Ho Do Minh Quan

Location: Melbourne, AU
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Portfolio: nauqh.github.io/
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PERSONAL PROJECTS

Music Recommendation System- musicotherapy.vercel.app   **Libraries**: React, FastAPI, OpenAI
- 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/nauqh/Ashema   **Frameworks**: Hikari, Lavalink
- 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.
  - Incorporated queue management, track search, and playback history features to further improve audio streaming usability.
  - Designed and implemented features such as custom playlists, shuffle songs, and autoplay related tracks using Youtube API; The bot has been actively used in 5 diverse Discord channels.

TECHNICAL EXPERIENCE

Google Developer Student Club – Technical Officer; Ho Chi Minh, Viet Nam - Melbourne, AU   *June 2020 – Present*
- Helped organise 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.
- Utilised extensive networking skills and industry connections to invite relevant guest speakers, resulting in increased attendance and engagement throughout.
- Organise and moderate a collaborative Discord server for developers and students to exchange ideas, share resources, and enhance their skills.

EDUCATION

Monash University | Bachelor of Computer Science; Melbourne, Australia   *March 2021 - June 2024*
Specialisation: Data Science & Software Development | GPA: High Distinction

Le Hong Phong High School for the Gifted; Ho Chi Minh, Vietnam   *August 2017 – June 2020*
Concentrations: English Major class | GPA: 9.0 / 10.0

SKILLS & INTERESTS

Interests: Data Engineering, Software Development
Languages: Python, Typescript, SQL, R,
Skills: Data modelling, Data analysis, Software development, Effective communication, Leadership
Frameworks & Tools: React, Nextjs, Django, FastAPI, Git, Docker