

Haozhou Xu

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EDUCATION

University of California, San Diego <i>Master of Science in Computer Science (CGPA: 4.0/4.0)</i>	San Diego, United States Sep 2024 – Jun 2026
University of Hong Kong <i>Bachelor of Engineering (Major in Computer Science, Minor in Statistics)</i> - CGPA: 3.8/4.0 (<i>First Degree Honor, Rosita King Ho Scholarship, Dean's Honours List</i>)	Hong Kong Sep 2020 – Jun 2024

WORK EXPERIENCE

Amazon <i>Incoming Software Engineer Intern (ML)</i>	Austin, United States Jun 2025 – Sep 2025
University of Hong Kong - Faculty of Architecture <i>Research Assistant</i> - Utilized OpenCV , VLM tools for street condition checking and point cloud generation. - Analysed the Hong Kong COVID-19 outbreak period mobility patterns by Multimodal Models . - Developed ML Localization system to track human patterns and infection risks with 97% accuracy. - Implemented sensor quadratic self-alignment algorithm with 95.8% accuracy.	Hong Kong Oct 2023 – Aug 2024
University of Hong Kong - Department of Computer Science <i>Research Intern</i> - 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.	Hong Kong May 2023 – Aug 2023
AsiaInfo Technology <i>Software Engineer Intern</i> - Java API 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 Distributed processing and SQL Querying to handle over 10000 parallel requests.	Nanjing, China May 2022 – Aug 2022

SELECTED PROJECTS

Concept Learning Research - Utilized Semantic Segmentation , Encoding and Hierarchy Clustering for knowledge construction. - Implemented VLM and CLIP for caption and LLM for data parsing, reasoning with CBM structure.	San Diego, United States
BidFlowAI Startup Project Site - Leveraged RAG system 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 , Uvicorn , deployed project on Heroku server. - Conducted module testing and API documentation utilizing Postman to ensure seamless services.	San Diego, United States
Personalized Career Consulting System (UG Final Year Project) Project Site - 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. - Established remote service on MS Azure together with Azure DB and Azure AI services.	Hong Kong
CASH Algo Trading Challenge 2023 (Global) Competition Site - Performed auto-trading, analysed financial data and combined R-Breaker with Transformers . - Conducted real-time simulation and optimization, won the 1st in competition with 3.16% weekly return.	Hong Kong
Kaggle Competitions - 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.	Hong Kong

PUBLICATIONS

Improving Pandemic Preparedness with Smart Lighting Compatible BLE and CO2 Grid Sensing	2024
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SKILLS

- ✧ **Software:** Python, Java, C/C++, Flask/Node/React/XML, MySQL/Oracle DB/MongoDB, Swift, Spring.
- ✧ **Machine Learning:** R, PyTorch, Tensorflow, OpenCV, Open3D, Keras, RL, Vision, NLP, Statistics.
- ✧ **Tools:** Docker, Git, Linux, RESTful API, Apache Tomcat, MS Azure, AWS, GPU, ROS, Pinecone.