

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**. My work received the **Ph.D. Thesis Prize** from AFIHM and **Canada Mitacs Globalink Research Award**. Part of my work on *visualization in motion* was applied in the **2024 Paris Olympics** swimming races. Previously, I was a postdoctoral and doctoral researcher at **INRIA** and a visiting researcher at **University of Calgary**. My research interests include *visualization in motion*, *AI-assisted data communication*, and *human-AI interaction*. Collaboration emails are more than welcome.

WORK EXPERIENCE

Assistant Professor Suzhou, Jiangsu, China	Xi'an Jiaotong-Liverpool University	July 2024 – Present
<ul style="list-style-type: none">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 Gif-Sur-Yvette, Île-de-France, France	Inria	Jan. 2024 – March 2024
<ul style="list-style-type: none">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 Calgary, Alberta, Canada	University of Calgary	July 2023 – Oct. 2023
<ul style="list-style-type: none">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 Gif-Sur-Yvette, Île-de-France, France	Université Paris-Saclay	Sept. 2021 – Aug. 2023
<ul style="list-style-type: none">The Université Paris-Saclay is a french combined technological research institute and public research university. It is ranked 13th in the ARWU 2025 and 70th in QS 2026.My duties included reviewing literature and conducting experiments.		
Doctoral Researcher Gif-Sur-Yvette, Île-de-France, France	Inria	Sept. 2020 – Dec. 2023
<ul style="list-style-type: none">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.		

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

Journals

1. **JCR Q1/CCF-A** **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 (TVCG)*, 2025, 31 (1), pp.174-184. DOI: 10.1109/TVCG.2024.3456319.
2. **JCR Q3** **Lijie Yao***. Situated Visualization in Motion. *IEEE Computer Graphics and Applications (CG&A)*. 2024, 44(6), pp.142-150. DOI: 10.1109/MCG.2024.3462129.
3. **JCR Q1/CCF-A** **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 (TVCG)*, 2024, 30 (3), pp.1821-1836. DOI: 10.1109/TVCG.2023.3341990.
4. **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 (TVCG)*, 2022, 28(10), pp.3546-3562, DOI: 10.1109/TVCG.2022.3184993.

Conferences

5. Wanfang Xu, Jifan Yang, Fengwen Zhang, Yu Lu, **Lijie Yao**, Le Liu, Lingyun Yu*. Touch, Sound, and Space: Exploring Immersive Music Interaction through AI-Generated Environments. *International Symposium on Visual Information Communication and Interaction (VINCI)*, Dec. 2025, Linz, Austria. To appear.
6. **CCF-A** Haonan Yao, Lingyun Yu, **Lijie Yao***. Designing Visualization Widgets for Tangible Data Exploration: A Systematic Review. *IEEE Visualization & Visual Analytics (IEEE VIS)*, Nov. 2025, Vienna, Austria. To appear.
7. **Lijie Yao***, Yuming Zhang, Yu Liu. Input Physicalization in Practice: An Instructional Walkthrough with Visualization Novices. *IEEE VIS workshop on Input Visualization*, Nov. 2025, Vienna, Austria. To appear.
8. Qi Guo[†], Junyi Li[†], Jiayi Hong, **Lijie Yao***. Early Exploration into AI-Assisted Visual Analytics for Dynamic Videos. *IEEE VIS workshop on GenAI, Agents, and the Future of VIS*, Nov. 2025, Vienna, Austria. To appear.
9. Junhao Zhao, **Lijie Yao***. Structured AI Agents for Reliable Visualization Report Generation. *IEEE VIS workshop on GenAI, Agents, and the Future of VIS*, Nov. 2025, Vienna, Austria. To appear.
10. **Honorable Mention** **Lijie Yao***. Visualization in Motion: Perception, Design, and User Experience. *Posters of ChinaVis 2025*, July 2025, Hangzhou, China.
11. **CCF-A** Fairouz Grioui*, Tanja Blascheck, **Lijie Yao**, Petra Isenberg. Micro Visualizations on a Smartwatch: Assessing Reading Performance While Walking. *IEEE Visualization & Visual Analytics (IEEE VIS)*, Oct. 2024, Florida, U.S. DOI: 10.1109/VIS55277.2024.00017.
12. Ahmed Elshabasi*, **Lijie Yao**, Petra Isenberg, Charles Perin, Wesley Willett. Collecting Information Needs for Egocentric Visualizations while Running. *IEEE VIS workshop on First-Person Visualizations for Outdoor Physical Activities*, Oct. 2024, Florida, U.S. DOI: 10.48550/arXiv.2409.06426.
13. 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. *IEEE VIS workshop on Visualization for Social Good*, Oct. 2022, Oklahoma City, U.S. DOI: 10.5281/zenodo.7053934.
14. Alaul Islam[†], **Lijie Yao***[†], Anastasia Bezerianos, Tanja Blascheck, Tingying He, et al.. Reflections on Visualization in Motion for Fitness Trackers. *ACM MobileHCI workshop on New Trends in HCI and Sports*, Sep. 2022, Vancouver, Canada. DOI: 10.48550/arXiv.2409.06401.
15. 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.

16. **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.
17. Federica Bucchieri*, **Lijie Yao**, Petra Isenberg. Visualization in Motion in Video Games for Different Types of Data. *Journée-Visu 2022*, Jun 2022, Bordeaux, France. DOI: 10.48550/arXiv.2409.07696.
18. **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

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

Thesis

21. **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

Awards

- Honorable Mention Award at ChinaVis July 2025
- ACM AFIHM Ph.D. Thesis Prize March 2024
- Canada Mitacs Globalink Research Award May. 2023 - Oct. 2023

Organization

2025

- Program Committee member for technical papers, *International Symposium on Visual Information Communication and Interaction (VINCI)*, Dec. 1-3, Linz, Austria.
- Program Committee member for full papers and posters, *IEEE Visualization & Visual Analytics (IEEE VIS)*, Nov. 2-7, Vienna, Austria.
- Program Committee member 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, VINCI, PacificVis
- 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

Year	Degree-granting Institution	Program	Student (F/M)	Outcomes	Next Step
Graduate					
2025/now	University of Liverpool	MSc	Yiming Zhang		
			Shiyuan Jiang		
			Zehong Ye		
			Yihan Dong (F)		
			Fanhua Liu		
2024/now		MRes	Yuzhu Chen (F)		
2021/22	Université Paris-Saclay	MSc	Federica Bucchieri (F)	1 × TVCG full paper 1 × EuroVis poster 1 × JournéeVisu poster	Work in industry
Under-graduate					
2025/now	Xi'an Jiaotong-Liverpool University & University of Liverpool	BEng	Haochen Yan	1 × Excellent SURF Award 1 × Student-nominated Winner	
			Ziyuan Wang	1 × Excellent SURF Award	
			Weixin Xiong (F)	1 × Excellent SURF Award	
			Yating Wu (F)		
			Xiaoran Zhao (F)		
			Xiaoyu Li (F)		
		BSc	Ruoxi Liao (F)	1 × Excellent SURF Award 1 × Student-nominated Winner	
			Tiantian Ye (F)		
			Xi Zhou (F)		
2024/25		BEng	Xing Wei		Master at USYD
			Yuming Zhang	1 × IEEE VIS workshop paper	Work in industry
			Yongxuan Teng		Work in industry
			Dingkang Yang		Master at USYD
Others					
2025	none	SURF	Qi Guo (F)	1 × IEEE VIS workshop paper 1 × Excellent SURF Award 1 × Student-nominated Winner	
			Junyi Li (F)	1 × IEEE VIS workshop paper 1 × Excellent SURF Award 1 × Student-nominated Winner	
			Ziyi Jin (F)	1 × Excellent SURF Award	
			Xun Gong (F)	1 × Excellent SURF Award	
			Jingyu Wang (F)	1 × Excellent SURF Award 1 × Student-nominated Winner	
2024/25		none	Haonan Yao	1 × IEEE VIS short paper	PhD at UNNC (full-scholarship)

Year	Degree-granting Institution	Program	Student (F/M)	Outcomes	Next Step
2024/now			Junhao Zhao	1 × IEEE VIS workshop paper	

TEACHING

Awards

- 2 × Excellent SURF Poster Awards, 1 × Student-nominated Winner Sep. 2025
- Second Prize in XIPU “AI in Education” Competition Feb. 2025

Year	Course Name	Level	Student Numbers	Teaching Language
Xi'an Jiaotong-Liverpool University				
2024/now	Foundations of Computer Science and Engineering	Undergraduate	720	English
	Microprocessor		550-750	
Université Paris-saclay				
2021/2023	Interactive Information Visualization	Graduate	50	English

EDUCATION

Université Paris-Saclay
 Doctor of Philosophy – Computer Science

Gif-sur-Yvette, France

Sept. 2020 – Dec. 2023

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

Université Paris-Saclay
 Master of Science – Computer Science

Gif-sur-Yvette, France

Sept. 2019 – Aug. 2020

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

Polytech Lille
 Diplôme d’ingénieur (= Master of Engineering) – Electrical Engineering and Automation

Lille, France

Sept. 2017 – Aug. 2019

- 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
 Bachelor of Engineering – Electronic Information Engineering

Xi’an, China

Aug. 2014 – June 2017

- 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