Lijie Yao 姚李捷

Ph.D. M.Sc. Ing. B.Eng.

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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.

Doctoral Researcher	Inria	Sept. 2020 – Dec. 2023

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

2. **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

4. **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

5. 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. IEEE VIS: CCF A

6. 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. IEEE VIS: CCF A

7. 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. IEEE VIS: CCF A

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. EuroVis: CCF B

10. **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. IEEE VIS: CCF A

Selected Proposals

13. 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. IEEE VIS: CCF A

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, *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