Qiyuan (Sam) Sun

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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, Java, SQL, LaTeX, HTML, CSS, JavaScript, blueprint

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 js 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

PERSONAL PROJECTS

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.

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 - Decenber 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.

Full stack(MERN) 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