

Wengxi Li

CONTACT INFORMATION

18 Tat Hong Avenue
Kowloon Tong, Kowloon,
Hong Kong, China
+862 6747-7850

✉ wengxili65@gmail.edu
🐙 github.com/imerlwx
🌐 imerlwx.github.io
✂ @LiWengxi

RESEARCH INTERESTS

Human-AI Interaction, Natural Language Processing, Information Space, Data Visualization

EDUCATION

University of Michigan, Ann Arbor, MI

Master of Science in *Electrical & Computer Engineering*, GPA: 4.00/4.00

April 2023

University College London, London, United Kingdom

Master of Science with **Distinction** in *Medical Image Computing*

August 2021

Beijing Normal University, Beijing, China

Bachelor of Science in *Physics*, GPA: 3.60/4.00

June 2020

RESEARCH EXPERIENCE

City University of Hong Kong, Hong Kong, China

2024 - present

Research Assistant (Advisor: Dr. Can Liu)

[Paper]

I research how GenAI and speech interfaces support human *cognitive processes*. I conducted focus group studies and longitudinal diary studies (n=12) to analyze how people use speech for ideation and writing. Through *mixed-methods analysis* of interview transcripts and interaction logs, I identified patterns in how users leverage AI to assist them in creative writing with speech. Based on these findings, I am *developing an organic interface* that helps users explore ideas through natural dictation, with AI-powered suggestions that respond to their thinking process.

Stanford University, Stanford, CA, USA

2023-2024

Research Assistant (Advisor: Dr. Hariharan Subramonyam)

[Paper]

I investigate human-AI collaboration in the creation of *personalized educational environments*. I created an *intelligent tutor system* that combines large language models with human input to extract and structure knowledge from video content. The system includes an interactive interface where instructors can refine AI-generated content organization through *modular adjustments*, and introduced a Bayesian model to build a student model to provide *adaptive content generation*.

University of Michigan, Ann Arbor, MI, USA

2023

Course Project (Advisor: Dr. Anhong Guo)

[Code]

I developed a human-AI collaborative system for *ergonomic workplace assessment*. The system uses a *fine-tuned vision-language model* (BLIP) to analyze workplace images and identify potential ergonomic issues. I designed an interface that enables experts to review and correct AI predictions, with the feedback used to improve model performance. The system achieved 74% accuracy in identifying ergonomic risks after incorporating human feedback from 50 expert-reviewed cases.

University College London, London, UK

2020-2021

Research Assistant (Advisors: Dr. Antonio Stanziola, Dr. Bradley Treeby)

[Poster]

I created an *adaptive ultrasonic neurostimulation system* that combines geometric algorithms with deep learning. The system uses Time Reversal and Geometric Beamforming to track focal points during head motion, supported by a neural network that predicts phase adjustments. Through simulation studies, the system maintained targeting accuracy within 0.5mm during head movements up to 15 degrees.

PUBLICATIONS	<p>1 [arXiv] Wengxi Li, Roy Pea, Nick Haber, Hari Subramonyam. Transforming Programming Videos into Personalized Tutoring Experiences: An LLM-Driven Cognitive Apprenticeship Approach. <i>Under Review of The 26th International Conference on Artificial Intelligence in Education</i></p> <p>2 [CHI'25 EA] Xuyu Yang*, Wengxi Li*, Matthew G. Lee, Zhuoyang Li, J.D. Zamfirescu-Pereira, and Can Liu. Rambler in the Wild: A Diary Study of LLM-Assisted Writing With Speech. <i>Conditional Accept of Extended Abstracts of the 2025 Conference on Human Factors in Computing Systems</i></p>						
SKILLS	<ul style="list-style-type: none"> • AI & Machine Learning: LLM prompt engineering, OpenAI API, ML model fine-tuning • Software Development: Python, JavaScript, C/C++, Web development frameworks • Data Analysis: R, SQL, statistical analysis, qualitative research methods • Research Methods: User studies, statistical analysis, mixed-methods research design • Languages: Mandarin Chinese (native), English (fluent) 						
SERVICE	<p>Volunteer for: UIST'23 (Win the T-shirt Design Contest!)</p> <p>Reviewer for: ChineseCHI'24</p> <p>Interviewer for: Microscopic survey of China's real progress (Completed 150 household surveys)</p>						
HONORS AND AWARDS	<table> <tr> <td>The First-Class Fellowships (Top 5%) of Beijing Normal University</td> <td>2019</td> </tr> <tr> <td>The First-Class Competition Scholarship (Top 5%) of Beijing Normal University</td> <td>2018</td> </tr> <tr> <td>Meritorious Winner (Top 7%) of Mathematical Contest in Modeling</td> <td>2018</td> </tr> </table>	The First-Class Fellowships (Top 5%) of Beijing Normal University	2019	The First-Class Competition Scholarship (Top 5%) of Beijing Normal University	2018	Meritorious Winner (Top 7%) of Mathematical Contest in Modeling	2018
The First-Class Fellowships (Top 5%) of Beijing Normal University	2019						
The First-Class Competition Scholarship (Top 5%) of Beijing Normal University	2018						
Meritorious Winner (Top 7%) of Mathematical Contest in Modeling	2018						