

CURRICULUM VITAE

PROFILE

Student at SIT-UoG (University of Glasgow) with a passion in achieving academic and professional excellence in both the Computer Science and Artificial Intelligence industries. Currently pursuing a degree in Computing Science with a diploma specialization in predictive analytics. Always keen to look for opportunities to improve technical skills such as learning multiple programming languages, Machine Learning, Deep Learning, Large Language Models (LLMs), Software Development as well as keeping abreast with latest frameworks and data science.

EDUCATION

SIT-UoG Joint Degree (University of Glasgow) Computing Science	Aug 2023 – Present <i>Expected 2026</i>
Ngee Ann Polytechnic Financial Informatics (Financial Analytics Specialization)	Apr 2018 – Apr 2021

PROJECTS

CloudCheck (DELL Cloud Native Award Winner) cloudcheckapp.vercel.app

- Gen-AI Image Detection Tool that leverages on Federated Learning and Cloud technologies
- Designed and implemented systems designs for efficient management of cloud native technologies using Docker and Kubernetes.
- Communications include gRPC, RESTful and Envoy
- URL listed “/pitch” shows slide deck fully coded in React.js

Chrome Extension Research Chatbot using Large Language Models (In-Progress)

- Implemented Retrieval Augmented Generation (RAG) which uses vector databases (Qdrant) for Similarity Search
- Designed AI Agents that does query refining and planning using Prompt Engineering techniques such as Few-shot Learning, Chain-of-thoughts and ReAct etc. to better improve quality
- Uses React.js, Python (Flask) where all the machine learning via LLM is done

LLM Integration with Mobile Handheld Devices - Personal Assistant (In-Progress)

- Build **local** quantized LLM models for mobile device computability
- Implement Retrieval Augmented Generation for context to specific use case
- Finetune and train open-source LLM models **locally** for user privacy (No third-party APIs)

GlyphOps

www.glyphops.com

- Built a full-stack website with Next.js as the frontend, Express.js as backend together with MySQL serving as database
- that allows for successful CRUD Operations while implementing Role-Based Access Control.
- Self-hosted the website on Linux Server (Ubuntu) on AWS EC2 and utilised Nginx as a reverse web proxy to serve
- the Next.js webpage via the EC2 instance.

Predictive Analytics – Grade prediction based on student behavior

- Utilised libraries such as TensorFlow, Keras, pandas to build Regression and Classification Decision Tree models
- Optimized and fine-tuned parameters using GridSearchCV and k-folds
- Performance metrics accuracy

Deep Learning - Natural Language Processing and Image Detection

- Used CNN for Image Detection and RNN for Text prediction
- Assignment for CNN was featured at Ngee Ann Polytechnic Open House 2021

WORK EXPERIENCE

3M Singapore – Internship

Customer Relationship Management Developer

- Assisted the Sales & Marketing Team and mentored by the Asia Marketing Operations Leader (Sales) to develop and streamline business processes through RPA and Data Analytics with Data Visualization.

3M Singapore – Contract Worker

Customer Relationship Management Developer

- Offered as return contract to assist the Sales and Marketing team at 3M Singapore to develop and automate business processes for sales team using UiPath (RPA) and Excel Macros. Improving business processes by integrating my individual projects into the company's workflow.

CERTIFICATIONS AND AWARDS

- **DELL Cloud Native Docker Award Winner 2024**
- **Top 25/250 (10%)** for OpenAI x Govtech Hackathon 2024
- **Finalist** for AWS Hackathon 2019
- **Ranked “Top 50”** in Shopee “I am the best Coder” Challenge 2019
- Edusave Good Progress Award 2020
- IBM Introduction to Deep Learning & Neural Networks with Keras

SKILLS

Python (Machine Learning/ Deep Learning)

Flask

C#, C

Java

Assembly

Vanilla JS/HTML/CSS

TypeScript

React

MySQL/ NoSQL/ Vector Database

Large Language Models

Operating Systems (incl. RTOS)

Computer Networks

Object Oriented Programming

Salesforce Lightning

UiPath RPA

PowerBI

Microsoft Excel, PPT, Word, Visio

Web Development

Proficient in English and Mandarin

HOBBIES

Machine learning/ Large Language Model/AI Projects, Software Development, Reading, Gym