

Haozhou Xu

hax040@ucsd.edu • (852) 6794-3142 • www.linkedin.com/in/haozhou-xu-858062288/

EDUCATION

University of California, San Diego San Diego, United States
Master of Science in Computer Science Sep 2024 – Jun 2026

University of Hong Kong Hong Kong
Bachelor of Engineering (Major in Computer Science, Minor in Statistics) Sep 2020 – Jun 2024

- ◇ CGPA: 3.8/4.3 (6/126 Ranked, **First Degree Honor**)
- ◇ Rosita King Ho Scholarship, Dean's Honours List

WORK EXPERIENCE

University of Hong Kong - Faculty of Architecture Hong Kong
Research Assistant | *Co-supervised by Prof. Eric Schuldensfrei and Prof. Hayden So* Oct 2023 – Aug 2024

- ◇ Utilized **OpenCV**, **Hugging Face** tools for street condition checking and point cloud generation.
- ◇ Analysed the Hong Kong COVID-19 outbreak period mobility patterns by **Graph Networks**.
- ◇ Developed ML systems to track human patterns and infection risks with **97%** accuracy.
- ◇ Implemented sensor quadratic self-alignment algorithm with **95.8%** accuracy.

University of Hong Kong - Department of Computer Science Hong Kong
Research Assistant | *Supervised by Dr. Hengshuang Zhao* May 2023 – Aug 2023

- ◇ Explored methods for enhancing 3D perception in various Computer Vision applications.
- ◇ Modified **Open3D**, **Pointcept** libraries, integrated **DinoV2** for efficient 2D feature extraction.
- ◇ Evaluated by the **ScanNet** dataset, showcasing the benefits of specific features for 3D perception.
- ◇ Adjusted **CUDA** code for projection, and achieved at least **3%** improvement in segmentation.

AsiaInfo Technology Nanjing, China
Software Engineer Internship May 2022 – Aug 2022

- ◇ Java Web development for a Fortune 500 company's customer system by **Spring Framework**.
- ◇ Involved in **JavaScript** writing, module testing, **Oracle DB** handling and customer info analysis.
- ◇ Implemented **concurrent** processing by **Go** to improve system efficiency with dynamic features.

SELECTED PROJECTS

BidFlowAI Startup [Project Site](#) San Diego, United States

- ◇ Leveraged ML models to transform natural language into standardized procurement documents.
- ◇ Implemented data retrieval and auto conversation systems by integrating **Pinecone** and **OpenAI**.
- ◇ Efficient Web development by utilizing **Flask**, **Bubble**, deployed project on **Heroku** server.
- ◇ Conducted module testing and API documentation utilizing **Postman** to ensure seamless services.

Personalized Career Consulting System (UG Final Year Project) [Project Site](#) Hong Kong

- ◇ Collected data by **Selenium** and trained Recommender System for career consulting (**0.82** F1 score).
- ◇ Implemented **NodeJS**, **ReactJS**, and **Flask** for Web design, and integrated into service bus.
- ◇ Created concurrent **RESTful API** and use the **Gunicorn** server for enhanced scalability.
- ◇ Established remote service on **MS Azure** together with **Azure DB** and **Azure AI** services.

CASH Algo Trading Challenge 2023 (Global) [Competition Homepage](#) Hong Kong

- ◇ Performed auto-trading, analysed financial data and combined **R-Breaker** with **ML** models.
- ◇ Conducted real-time simulation and optimization, won the **1st** in competition with **3.16%** weekly return.

Kaggle Competitions Hong Kong

- ◇ Conducted statistical analysis, feature engineering, and machine learning implementations.
- ◇ Achieved **67/4821**, **1/42** and **2/42** in House Price, ICU time and Mortality Rate Competitions.

EXTRACURRICULAR ACTIVITIES

Teaching Assistant (HKU COMP-2113: 2022 Fall, 2023 Fall) Sep 2022 – Jan 2024

Library Volunteer Jul 2021

PUBLICATIONS

Wireless Sensor Network for Spatial Contact Tracing (**First Author**, Mobicom2024 submitted) 2024

SKILLS

- ◇ **Software:** C/C++, Java, Flask/NodeJS/React/XML, MySQL/Oracle DB/MongoDB, Bubble, Spring, Go.
- ◇ **Machine Learning:** Python, R, PyTorch, OpenCV, Open3D, Hugging Face, Statistics Knowledge.
- ◇ **Tools:** Docker, Git, Linux, RESTful API, Apache Tomcat, MS Azure, Heroku, Postman, Pinecone.