Ho Jing Rui

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Singapore

EDUCATION

Nanyang Technological University, Singapore **Aug 2021 – May 2025**

BS Mathematical and Computer Sciences (Double Major)

- **Academic:** CGPA 4.71/5
- **Awards:** Dean's List AY21/22

WORK EXPERIENCE

Synapxe Pte Ltd – Software Engineer **Jan 2024 – Jun 2024**

Software Engineering & Development (SEED)

- Pioneered a project integrating Generative AI (GenAI) in the Healthcare Industry to improve patient outcomes through advanced data analysis and personalized recommendations
- Configured AWS Lambda functions for efficient data retrieval from S3 and query execution with Athena, and transformed raw JSON payloads into structured table formats using Glue Notebooks
- Developed a user-friendly frontend application with Streamlit for seamless interaction with GenAI, enhancing data interpretation and user experience

discovermarket Asia Pte Ltd – Software Engineer **May 2023 – Aug 2023**

Data Science, Backend, & DevOps

- Coordinated with the Vietnam team and a seasoned Data Scientist to incorporate Python into the microservice codebase, adhering to the Twelve-Factor App (12FA) methodology.
- Leveraged Azure Machine Learning Studio for seamless data ingestion, pre-processing, and integration, optimizing the Machine Learning pipeline.
- Refactored codebases using React and Flask to enhance comprehensibility and deployability on Azure Web App and Azure Static Web App, improving user accessibility.
- Established a robust connection between the functions and Azure Blob Storage, ensuring streamlined file management.

PROJECTS

Geospatial Clustering Application (Map Cluster)

Languages/Frameworks: Angular, Flask

- Designed and implemented a Python-based API that processes geographical coordinates, leveraging KMeans algorithms to generate insightful clusters.
- Orchestrated the frontend to seamlessly facilitate CSV file uploads, enabling smooth interaction with the backend processing.
- Planned to enhance clustering options by integrating the DBSCAN algorithm.
- Visualised clusters through an Angular-based frontend utilising the Leaflet library for robust map visualisation.
- Leveraged essential libraries like scikit-learn for model creation and pandas for efficient data manipulation.

Connect4

Languages/Frameworks: Python

- Developed a console-based Connect 4 game, accommodating both human and AI players.
- Enhancing AI challenge by implementing the Minimax Algorithm for heightened gameplay difficulty.
- Implemented a user-friendly interface with ASCII art for an engaging gaming experience.

SKILLS & INTERESTS

- **Languages:** Python, C, C++, Java, R, HTML, CSS, JavaScript, SQL
- **Frameworks:** Angular, ReactJS, Flask, Django
- **Tools:** Git, Jupyter, RStudio, SQLite, Microsoft Azure, Amazon Web Services
- **Interests:** Machine Learning, Data Science, DevOps