

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

- **Target Media Culcreative (Upcoming Internship)** Singapore
Software Engineer Intern Sept 2024 - April 2025
 - Recruited by COO to integrate hackathon's winning solution into their company's internal systems
 - Leveraging hackathon solution to help secure Target Media as the primary provider of DDPs in Punggol District
- **Singapore Institute of Technology** Singapore
AI Engineer Intern May 2024 - Present
 - Worked on Project LEARN, an initiative to enhance mother tongue language proficiency in students through AI
 - Tasked with utilising LLAMA3 as to mark student's answers to questions, finetuning the model with LoRA and ORPO Techniques to achieve scoring accuracy improvements from **60% to 95%** on unseen data
 - Designed pipelines to generate synthetic data, ensuring quality and variety in data for model generalisation
 - Applied prompt engineering and large language models (LLMs) to generate follow-up questions, enhancing student engagement and reinforcing learning outcomes
- **SMRT** Singapore
Data Scientist Intern Jan 2024 - Aug 2024
 - Worked in a team of four to collaborate with SMRT to analyze and profile commuter travel patterns
 - Accomplished the creation of a feature table for commuter profiling as measured by comprehensive metrics, by engineering features based on travel patterns.
 - Optimized a machine learning model to identify tourists with 97.86% accuracy, predicting tourist status for 6.9 million commuters, and identifying 2.35 million potential tourists.
 - Collaborated as a team to implement memory optimization techniques and data reconciliation processes, effectively handling data sets of size 200 million
- **PropNex Realty Pte Ltd** Singapore
AI Development Intern Jan 2024 - May 2024
 - Worked on AdWords and TemplateAI, internal AI tools that **28,000+ agents** use to generate marketing materials
 - Engineered NLP pipelines using langchain and OpenAI GPT models, cutting manual data labelling time by **80%**
 - Architected specialized evaluation pipelines to measure LLM content quality, accelerating review cycles
 - Finetuned OpenAI models for specific project needs, improving pass rates for custom evaluation criteria (e.g., character limits, meeting user-selected options) from **50% to 90%**
- **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**
 - Led the development of multi-lingual audio-to-text API with OpenAI WhisperAI and FastAPI
 - Optimised ASR model parameters to achieve **10% reduction in Character Error Rate (CER)** and **20% improvement in timestamp accuracy**

AWARDS

- **1st Place: SIT x Target Media x People's Association - BeyondTheScreen** July 2023 - Apr 2024
 - Developed NFC integrated interface for users to interact with ads from digital display panels (DDP)
 - Utilised bluetooth scanners to track user interactions with DDPs, and display personalised content
 - Implemented a CMS for advertisers to manage and update content, and track user interaction analytics

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