# XIE JIANGSHAN

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### **EDUCATION**

#### The Chinese University of Hong Kong

Hong Kong

Master of Science in Financial Technology

Sep 2025 - May 2026

**B.Eng. in Systems Engineering and Engineering Management** *GPA*: 3.216/4.000 Sep 2021 – Jun 2025 Coursework: Statistics, Stochastic Models, Machine Learning, Data Science, Operational Research, etc.

EXPERIENCE

# CUHK Jockey Club AI for the Future Project

Hong Kong

Web Application Developer Intern

Jun 2025 - Aug 2025

- Independently developed a Nuxt3 (Vue-based) front-end website and contributed to multiple existing platforms by optimizing page layouts, components, and routing, reducing page load time by approximately 30% through asset optimization and code splitting.
- Improved UI/UX by refining component structure, replacing visual assets, implementing multilingual support and cookie settings, and ensuring responsive designs for desktop, tablet, and mobile devices.
- Engineered interactive 2D animations and visual effects with HTML5 Canvas, such as a real-time animated clock component, improving user engagement and front-end visual interactivity.
- Collaborated across frontend and backend teams to deploy scalable and secure web applications.

## CUHK Office of University General Education

Hong Kong

Web Application Developer (Part-time Contract)

Sep 2024 - Jan 2025

- Enhanced system functions for greater usability and performance, based on real-world usage.
- Composed a detailed user guide to support non-technical staff in daily operations and troubleshooting.
- Implemented bug fixes and interface improvements based on user feedback from university admin staff.

#### CUHK Office of University General Education

Hong Kong

Information System and Inventory Management Intern

Jun 2024 - Aug 2024

- Developed, implemented, and managed a robust information database for departmental book collections, ensuring efficient cataloging and retrieval of resources.
- Utilized MongoDB to design and manage backend data models, applying indexing to optimize query performance and efficiently handle user accounts, book lending records, and library resource information.
- Developed a full-stack web application hosted on Glitch, enabling users to search available books, facilitate borrowing and returning processes, and view comprehensive borrowing history records.

#### SKILLS

Language Skills: Proficient in Mandarin, Cantonese, and English.

Technical Skills: Vue, Vite, Python, SQL, MongoDB, Three.js, Canvas/WebGL.

Tools: Git, Linux, Cloudflare, n8n, LaTeX, AI tools, Microsoft Office, and Photoshop.

### ACADEMIC PROJECTS

# Study on the Application of Zero-Shot TTS Systems in Data Augmentation for Speech Emotion Recognition (SER)

Team Leader | Advisor: Prof. WU, Xixin

Jul 2024 – May 2025

- Conducted research on Zero-Shot TTS models (e.g. VALL-E-X) to synthesize emotional speech for addressing data scarcity in SER.
- Synthesized 10,000+ speech samples from IEMOCAP, achieving an 8.563% UA improvement over the baseline across three experimental settings.

# Study on the Application of Operational Research in Resource Optimization and Productivity Improvement

Team Leader | Advisor: Prof. Arnab Bisi

Jul 2023 - Aug 2023

- Investigated UPS operational processes and built mathematical models to evaluate the effect of operations research on resource efficiency.
- Published a research thesis in Advances in Economics Management and Political Sciences (61(1): 257–264).