Kexue 'Shirley' Fu

(+852) 53077659 kexuefu2-c@my.cityu.edu.hk https://fukexuexue.github.io/

EDUCATION

School of Creative Media, City University of Hong Kong

Research graduate student in Human-Computer Interaction

School of Management Science, Chongqing University

B.E. in Intelligent Construction Management

2019 - 2023

PUBLICATIONS

Major Peer-reviewed Conference and Journal Papers

- 1. [TOCHI] Kexue Fu*, Yawen Zhang*, Hiu Man Ho, Wenzhe Hu, RAY LC, Qinyuan Lei, Shengdong Zhao. Crafting Memorable Science Stories: Harnessing the Power of Narrative Peaks in Online Science Videos. *Under review of ACM Transactions on Computer-Human Interaction (TOCHI)*
- [DIS'24] Kexue Fu, Ruishan Wu, Yuying Tang, Yixin Chen, Bowen Liu, and RAY LC. "Being Eroded, Piece by Piece": Enhancing Engagement and Storytelling in Cultural Heritage Dissemination by Exhibiting GenAI Co-Creation Artifacts. Proceedings of the 2024 Designing Interactive Systems Conference https://doi.org/10.1145/3643834.3660711
- 3. [CHI'23] Kexue Fu*, Yixin Chen*, Jiaxun Cao, Xin Tong, and RAY LC. "I Am a Mirror Dweller": Probing the Unique Strategies Users Take to Communicate in the Context of Mirrors in Social Virtual Reality. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* https://doi.org/10.1145/3544548.3581464
- 4. [CSCW'25] Xiaoyu Chang, Fan Zhang, Kexue Fu, Carla Diana, Wendy Ju, RAY LC. A Constructed Response: Designing and Choreographing Robot Arm Movements in Collaborative Dance Improvisation. *Under revision of Proceedings of the ACM on Human-Computer Interaction*
- 5. [CHI'25] Fan Zhang, Molin Li, Xiaoyu Chang, Kexue Fu, Richard William Allen, RAY LC. "Becoming My Own Audience": How Dancers React to Avatars Unlike Themselves in Motion Capture-Supported Live Improvisational Performance. *Under revision of Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*

Minor Lightly-Reviewed Posters, Extended Abstracts, Workshop Papers, and Artworks

- 1. Sijia Liu, RAY LC, Kexue Fu, Qian Wan, Pinyao Liu, Jussi Holopainen. Dreamscaping: Supporting Creativity By Drawing Inspiration from Dreams. C&C '24: Proceedings of the 16th Conference on Creativity Cognition (C&C'24 Workshop)
- 2. RAY LC, Sijia Liu, Latisha Besariani Hendra, Kexue Fu. TIME ENOUGH: Generative AI Visions of Climate Change as Cave Paintings of the Future. C&C '24: Proceedings of the 16th Conference on Creativity Cognition (C&C'24 Artwork)
- 3. RAY LC, JD Zamfirescu-Pereira, Natalie Friedman, Kexue Fu, Yanheng Li, Wendy Ju. "Sit on me please": Investigating Perception of Furniture Robotic Movements Using Video Prototyping. Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI'24 EA)

On going WORK

Enhancing Digital Learning through Science Communication Narrative Design with Narrative Peaks 03/2024 - Present

- Role: Project leader
- PIs: Prof.Shengdong Zhao(HCI, CityUHK) and Prof.Qinyuan Lei(HCI, CityUHK)
- Participation: Developed project ideas from the ground up, including conducting literature reviews, designing experiments, and implementing pilot testing and workshop studies, leading to an empirical project submitted to TOCHI. Currently conducting artifact work to explore interface design and interaction paradigms for writing science communication narratives with narrative peaks.

Integrating Human Feedback and Neural Data to Enhance Artistic Control in GenAI Systems 02/2024 - Present

- Role: Student Co-PI, collaborating with Dr. Yueyuan Zheng (CogSci, HKUST)
- PIs: Prof.RAY LC (HCI, CityUHK), Prof.Janet Hsiao (CogSci, HKUST), Prof.Antoni B. Chan (CS, CityUHK), Prof. Jixing Li (Linguistics, CityUHK)
- Participation: In charge of designing EEG and eye-tracking experiments(developed experimental stimuli, procedures, and interfaces) and independently created the textto-image datasets for the experiments. Conducted pilot studies and analyzed EEG and eye-tracking data used for LLaMA modal fine-tuning and contributed to writing research grant proposals for the CRF and managed overall project coordination.

AWARDS AND Honors • Postgraduate Studentship, CityUHK

09/2023-current

• Research Tuition Scholarship, CityUHK

08/2024

SIGCHI Gary madson travel award

02/2023

• Meritorious winner Mathematical Contest in Modeling(MCM)

04/2021

SKILLS

Languages: Chinese, English

Programming: Python, Web development, MATLAB, R.

Design: Figma, Tableau, Revit, AutoCAD

Research Methods: Experiment design(Survey design, EEG and Eye-tracking), Behavioral Study, Quantitative Analysis, Interview, Observation, Ethnographic Study, Qualitative Analysis and Study Design

ACADEMIC **SERVICES**

Teaching Assistant for: SM4712A Graduation Thesis / Project CityUHK Reviewer for: CHI'25, CHI'24, ChineseCHI'23, SIGGRAPH Asia'24

Volunteer for: CHI PLAY'23, C&C'24

Conference Service for: CHI'24 Section Chair for Creative Practices, Arts and AI

OTHER **PROIECTS** Innovative Mobility Design Integrated into an Energy and Cooling Self-Adaptive City Finalist in the Innovation Competition for Construction Engineering and Management. 02/2023 – 06/2023

Automatic Generation of Architectural Renderings Using Neural Networks An undergraduate research project at the School of Big Data and Software Engineering, Chongqing Univer-06/2020 - 10/2021 sity (CQU).

Data visualization of world happiness report Analyzed and visualized data to reveal regional trends and extreme comparisons, using vector graphics for clear storytelling. 05/2022

Building a Life-cycle Carbon Footprint Retrieval System in the Construction Industry Based on a Knowledge Graph Built a life-cycle carbon footprint retrieval Q&A system based on the neo4j knowledge graph framework. 10/2021 - 12/2021