Git, Remix, React, VS Code, Visual Studio, PyCharm, IntelliJ, PostgreSQL
Development Strategies: Agile, Scrum, Waterfall

EXPERIENCE

Teaching Assistant (TA)   September 2023 – December 2023
University of Minnesota   *Minneapolis, MN*
- Led weekly labs, code-reviewed, and provided feedback for Java programs.
- Supported overall 100+ students in Object-oriented Programming
- Collaborated closely with a team of TAs and instructors to navigate and solve related problems.
- Created a welcoming and encouraging environment along with facilitating discussions among students.