Lijie Yao 姚李捷

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ABOUT ME

I am an **Assistant Professor** at **Xi'an Jiaotong-Liverpool University**. I obtained my Ph.D. degree from **Université Paris-Saclay**, supervised by Dr. Petra Isenberg and Prof. Anastasia Bezerianos. My dissertation on *Situated Visualization in Motion* received the **Ph.D. Thesis Prize** from AFIHM (annual recipient: 2). Previously, I was a postdoctoral and doctoral researcher at **INRIA**, AVIZ team, and a visiting researcher at **University of Calgary** hosted by Dr. Wesley Willett. My research interests include **visual analytics and visualization**, focusing on **visualization in motion**. I always explore the impact of motion characteristics and spatial factors on the perception, design, and user experience of visual representations.

WORK EXPERIENCE

Assistant Professor

Xi'an Jiaotong-Liverpool University

July 2024 - Present

Suzhou, Jiangsu, China

- Xi'an Jiaotong-Liverpool University is a Chinese private university founded in 2006 as a joint venture between the University of Liverpool and Xi'an Jiaotong University.
- My duties include research, teaching, and academic/administrative services.

Postdoctoral Researcher

Inria

Jan. 2024 - March 2024

Gif-Sur-Yevette, Île-de-France, France

- Inria is a French national institution for research in digital science and technology. It is ranked 18th in the global research institution and 7th in computer science.
- My duties included reviewing literature, conducting experiments, and writing papers.

Visiting Researcher

University of Calgary

July 2023 – Oct. 2023

Calgary, Alberta, Canada

- The University of Calgary is a Canadian public research university founded in 1908, prior to being instituted into a separate, autonomous university in 1966.
- My duties included reviewing literature and conducting experiments.

Teaching Assistant

Université Paris-Saclay

Sept. 2021 - Aug. 2023

Gif-Sur-Yevette, Île-de-France, France

- The Université Paris-Saclay is a french combined technological research institute and public research university. It is ranked 12th in the ARWU 2024 and 73rd in QS 2025.
- My duties included reviewing literature and conducting experiments.

Gif-Sur-Yevette, Île-de-France, France

- Inria is a French national institution for research in digital science and technology. It is ranked 18th in the global research institution and 7th in computer science.
- My duties included reviewing literature, conducting experiments, writing papers, advising students, and presenting at conferences.

PEER-REVIEWED PUBLICATIONS

* Corresponding author, † These authors contribute equally. List order: reverse chronology.

Journals

- 1. **Lijie Yao***, Federica Bucchieri, Victoria McArthur, Anastasia Bezerianos, Petra Isenberg. User Experience of Visualizations in Motion: A Case Study and Design Considerations. *IEEE Transactions on Visualization and Computer Graphics*, 2025, 31 (1), pp.174-184. DOI: 1109/TVCG.2024.3456319.

 TVCG: JCR Q1/CCF A
- Lijie Yao*. Situated Visualization in Motion. *IEEE Computer Graphics and Applications*. 2024, 44(6), pp.142-150.
 DOI: 10.1109/MCG.2024.3462129.
 CG&A: JCR Q3
- 3. **Lijie Yao***, Romain Vuillemot, Anastasia Bezerianos, Petra Isenberg. Designing for Visualization in Motion: Embedding Visualizations in Swimming Videos. *IEEE Transactions on Visualization and Computer Graphics*, 2024, 30 (3), pp.1821-1836. DOI: 10.1109/TVCG.2023.3341990.

 TVCG: JCR Q1/CCF A
- Lijie Yao*, Anastasia Bezerianos, Romain Vuillemot, Petra Isenberg. Visualization in Motion: A Research Agenda and Two Evaluations. *IEEE Transactions on Visualization and Computer Graphics*, 2022, 28(10), pp.3546-3562, DOI: 10.1109/TVCG.2022.3184993.

 TVCG: JCR Q1/CCF A

Conferences

- Fairouz Grioui*, Tanja Blascheck, Lijie Yao, Petra Isenberg. Micro Visualizations on a Smartwatch: Assessing Reading Performance While Walking. Short papers of the IEEE Conference on Visualization, Oct. 2024, Florida, U.S. DOI: 10.1109/VIS55277.2024.00017.
- Ahmed Elshabasi*, Lijie Yao, Petra Isenberg, Charles Perin, Wesley Willett. Collecting Information Needs for Egocentric Visualizations while Running. *In Proceeding of the First-Person Visualizations for Outdoor Physical* Activities workshop at IEEE VIS, Oct. 2024, Florida, U.S. DOI: 10.48550/arXiv.2409.06426.
- Yvonne Jansen, Federica Bucchieri, Pierre Dragicevic, Martin Hachet, Morgane Koval, Léana Petiot, Arnaud Prouzeau, Dieter Schmalstieg, Lijie Yao, Petra Isenberg*. Envisioning Situated Visualizations of Environmental Footprints in an Urban Environment. *In Proceedings of the Visualization for Social Good workshop at IEEE VIS*, Oct. 2022, Oklahoma City, U.S. DOI: 10.5281/zenodo.7053934.
- 8. Alaul Islam[†], **Lijie Yao***[†], Anastasia Bezerianos, Tanja Blascheck, Tingying He, et al.. Reflections on Visualization in Motion for Fitness Trackers. *In proceeding of the New Trends in HCI and Sports workshop at MobileHCI*, Sep. 2022, Vancouver, Canada. DOI: 10.48550/arXiv.2409.06401.

 MobileHCI: CCF B
- 9. Federica Bucchieri*, **Lijie Yao**, Petra Isenberg. Situated Visualization in Motion for Video Games. *Posters of the EuroVis*, Jun 2022, Rome, Italy. DOI: 10.2312/evp.20221119.
- Lijie Yao*, Anastasia Bezerianos, Romain Vuillemot, Petra Isenberg. Situated Visualization in Motion for Swimming. *Journée Visu 2022*, Jun 2022, Bordeaux, France. DOI: 10.48550/arXiv.2409.07695.

- 11. Federica Bucchieri*, **Lijie Yao**, Petra Isenberg. Visualization in Motion in Video Games for Different Types of Data. *JournéeVisu 2022*, Jun 2022, Bordeaux, France. DOI: 10.48550/arXiv.2409.07696.
- 12. **Lijie Yao***, Anastasia Bezerianos, Petra Isenberg. Situated Visualization in Motion. *Posters of the IEEE VIS*, Oct 2020, Salt Lake City, U.S.. 2020. DOI: 10.48550/arXiv.2409.07005.

Selected Proposals

- Charles Perin*, Tica Lin, Lijie Yao, Yalong Yang, Maxime Cordeil, Wesley Willett. First-Person Visualizations for Outdoor Physical Activities: Challenges and Opportunities. Selected workshop of the IEEE VIS, Oct. 2024, Florida, United States.
- 14. **Lijie Yao***. Situated Visualization in Motion. *Selected proposals of Doctoral Colloquium of the IEEE VIS*, Oct. 2022, Oklahoma City, United States. IEEE VIS: CCF A

Thesis

15. **Lijie Yao***. Situated Visualization in Motion. Human-Computer Interaction [cs.HC]. Université Paris-Saclay, 2023. English. NNT: 2023UPASG093. URL: theses.hal.science/tel-04413122.

RESEARCH ACTIVITIES

Organization

2025:

Program Committee for full papers and posters, *IEEE Visualization & Visual Analytics (IEEE VIS)*, Nov. 2-7, Vienna, Austria

Program Committee for short papers, *ACM Symposium on Eye Tracking Research & Applications (ETRA)*, May 26-29, Tokyo, Japan.

2024:

Co-organiser for workshop on First-Person Visualizations for Outdoor Physical Activities, *IEEE visualization & Visual Analytics (IEEE VIS)*, Oct. 13, Florida, U.S.

Review

- 2025: CHI, VIS, EuroVis, ISMAR, UIST, ETRA, HRI, NSERC, ChinaVis, IwC
- 2024: CHI, VIS, EuroVis, TVCG, ETRA, alt.chi, IMX, HRI, TSMCS, SAIS, ISS, MobileHCI, ETVIS
- 2023: CHI, VIS, EuroVis, CHI LBW
- 2022: VIS, SIGGRAPH Asia

SUPERVISION

Graduate Level

- AY2024/26, University of Liverpool:
 Yuzhu Chen (F), Yihan Dong (F), Yiming Zhang, Shiyuan Jiang, Zehong Ye.
- AY2021/22, Université Paris-Saclay:
 Federica Bucchieri (F), Situated Visualization in Motion for Video Games, co-supervised with Dr. Petra Isenberg.

Undergraduate Level

AY2024/25, Xi'an Jiaotong-Liverpool University & University of Liverpool:
 Xing Wei, Yuming Zhang, Yongxuan Teng, Dingkang Yang, Jiachen Jiang, Yingkai Xu.

TEACHING

Xi'an Jiaotong-Liverpool University

Suzhou, China

Sept. 2024 – Present

- Undergraduate level: SAT006 Foundations of Computer Science and Engineering (711 students)
- Undergraduate level: CPT210 Microprocessor (Module leader, 542 students)

Université Paris-Saclay

Gif-sur-Yvette, France

Sept. 2021 – Aug. 2023

• Graduate level: Interactive Information Visualization (around 50 students)

EDUCATION

Université Paris-Saclay

Gif-sur-Yvette, France

Sept. 2020 - Dec. 2023

Doctor of Philosophy - Computer Science

- Supervisors: Petra Isenberg & Anastasia Bezerianos
- Thesis Topic: Situated Visualization in Motion
- Research Focus: Visualization in motion, perception, visual design

Université Paris-Saclay

Gif-sur-Yvette, France

Sept. 2019 - Aug. 2020

Master of Science - Computer Science

- Supervisors: Petra Isenberg
- Thesis Topic: Situated Visualization in Motion
- Research Focus: Visualization in motion, perception, visual design

Polytech Lille Lille, France Sept. 2017 – Aug. 2019

Diplôme d'ingénieur (= Master of Engineering) – Electrical Engineering and Automation

- Supervisors: Komi Midzodzi Pekpe
- Thesis Topic: Position Control of A Drone
- Research Focus: Embedded systems, automatic control

XIDIAN University | 西安电子科技大学

Xi'an, China

Aug. 2014 – June 2017

Bachelor of Engineering - Electronic Information Engineering

- Supervisors: Xavier Redon & Alexandre Boé
- Thesis Topic: Electronic Necklace for Health Monitoring
- Research Focus: Embedded systems, microelectronics

LANGUAGES

• Chinese (Mandarin): Native Fluency

• English: Advanced Proficiency

· French: Advanced Proficiency