Teow Si Hao, Nicholas

WORK EXPERIENCE

DSO National Laboratories

Singapore

Data Scientist Intern

May. 2024 - Aug. 2024

- Conducted EDA on a 30 million row dataset of machine operation values, involving feature selection and correlation assessment. Developed an unsupervised-trained isolationForrest model that achieved 80.6% accuracy.
- Set up Time-Series Database and created dashboards for real-time monitoring. Deployed the predictive ML model that identified potential hardware anomalies and malfunctions, resulting in cost savings of up to \$5.5 million for the company.
- Co-developed a minimum viable product (MVP) with Software Engineers for a laser software application integrated with machine learning predictions, enhancing its usability for over 100 employees in the division.

EDUCATION

National University Of Singapore

Singapore

Bachelor of Science in Business Analytics

Aug. 2022 - Apr. 2026

• Grade: Expected First Class Honours

PROJECTS

InTurn | CSS, Firebase, GitHub, HTML, JavaScript, Node.js, Vue.js

Jan. 2024 - May. 2024

- A comprehensive web platform streamlining internship discovery and management for university students.
- Key features include a centralized application tracker with analytics, a community forum, and personalized recommendations built using Vue.js, Firebase, and Node.js.

Personal Website | CSS, GitHub, HTML, JavaScript

Mar. 2024

• Developed a personal website talking more about myself, my experience & my hobbies, hosted on GitHub Pages.

TwelfthMan | CSS, GitHub, Heroku, HTML, JavaScript, React Native, RESTful API

- A football predictor and fixtures app, developed using JavaScript, CSS, and HTML on the React framework, this app offers a seamless and engaging user interface.
- Utilizes APIs from reputable football data sites to provide users with comprehensive and real-time information about teams, players, fixtures, and match statistics.

HACKATHONS

BrainHack (Seetrue)

Singapore June. 2023

DSTA

- Utilized advanced NLP techniques to participate in a competition focused on fake text and image detection.
- Leveraged with pre-trained BERT (Bidirectional Encoder Presentations from Transformers) model for fine-tuning on Python. Developed and implemented data preprocessing pipelines and integrated text-image analysis for improved detection accuracy.

National AI Student Challenge

Singapore

CSIT

May. 2024

- A web application "Bandicota.ai" that uses LLMs to analyze text for potential scam indicators. It also aims to educate users on recognizing and combating scams.
- Leveraged Streamlit to build the web app interface and utilised OpenAI for scam detection and educational content generation through its API.

TECHNICAL SKILLS

Languages: Python, Java, R. SQL, JavaScript

Experience in: Git, Postman, Firebase, Tableau, Docker, React Native, Grafana, Prometheus, MongoDB, InfluxDB

Libraries: pandas, NumPy, Matplotlib, nltk, scikit-learn

Techniques: Exploratory Data Analysis (EDA), Data Cleaning and Pre-processing, Feature Engineering, Statistical Analysis, Machine Learning, Anomaly Detection, Time Series Analysis, NLP