

Dr. Meng XIA

Basic Information

Gender: female Birthday: 1993-5 Email: mengxia@andrew.cmu.edu Homepage: xiameng.org

Research interest: Data Visualization, Human Computer Interaction, and Education. Using visual analytics and emerging AI techniques to improve education.

Education Background and Research Experience

2022.1-present	Carnegie Mellon University, Human Computer Interaction Institute, Postdoc
2021.1-2021.12	KAIST, Postdoctoral researcher, School of Computing, Postdoc
2020.9-2021.3	Hong Kong University of Science and Technology, CSE, Postdoc
2017.8-2020.8	Hong Kong University of Science and Technology, PhD of CSE
2019.6-2019.10	University of Toronto, Visiting student of CSE
2014.9-2017.3	Zhejiang University, State Key Laboratory of CAD&CG, Master of CSE
2009.9-2013.7	Hangzhou Dianzi University, Bachelor of Literature in English (second degree)
2009.9-2013.7	Hangzhou Dianzi University, Bachelor of CSE

Publications

- **Understanding Distributed Tutorship in Online Language Tutoring**, Meng Xia, Yankun Zhao, Mehmet Hamza Erol, Jihyeong Hong, Juho Kim, ACM LAK (Learning Analytics & Knowledge) 2022
- **RLens: A Computer-aided Visualization System for Supporting Reflection on Language Learning under Distributed Tutorship**, Meng Xia, Yankun Zhao*, Jihyeong Hong*, Mehmet Hamza Erol*, Taewook Kim, Juho Kim, L@S 2022
- **Persua: A Visual Interactive System to Enhance the Persuasiveness of Arguments in Online Discussion**, Meng Xia, Qian Zhu, Xingbo Wang, Fei Nie, Huamin Qu, Xiaojuan Ma, CSCW 2022
- **Bias-Aware Design for Informed Decisions: Raising Awareness of Self-Selection Bias in User Ratings and Reviews**, Qian Zhu, Leo Yu Ho Lo, Meng Xia, Zixin Chen, Xiaojuan Ma, CSCW 2022 (Accept with minor revision)
- **Exploring Interactions with Printed Data Visualizations in Augmented Reality**, Wai Tong, Zhutian Chen, Meng Xia, Leo Yu-Ho Lo, Linping Yuan, Benjamin Bach, Huamin Qu, IEEE VIS 2022, **Honorable Mention Award**
- **BlockLens: Visual Analytics of Student Coding Behaviors in Block-Based Programming Environments**, Sean Tsung, Huan Wei, Haotian Li, Meng Xia, Yong Wang, Huamin Qu, L@S 2022 (Work In Progress)
- **"It Feels Like Taking a Gamble": Exploring Perceptions, Practices, and Challenges of Using Makeup and Cosmetics for People with Visual Impairments**, Mingzhe Li*, Franchesca Spector*, Meng Xia*, Mina Oh*, Peter Cederberg, Yuqi Gong, Kristen Shinohara, Patrick Carrington, CHI2022
- **Mobile-Friendly Content Design for MOOCs: Challenges, Requirements, and Design Opportunities**, Jeongyeon Kim, Yubin Choi, Meng Xia, Juho Kim, CHI 2022, **Best Paper Award**
- **AlgoSolve: Supporting Subgoal Learning in Algorithmic Problem-Solving with Learnersourced Microtasks**, Kabdo Choi, Hyungyu Shin, Meng Xia, Juho Kim, CHI 2022
- **Explaining Air Quality Forecast for Verifying Domain Knowledge using Feature Importance Visualization**, Reshika Palaniyappan Velumani, Meng Xia, Jun Han, Chaoli Wang, Alexis Lau, Huamin Qu, IUI 2022
- **Investigating the Effects of Robot Engagement Communication on Learning from Demonstration**, Mingfei Sun, Zhenhui Peng, Meng Xia, Xiaojuan Ma, International Journal of Social Robotics 2021
- **QLens: Visual Analytics of Multi-step Problem-solving Behaviors for Improving Question Design**, Meng Xia, Reshika Palaniyappan Velumani, Yong Wang, Huamin Qu, Xiaojuan Ma, VIS 2020 (TVCG 2021)
- **Using Information Visualization to Promote Students' Reflection on "Gaming the system" in Online Learning**, Meng Xia, Yuya Asano, Joseph Jay Williams, Huamin Qu, Xiaojuan Ma, L@S 2020
- **SeqDynamics: Visual Analytics for Evaluating Online Problem-solving Dynamics**, Meng Xia, Min Xu, Chuan-en Lin, Ta-ying Cheng, Huamin Qu, Xiaojuan Ma, EuroVIS 2020

Predicting Student Performance in Interactive Online Question Pools Using Mouse Interactions, Huan Wei, Haotian Li, Meng Xia, Yong Wang, Huamin Qu, LAK 2020

- **Visual Analytics of Student Learning Behaviors on K-12 Mathematics E-learning Platforms**, Meng Xia, Huan Wei, Min Xu, Leo Yu Ho Lo, Yong Wang, Rong Zhang, Huamin Qu, IEEE VIS 2019 Posters, **Best Poster Award**
- **PeerLens: Peer-inspired Interactive Learning Path Planning in Online Question Pool**, Meng Xia, Mingfei Sun, Huan Wei, Qing Chen, Yong Wang, Lei Shi, Huamin Qu, Xiaojuan Ma, in Proc. of ACM SIGCHI 2019
- **Generation of Thangka Relief from Line Drawings**, Meng Xia, Rong Zhang, Ren Peng, Jinhui Yu, SCIENTIA SINICA Informationis 2018
- **EnsembleLens: Ensemble-based Visual Exploration of Anomaly Detection Algorithms with Multidimensional Data**, Ke Xu, Meng Xia, Xing Mu, Yun Wang, Nan Cao, TVCG 2018
- **Exploring How Software Developers Work with Mention Bot in GitHub**, Zhenhui Peng, Jeehoon Yoo, Meng Xia, Sunghun Kim, Xiaojuan Ma, in Proc. of Chinese CHI 2018
- **Estimating Emotional Intensity from Body Poses for Human-Robot Interaction**, Mingfei Sun, Yiqing Mou, Hongwen Xie, Meng Xia, Michelle Wong, Xiaojuan Ma, in Proc. of IEEE SMC 2018
- **Deep Spherical Panoramic Representation for 3D Shape Recognition**, Yuanli Feng, Meng Xia, Penglei Ji, Xiao Zhou, Ming Zeng, Xinguo Liu, Computer-Aided Design & Computer Graphics 2017
- **Designing Kinect Game based on Video Tracking**, Yinglie Zhang, Meng Xia, Linqiang Chen, Computer Engineering and Applications 2015

Scholarships and Prizes

Honorable Mention Award at IEEE VIS 2022

Best Paper Award at CHI 2022

SENG TOP Research Program Graduate Award, 2018-2019

Best Poster Award at IEEE VIS, 2019

Overseas Research Award, 2018-2019

National Scholarship, 2015 & 2011

Chairman of Postgraduate Association of Computer Science Department, 2014-2015

Outstanding graduate student and student cadres, 2014-2015

Teaching Experience

Instructor at CMU for 05432/05832 Personalized Online Learning, Fall 2022

Teaching Assistant Coordinator at HKUST, Spring 2020

Teaching Assistant at HKUST for COMP 2611 Computer Organization, Spring 2018

Teaching Assistant at HKUST for COMP 2611 Computer Organization, Fall 2018

Community Service

AC for CHI 2023, LBW CHI 2022

Program Committee member for IEEE VIS 2021, 2022

Reviewer of CHI 2019, 2020, 2021, 2022, VIS 2020, 2021, 2022; ChinaVis 2019, 2020, 2021, 2022; CSCW 2021, 2022

Personal skills

English IELTS 7.0, fluent

Programming JavaScript, Python, C/C++, C#, PHP, NoSQL (MongoDB)

Personality Optimistic, curious about new things, and hardworking

Specialty Project management and teamwork