JOSEPH HEE

(+61) 426635395 | joseph.hee.2021@scis.smu.edu.sg | https://www.linkedin.com/in/josephheejl/

PROFILE

Highly motivated information systems student, keen on problem solving with technology. An effective communicator and leader, enjoys working in teams to build quality products.

EDUCATION

Singapore Management University   **Singapore**
Bachelor of Science (Information Systems)   **Aug 2021 - May 2025**
Major in Information Systems
Dual Track Business Analytics, Digitalisation and Cloud solutions
GPA : 3.68/ 4.0
Relevant course work : ER Modelling, Logical Diagrams, SQL, PHP, Vue, Figma, Java, Springboot, Flask, Docker

RELATED EXPERIENCE

2nd Motorised Infantry Battalion   **Singapor**
Dep Training and Ops Officer 2Sir   **Jul 2020 - Feb 2021**
  • Liaised with external organisations to manage time sensitive and critical operations for battalion consisting of 700 soldiers.
  • Managed internal training progress and records, achieved 0 findings for internal and external audits.
  • Designed and implemented a tracking document leveraging Microsoft Excel to organize training records of all soldiers within 2 SIR, ensured training is progressively conducted and accurately tracked.

Escapify Travel Web Application   **Singapore Management University**
Full Stack Developer   **Oct 2022 - Nov 2022**
  • Practiced MVVM software design to build a full stack web application within 3 weeks
  • Consolidated three different travel related APIs (Hotels,Destinations,Google) to develop a comprehensive platform for travellers
  • Enforced secure coding practice using environment variables to store API Keys, scored A- on ImmuniWeb web security test with 2 software issues
  • Leveraged on firebase realtime snapshot update capability to create an interactive experience between users, comments are updated immediately and supports multiple users, 5 users posted travel experience

Form Management System   **Singapore Management University**
Full Stack Developer   **Jan 2023 - Apr 2023**
  • Adopted MVC behavioural design pattern to create a Springboot Vue full stack web application within 2 months
  • Spearheaded design of Springboot backend, established routes for more than 3 controllers supporting frontend requirements

GoBook Class Booking System   **Singapore Management University**
Microservice Developer   **Mar 2023 - Apr 2023**
  • Designed Microservice Architecture with Cloud Native deployment to construct a full stack web application within 2 months
  • Experimented and executed Kafka Event Streaming service to perform real time Content-Based recommendation for users

Coders Assembly   **Singapore Managment University**
Mentor for Intro to Programming IS111   **Aug 2022 - Nov 2022**
  • Organised focus group biweekly sessions with 5 first year students to discuss python problems
  • Lead code along sessions in python workshop for 40 students on python fundamentals lists, dictionary, file reading

Mentor for Web Application Development IS216   **Jan 2023 - Apr 2023**
  • Organised focus group biweekly sessions with 5 first year students to discuss php problems
  • Guided students 40 students during Web Application Development Workshop on php fundamentals classes , objects , database connection

Singapore Management University   **Singapore Management University**
Disaster Tweet Research Assistant   **Nov 2022 - Jan 2023**
  • Conducted independent research into different applications of relation extraction on over 400 tweets
  • Utilized supervised learning and rule-based techniques to extract numerical values to develop a precise deep learning model for Relation Extraction with proficient use of Tensorflow Library. Made use of Class Weighting to handle heavy class imbalance.

- Implemented deep learning models using Conv1D and Lstm layers to extract relation from rule based generated dataset with an accuracy of 93%

CO-CURRICULAR ACTIVITIES

JSL-Tech
Core Development Team for Ecommerce Website   **Apr 2021 - Aug 2021**
- Led design of prototype, iterating through 3 versions on figma graphics editor before translating design to actual product
- Built an ecommerce platform using Nuxt Framework and Firebase with a team of 2
- Applied Agile Project Management using JIRA to lead tasks and Discord for meetings
- Established distribution of work leveraging on Github API to delegate roles managing up to 3 components at one time

Humans vs Robots Facebook Kaggle Competition
Feature Engineer, Data Analyst   **Dec 2021 - Dec 2021**
- Led and organized team of 3 to discuss and apply different methods for feature engineering and machine learning model selection
- Feature engineered and applied various machine learning models using data from a pool of 7.6 million online auction bids to identify if a bid was made by a human or bot

React-Django Todo App
Developer   **Apr 2022 - Apr 2022**
- Initiated an individual project to be able to apply links between frontend and backend processes deploying industry frameworks
- Constructed a simple Todo App with React frontend and django Backend, using Django Rest API Framework to interact with frontend
- Improved knowledge on Django Framework, Model View Template to develop web applications using Python

Tik-Tok Camp 2022 Group Project - Hangman
Frontend Engineer   **May 2022 - Jun 2022**
- Spearheaded frontend development using React framework, utilizing react state management and quick deployment features to produce a two player hangman game in span of two weeks.
- Headed frontend development with Agile, github commit used to trace changes and features. Frequent meetings to establish communication and delegation of tasks .

Zero To Mastery Tensorflow Developer Course
Developer
- Implemented multi-class image classification neural networks on Fashion MNIST and Food101 dataset, analysing effectiveness of Convolution layers and pre-trained EfficientNetB0 models on over 101000 food images. Beat
- Executed natural language processing neural networks on PubMed data, explore differences in pre-trained Glove embedding vs Universal Sentence Encoder to classify 202000 medical abstracts in sequence sentence classification.
- Utilized time series N-BEATS neural network architecture based applied on 4 years of Bitcoin Price data to predict next day bitcoin prices based on previous week.

SKILLS & INTERESTS

Technical Skills : Python, Javascript, C, Php, Firebase, MySQL, Django
Language : English (Native), Chinese (Fluent)
Interests :

CERTIFICATIONS

- Google Tensorflow Certification
- Heicoders Academy AI200 Certification in Applied Machine Learning
- Heicoders Academy AI100 Certification in Python Programming and Data Visualisation