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23 George st, Mortdale, Sydney, NSW, Auastrlia Full Working Right in Australia Temporary Graduate Visa(485)

#### **EDUCATION**

The University of Sydney, Sydney, NSW, Australia

# Bachelor of Advanced computing and Bachelor of Commerce,

Computer Science and Business Information Systems,

Graduated July 2025, Grade: Distinction

#### **SKILLS**

Languages: Python, C, C++, Java, SQL, LATEX, HTML, CSS, JavaScript, Kotlin

Computer Skills: ML/DL, NLP, Transformers/RNN/CNN/LSTM/GCN..., Unsupervised learning, Randomized algorithms, Advanced Algorithms Design, Cloud with AWS, Mobile app development, Full stack Web development with node is ad react, Multimedia retrieval

Business/management skills: Agile and Scrum, Business Intelligence, Business Information Systems, Project management

Language skills: IELTS Score: 7.5. Studied in New Zealand since Year 9, with English as my primary language of communication ever since. Growing up in a Mandarin and Cantonese family, I have a relatively effective communication method in multilingual environments

## **Experiences**

## Casual AI Tuner:

December 2024 - Feburary 2025

Huiling tech, GuangZhou, China

Skills Utilized: php, Node.js, Machine Learning, Quantaxis, Data Preprocessing and Cleaning, Hyperparameter tuning

I served as a Casual AI Assistant at Huiling Technologies, a small Chinese firm. I was brought on board through referrals and was responsible for retraining and reimplementing the complete AI architecture, along with redesigning the models' inputs and outputs for a stock trading risk management system. This is built the foundations of my stock index prediction project.

# **PERSONAL PROJECTS**

Personal Portfolio Website:

screenshots/demo July 2025 - present of the projects viewable in my website

Skills Utilized: React, Node.js, Express, Framer Motion, JavaScript, HTML/CSS, Git, Deployment (Render)

Developed a full-stack responsive portfolio website showcasing professional projects and skills. Implemented modern UI/UX design with smooth animations, interactive project galleries with video thumbnails, downloadable documents, and a contact form with email integration. Features include dynamic project cards, multi-image displays, PDF downloads, and mobile-responsive design optimized for professional presentation. Check out https://github.com/qiyuansunsam/web Or check the website itself

# Sketch My Hair andriod application:

March 2025 - present

Skills Utilized: Kotlin, Gradle, Machine learning, mobile developments

This project is an Android hairstyle application that allows users to create and visualize different hair styles. Users can draw on a canvas with various tools and colors, select reference images for inspiration, and generate new hairstyles using AI. The app features a unified navigation interface with floating design elements that provide context-aware tools for drawing, reference selection, and style generation across three main tabs. This is a continuation of my sketch based image retrieval university project. Check out https://github.com/qiyuansunsam/smh.git

# Stock/Index Predictions with Quantaxis and LSTM:

June 2024 - present

Skills Utilized: Python, Quantaxis, Data Preprocessing and Cleaning, TensorFlow, Keras

Explored diverse methodologies to predict stock prices and market indices. Developed a quantitative trading bot and generated statistical reports predicting market consolidation, price convergence, and index fluctuations for risk management. Check out https://github.com/qiyuansunsam/Quant.git

# Exchange rate prediction:

July 2021 - present

Skills Utilized: Python, Tensorflow Keras, LSTM, proocessing, cleaning, and merging data

Developed a long-term project to predict AUD-CNY exchange rates for personal use wiht automatcially updating databases. Evolved the model from linear regression to an LSTM network, integrating real-time data via APIs and significantly improving predictive performance. Check out https://github.com/qiyuansunsam/exchange.git

# ChatGPT API for Chinese usage:

Febuary 2023 - June 2023

Skills Utilized: Python, Flask, HTML, JavaScript, CSS, cloud computing

Developed a web service to provide ChatGPT access in China back when it was not accessable by chinese ips, mirroring its UI and features like session management and code highlighting. Completed the primary build in two days, followed by five months of maintenance. Check out https://github.com/qiyuansunsam/ChatWeb.git

## Multiple choice questions generator:

Febuary 2023 - present

Skills Utilized: Python, Flask, HTML, JavaScript, CSS, openapi, geminiapi Developed an exam study aid that automates Multiple-Choice Question generation. The tool processes PDFs and context, queries LLMs (ChatGPT/Gemini) to create questions, and stores them in a topic-organized question bank that prevents duplicates.https://github.com/qiyuansunsam/learn.git

# Android mobile application on budgeting:

January 2025 - present

Skills Utilized: Java, AOI integrations, usability designs, xml and json data transfer structures.

Co-developed an Android budgeting application prototype. Integrated the Alipay API for automated transaction data retrieval and real-time expense tracking, focusing on a UI/UX designed for financial automation. This is a closed source project.

UNIVERSITY PROJECTS (NOTABLE) Research papaer: Methods of utilizing survey data for predicting building energy consumption using transformers and MLP with dataset merging, transformation, and DistilBERT:

June 2024 - December 2024

**Skills Utilized:** Python, Data Mining, Preprocessing and Cleaning, TensorFlow, Keras, Model designs and experiment structures, Encoder designs

Led a 4-person advanced capstone team (standard: 7), taking full responsibility for all ML/DL components due to team inexperience. Independently handled project objectives, method design, implementation, and personally finished 49 pages out of 50 of the core research paper. Acted as the primary client communicator and lead presenter.  $https://bitbucket.org/comp3988_fr10/comp3988_fr10_4p34/src/main/$ 

# Full (MERN) stack web Implementation:

March 2025 - June 2025

Skills Utilized: Mongodb, Express, React, Node js

Led a group project with a MERN stack due to team disengagement. responsible for developing approximately 70% of the backend and 90% of the frontend, initial architectures and all testing and debugging after the team was unable to manage the technology.

# Sketched based image retrieval on hair styles:

March 2025 - June 2025

Skills Utilized: Python, Machine Learning with torch, sketched based image retrieval, fastapi

Led the group project by designing architecture, responsible for designing and implementing a novel deep learning model for sketch-based hairstyle image retrieval for a hair style dataset not used for the same purpose anywhere on literature. Managed all ML-related tasks, including architecture design, data preprocessing, and augmentation, achieving a 0.99 Hit@1 score and delivering a functional web demo. Check out https://github.com/qiyuansunsam/SBIR.git

**INTERESTS** 

AI, ML/DL, Big data, Video Game Designs, Computer Vision, Generative AI and Large Language Models, Data Mining and Big Data, System Design and Architecture