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 (Expected: Highest Distinction)
- **Awards:** Dean's List AY21/22
- **Competitions:** Shopee Code League 2022 – Participant
- **Activities:** Faculty Orientation 2022 – Programmes Team

SKILLS & INTERESTS

- **Languages:** Python, C, C++, Java, R, HTML, CSS, JavaScript, SQL
- **Frameworks:** Angular, ReactJS, Flask, Django
- **Tools:** Git, Jupyter, RStudio, SQLite, Microsoft Azure, MongoDB, Elasticsearch, Kibana
- **Interests:** Algorithms, Machine Learning, Data Science & Analytics

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.

NeoVim
Languages/Frameworks: Lua

- Transformed my laptop's terminal into an Integrated Development Environment (IDE) using Vim commands.
- Integrated open-source GitHub plugins for a streamlined and efficient development environment.

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.

WORK EXPERIENCE

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

- Collaborated with the Vietnam team and a seasoned Data Scientist to strategize the incorporation of Python into the microservice codebase. This initiative was executed while upholding the principles of the Twelve-Factor App (12FA) methodology.
- Engaged in cross-functional, agile improvement teams, offering valuable system-level perspectives to identify the most efficient and effective strategies for achieving project goals.
- Leveraged the seamless integration capabilities of Azure Machine Learning Studio with other Azure services. This streamlined the flow of data ingestion, pre-processing, and integration within the Machine Learning pipeline.
- Integrated Azure Cognitive Search Indexing to enhance chat results within the existing chatbot framework by 10%.
- Collaborated with a Data Scientist in procuring rainfall data via weather APIs. Harnessed Jupyter Lab to extract meaningful statistical inferences from this data, contributing valuable insights to the analysis process.
- Elevated prior interns' projects by refactoring codebases using React and Flask. This revamp not only enhanced code comprehensibility, but also paved the way for deployment on Azure Web App and Azure Static Web App, ensuring user-friendly accessibility.