# TAM, Ka Ho Sam

Kowloon, HK | samkht3327.work@gmail.com | (+852) 9780 3747 | khtam-51a008256 | ash3327

## Education

**The Chinese University of Hong Kong** Expected Jul 2025

**B.Eng. in Artificial Intelligence: Systems and Technologies**

- **Major GPA:** 3.795/4.000
- **Awards:** *Dean's List:* 2021-22, 2022-23, 2023-24; *CSE Outstanding Academic Performance (Bronze),* 2023-24
- **Relevant Courses:** Python, C++, Statistical Analysis, Time Series, Applied Deep Learning, NLP

## Work Experience

**Machine Learning Intern**, Glassbox AI Limited, Sha Tin Jun 2024 – Nov 2024

- Developed a backend pipeline for automated data fetching from multiple APIs and performing LLM inference with **fine-tuned LLaMa** using **Python, Flask, and MySQL**
- Worked with **LLaMa and streamlit** for Chinese-to-sign-language translation task
- Studied temporal alignment techniques on gesture sequences, including **DTW and CTC loss**

## Projects

**Final Year Project: Invariant Hand Gesture Representation Learning with Contrastive Learning** | PyTorch Sep 2024 – Apr 2025

- Enhanced model generalization over unseen data classes (static hand gestures) with few-shot inputs
- Implemented curriculum-based augmentations (**curriculum learning**) with large unlabelled synthetic datasets (MANO) alongside labelled data
- Explored **temporal contrastive learning techniques** on dynamic gesture recognition by testing on LSTM

**Exploring and Applying Computer Vision Techniques** | Python, PyTorch Jun 2023 – Apr 2024

- Evaluated generalizability of **Vision Transformers (ViTs)** on small-scale datasets compared to CNNs
- Improved stability of instance tracking on video using **YOLOv8**-based object detection with custom algorithm

**Android Event-Planning App** | Java Mar 2023 – Jan 2024

- Managed end-to-end **software development cycle** from UI design, core functions to backend integration
- Optimized data handling with RoomDatabase and **SQL** queries

**Deep Q-Learning Agent for Third-Person Shooter Game** | Python, Keras Oct 2022 – Dec 2022

- Collaborated in a team of 2 to create a custom Python Gym environment for a 2D third-person shooter game
- Implemented an AI agent with **Deep Q-Network** that increased average kill streak by 30× and extended survival time by 4× over baseline

## Skills

**Programming:** Python, Java; C/C++
**Web & Backend:** Flask, MySQL; Git, Docker, Linux; HTML/CSS, JavaScript; React
**AI/ML:** PyTorch, TensorFlow, Keras, Pandas, NumPy, OpenCV, Matplotlib
**Specializations:** Computer Vision (ResNet, U-Net, ViT, GANs, Diffusion), Natural Language Processing (LSTM, BERT, LLaMa), Reinforcement Learning (DQN)
**Language:** Cantonese (Native), English (Fluent), Mandarin (Native)