KEXUE 'SHIRLEY' FU PH.D.

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EDUCATION

School of Creative Media, City University of Hong Kong — Hong Kong, SAR
Second year Ph.D. candidate in Human-Computer Interactuin — 2023 - Current
- Advisor: Prof. RAY LC
- Committee: Prof. Zhicong Lu, Prof. Kening Zhu

School of Management Science, Chongqing University — Chongqing, China
B.E. in Industrial Engneering — 2019 - 2023

PUBLICATIONS

Major Peer-reviewed Conference and Journal Papers

1. **[TOCHI] First author manuscripts under review** Investigating Narrative Structures for Enhancing Knowledge Retention in Science Communication (Title Modified for Anonymity). *ACM Transactions on Computer-Human Interaction (TOCHI)*

2. **[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'24] Under Revision (co-author)** Exploring Human-Robot Collaboration in Dance Improvisation: Designing and Adapting Movements with Robotic Arms (Title Modified for Anonymity). *In Proceedings of the ACM on Human- Computer Interaction*

5. **[CHI'24] Under Review(co-author)** Exploring Dancer Responses to Non-Human Avatars in Motion Capture-Supported Improvisational Performances (Title Modified for Anonymity). *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*

6. **[CHI'24] Under Review (co-author)** Enhancing Engagement with Performative Intangible Cultural Heritage Through Spatialized Audio Interaction in Virtual Reality (Title Modified for Anonymity). *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*

7. **[UIST'25] First Author Manuscript in Preparation:** Automated Creation of Engaging and Effective Science Communication Scripts with Narrative Peaks (Title Modified for Anonymity). *Proceedings of the 38th Annual ACM Symposium on User Interface Software and Technology*

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)*

GRANTS APPLICATION

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

- **Application:** General Research Fund (Passed the first round)
- **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 the design and data collection of EEG and eye-tracking experiments, developed experimental interfaces, contributed to writing research grant proposals, and managed overall project coordination.

AWARDS AND HONORS

- **Postgraduate Studentship, CityUHK** 230,400HKD/year(300,00USD/year)   09/2023-current
- **Research Tuition Scholarship, CityUHK** 42000HKD(4600USD)   08/2024
- **SIGCHI Gary Madson travel award** 2500USD   02/2023
- **Meritorious winner** Mathematical Contest in Modeling(MCM)   04/2021

SKILLS

Languages: Chinese, English

Programming: `Python`, `Web development(Node.js,React.js)`, `MATLAB`, `R`.

Design: Figma, Tableau, Revit, AutoCAD

Quantitative Methods: Experiment design(Survey design, EEG and Eye-tracking), Behavioral Study, Quantitative Analysis

Qualitative Methods: Interview, Observation, Ethnographic Study, Qualitative Analysis and Study Design

ACADEMIC SERVICES

Teaching Assistant for: *SM4712A Graduation Thesis / Project CityUHK*

Reviewers for: *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 PROJECTS

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 University (CQU).   *06/2020 – 10/2021*

Data visualization of world happiness report Analyzed and visualized data to reveal regional trends and extreme comparisons, using vector graphics for clear storytelling.   *03/2022 – 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*