Ho Do Minh Quan

Clayton, Melbourne | 0478-524-519 | hodominhquan.self@gmail.com | https://nauqh.dev/ | linkedin.com/in/nauqh/

PERSONAL PROJECTS

Music Recommendation System - musicotherapy.vercel.app

- Extract audio features and metadata from Spotify playlist using Spotify API
 - Utilised Spotify API documentation for accurate and efficient data retrieval.
 - Optimise data extraction and manipulation skills to generate a base features dataset for recommendation training.
- Perform data analysis of user playlist
 - Conducted data analysis of user playlists and generated insightful visualisations to identify key patterns and trends.
 - Build system for suggesting songs based on playlist characteristics using content-based filtering; enhance
 recommendation quality by implementing collaborative filtering using matrix factorization on a wide range of users.
- Utilise large language model for music characteristics analysis
 - Conducted fine-tuning of the GPT-4 model for in-depth analysis of music characteristics, employing advanced prompt engineering techniques to optimise performance and precision
 - Designed and hosted web application to deploy recommendation model; Application has been viewed by more than 100 distinct users.

Discord Music Bot - https://github.com/naugh/Ashema

- Developed a highly scalable and customizable music streaming bot for personal Discord servers
 - Integrated Lavalink framework, a high-quality music player that supports a variety of audio formats and music sources, including YouTube, SoundCloud and Spotify.
 - Designed and implemented features such as custom playlists, shuffle songs, and autoplay related tracks using Youtube API; The bot has been actively used in 10 diverse Discord channels.
- Improved user interaction by creating a more engaging and responsive experience.
 - Implemented interactive commands and responses, allowing users to control the bot intuitively through Discord chat, enhancing user engagement and experience.

TECHNICAL EXPERIENCE

CoderSchool – Analytics Engineer / Teaching Associate; Ho Chi Minh, Viet Nam

November 2023 – Present

Frameworks: Hikari, Lavalink

Libraries: React, Fastapi, Langchain

- Provide comprehensive knowledge across multiple domains in data science and computer science, guiding learners towards a deeper understanding of the field and helping them choose the right career path. Successfully supported learners to graduate with high results and receive immediate job offers.
- Designed and implemented data-driven solutions to enhance educational experiences. My role involves developing and maintaining a new exam platform for data science courses that improves content management, usability, and integrates an advanced auto-grading system for efficient assessments.
- Built automated job scraper that curates personalized opportunities on a weekly basis for learners from different courses through Discord. Developed AI assistant to enhance learner support by answering questions on forum posts and facilitating engagement in Coderschool's question center.

Google Developer Student Club – Operations Officer; Ho Chi Minh, Viet Nam - Melbourne, AU

June 2020 – Present

- Organized technical events and workshops on Google technology for club members and the local community.
- Collaboration with cross-functional teams to deliver highly engaging and informative events.
- Utilized extensive networking skills and industry connections to invite relevant guest speakers, resulting in increased attendance and engagement throughout.

EDUCATION

Monash University | Master of Data Science; Melbourne, Australia

July 2024 - Present

Specialisation: Applied Data Analysis | GPA: High Distinction

Monash University | Bachelor of Computer Science; Melbourne, Australia

March 2021 - June 2024

Specialisation: Data Science & Software Development | GPA: High Distinction

SKILLS & INTERESTS

Languages: Python, Typescript, SQL, R, HTML/CSS

Data Technologies: Pandas, Numpy, Plotly, Scikit-learn, Langchain, Pytorch, Tableau, Dagster **Software Frameworks and Tools:** React, Nextjs, Tailwind, Chakra, FastAPI, Git, Docker, AWS