Cheng Yi Xing

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EDUCATION

- **Singapore Institute of Technology (SIT)** — Penultimate Year
  Bachelor's of Science in Applied Artificial Intelligence — *Aug 2022 – Expected May 2025*
  - **Awards**: SIT Scholarship (Full ride), awarded to just 13 students among 3000+ first-year candidates

EXPERIENCE

- **PropNex Realty Pte Ltd** — Singapore
  Tech Development Intern — *Jan 2024 - Present*
  - Involved in the GenAI team, developing AI tools to optimize agent workflows using Next.js, FastAPI and OpenAI
  - Automated data generation and evaluation pipeline for finetuning LLM models, reducing manual data labelling and evaluation time by **80%**
  - Conducted iterative prompt engineering to optimize prompts to precisely align with use case and requirements.
  - Fine-tuned OpenAI GPT models, boosting evaluation accuracy from 50% to 94%, meeting project requirements.
- **Singapore Institute of Technology** — Singapore
  Software Engineer — *Apr 2023 - Dec 2023*
  - Developed a web app with ReactJS and Firebase to collect audio and annotation data from **1000+ students**, achieving a **95% reduction in human error.**
  - Led the development of multi-lingual audio-to-text transcription API with WhisperAI and FastAPI, **reducing transcription time by 90%**
  - Optimised model parameters to achieve **10% reduction in Character Error Rate (CER)** and **20% improvement in timestamp accuracy**
  - Containerized the API using Docker and leveraged CUDA GPU capabilities to enhance performance by **700%**
- **Redfluencer** — Singapore
  Software Engineering Intern — *Apr 2022 - Nov 2022*
  - Delivered mobile app features with React Native, resulting in a **20% increase in user engagement.**
  - Addressed bugs, leading to a **reduction in crashes** and a **15% improvement in user satisfaction scores.**
  - Initiated the design of certain app's features, including the redesign of the app's reward system
- **OrangeTee & Tie** — Singapore
  Data Analyst Intern — *Mar 2018 - Oct 2018*
  - Implemented analytics solution (Tableau) to monitor and improve sales agent performance.
  - Presented dashboard to external stake holders, including ministers and senior management of OrangeTee & Tie

AWARDS

- **1st Place: SIT x Target Media x People's Association - BeyondTheScreen** — Nov 2023
  Created interfaces that display personalised content based on registered bluetooth devices nearby, with a CMS
- **1st Place: IMDA - Tableau Data Stories of Singapore Competition** — Nov 2018
  Designed a dashboard to educate waste generation in Singapore and presented to panel of judges (Tableau)

PROJECTS

- **Advanced Commuter Profiling Analysis: Integrated Team Project** — Jan 2024 - Present
  - Collaboration with SMRT to analyze ridership transaction data and develop a commuter profiling system
  - Working in a team of 4 to analyze over **600 million transactions**, utilizing clustering algorithms to identify commuter patterns and preferences
- **yixing.info: Portfolio Website** — Dec 2023
  - Built a personal website with Next.js, achieving a perfect **Real Experience Score of 100.**
  - Implemented a chatbot using generative AI, leveraging a vector database for knowledge storage and prompt engineering to deliver accurate responses to questions about me.

SKILLS AND TECHNOLOGIES

- **Languages and Libraries:**: Python (+ Pytorch, Flask, FastAPI, Pyspark, Selenium, Pandas, NumPy), JavaScript (+ React, React Native, Next.js, Express.JS),Typescript, PHP, Java, C, SQL, NoSQL
- **Technologies:**: Firebase, Supabase, Docker, Pinecone, Redis, AWS (S3, EC2, RDS), Hadoop, Spark, HuggingFace