

DANXUAN LIANG

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EDUCATION

Hong Kong University of Science and Technology

MPhil in Computer Science and Engineering

- Supervisor: Professor Huamin QU

Hong Kong, China

Sep. 2025 – Present

Hong Kong University of Science and Technology

BEng in Computer Science with Extended Major in Artificial Intelligence

Hong Kong, China

Sep. 2021 – May. 2025

University of Illinois, Urbana-Champaign

Exchange Student, Computer Science

IL, USA

Aug. 2023 – Dec. 2023

RESEARCH INTERESTS

VR/XR, Interactive System Design, Human-Computer Interaction, Education Technology, AI-driven Educational Multimedia, LLM for Coding

PUBLICATIONS

Designing Scaffolding Strategies for Conversational Agents in Dialog Task of Neurocognitive Disorders Screening.

J Hu, J Li, Y Zeng, D Yang, **D Liang**, H Meng, X Ma

<https://doi.org/10.1145/3613904.3642960>

CHI 2024. May. 2024

PROJECT EXPERIENCE

GAVIS: VR English Speaking Program (awarded HKD \$20 million from QEF)

HKUST

Advisor: **Prof. Huamin QU** (VisLab, HKUST)

Jul. 2025 - Present

- VR software development (scenes, UI, backend integration) in Unity on Meta Quest.
- Developed scoring logic for English speech and non-verbal expression (using gesture data).
- Developed a presentation practice feature.

Stage Lighting Education in Metaverse

Texas A&M University (Remote)

Advisor: **Prof. Wai Tong** (VVAI Lab, TAMU)

Sep. 2024 - Present

- Built an intelligent performance evaluation system for VR stage lighting education in Unity using open-source models.
- Independently tested the prototype with a HKAPA lighting expert and iterated the design based on their feedback.

Designing Conversational Agents for Neurocognitive Disorders Screening

HKUST

Advisor: **Prof. Xiaojuan Ma** (CSE, HKUST)

Feb. 2023 - May. 2024

Presentation Video: [link](#)

- Applied scaffolding theory to design the dialog flow and developed a prototype of the conversational agent.
- Assisted in data coding, specifically handling video files obtained from cooperating hospitals.
- Collaborated in the development of the subject-end interface and contributed to UI design and testing.
- Co-authored a research paper related to the project.

INDUSTRIAL EXPERIENCE

Hong Kong Hospital Authority, Summer IT Intern

Kowloon Bay, Hong Kong

Jun. 2024 – Aug. 2024

- Implemented new features for eHealth, a centralized platform for healthcare data sharing.
- Performed data analysis and backup operations to ensure system security and integrity.

Quantum Digital Health Ltd., Digital Marketing Intern

Cyberport, Hong Kong

May. 2023 - Jul. 2023

- Improved UX design of "JianKangPai," a health assessment WeChat mini-program using facial scanning technology for elderly users.
- Conducted market analysis and supported marketing strategy development for Mainland China.
- Assisted in organizing an exhibition at the World Artificial Intelligence Conference (WAIC).

Soqqle Ltd., Game Developer & UI/UX Designer

HKSTP, Hong Kong

Jan. 2022 – Mar. 2022

- Developed "Classlet," a 3D metaverse educational app for situational teaching using Unity.

- Designed a character clothing system with UI, MongoDB database, and C# scripting.
- Built a Redis-based broadcast sockets system for multiplayer functionality.

HONORS

• Dean's List	2024
• Finalist of The Best UROP Mini-conference Paper Award, HKUST	2024
• JUPAS Scholarship Awardee, HKUST	2021

SELECTED COURSES

Human-Computer Interaction	Operating System	Natural Language Processing
Algorithm	Matrix and Linear Algebra	Parallel Programming
Machine Learning	Software Engineering	C++ Programming
Calculus	Computer Organization	

SKILLS

Programming: Python (Pytorch, Tensorflow, Pandas), C++, C# (Unity), Java, Javascript (React.js), HTML, CSS

English: IELTS: 7.5