

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.

EDUCATION

Université Paris-Saclay	Gif-sur-Yvette, France	Sept. 2020 – Dec. 2023
Doctor of Philosophy – Computer Science		
<ul style="list-style-type: none">Supervisors: Petra Isenberg & Anastasia BezerianosThesis Topic: Situated Visualization in MotionResearch Focus: Visualization in motion, perception, visual design		
Université Paris-Saclay	Gif-sur-Yvette, France	Sept. 2019 – Aug. 2020
Master of Science – Computer Science		
<ul style="list-style-type: none">Supervisors: Petra IsenbergThesis Topic: Situated Visualization in MotionResearch 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		
<ul style="list-style-type: none">Supervisors: Komi Midzodzi PekpeThesis Topic: Position Control of A DroneResearch 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		
<ul style="list-style-type: none">Supervisors: Xavier Redon & Alexandre BoéThesis Topic: Electronic Necklace for Health MonitoringResearch Focus: Embedded systems, microelectronics		

WORK EXPERIENCE

Assistant Professor	Xi'an Jiaotong-Liverpool University	July 2024 – Present
Suzhou, Jiangsu, China		
<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	Inria	Jan. 2024 – March 2024
Gif-Sur-Yevette, Île-de-France, France		
<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	University of Calgary	July 2023 – Oct. 2023
Calgary, Alberta, Canada		
<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	Université Paris-Saclay	Sept. 2021 – Aug. 2023
Gif-Sur-Yevette, Île-de-France, France		
<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	Inria	Sept. 2020 – Dec. 2023
Gif-Sur-Yevette, Île-de-France, France		
<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. 		
PEER-REVIEWED PUBLICATIONS		
* Corresponding author, † These authors contribute equally. List order: reverse chronology.		
Journals		
<ol style="list-style-type: none"> 1. Lijie Yao*, Federica Bucchieri, Victoria McArthur, Anastasia Bezerianos, Petra Isenberg. User Experience of Visualizations in Motion: A Case Study and Design Considerations. <i>IEEE Transactions on Visualization and Computer Graphics (TVCG)</i>, 2025, 31 (1), pp.174-184. DOI: 1109/TVCG.2024.3456319. 2. Lijie Yao*. Situated Visualization in Motion. <i>IEEE Computer Graphics and Applications (CG&A)</i>. 2024, 44(6), pp.142-150. DOI: 10.1109/MCG.2024.3462129. 3. Lijie Yao*, Romain Vuillemot, Anastasia Bezerianos, Petra Isenberg. Designing for Visualization in Motion: Embedding Visualizations in Swimming Videos. <i>IEEE Transactions on Visualization and Computer Graphics (TVCG)</i>, 2024, 30 (3), pp.1821-1836. DOI: 10.1109/TVCG.2023.3341990. 4. Lijie Yao*, Anastasia Bezerianos, Romain Vuillemot, Petra Isenberg. Visualization in Motion: A Research Agenda and Two Evaluations. <i>IEEE Transactions on Visualization and Computer Graphics (TVCG)</i>, 2022, 28(10), pp.3546-3562, DOI: 10.1109/TVCG.2022.3184993. 		
Conferences		
<ol style="list-style-type: none"> 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. <i>International Symposium on Visual Information Communication and Interaction (VINCI)</i>, Dec. 2025, Linz, Austria. DOI: 10.1145/3769534.3769589. 6. Haonan Yao, Lingyun Yu, Lijie Yao*. Designing Visualization Widgets for Tangible Data Exploration: A Systematic Review. <i>IEEE Visualization & Visual Analytics (IEEE VIS)</i>, Nov. 2025, Vienna, Austria. DOI: 10.1109/VIS60296.2025.00058. 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. Link: osf.io/dfgvx
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. Link: visxgenai.github.io/subs-2025/1558/1558-doc.pdf
 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. Link: nemozjh.github.io/VIS_Agent_nemo/
 10. **Honorable Mention Lijie Yao***. Visualization in Motion: Perception, Design, and User Experience. *Posters of ChinaVis 2025*, July 2025, Hangzhou, China.
 11. 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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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

- Poster 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

2026

- Organizing Committee, Community, Meetups, & Election Chair, *IEEE Visualization & Visual Analytics (IEEE VIS)*, Nov. 9-13, Boston, U.S.

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

- 2026: CHI, EuroVis, PacificVis (TVCG journal track), ETRA, HRI
- 2025: CHI, VIS, EuroVis, TVCG, ISMAR, UIST, ETRA, HRI, NSERC, ChinaVis, IWC, VINCI
- 2024: CHI, VIS, EuroVis, TVCG, TSMC, ETRA, alt.chi, IMX, HRI, SAIS, ISS, MobileHCI, ETVIS
- 2023: CHI, VIS, EuroVis, CHI LBW
- 2022: VIS, SIGGRAPH Asia

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	
Université Paris-saclay				
2021/2023	Interactive Information Visualization	Graduate	50	English

LANGUAGES

- Chinese (Mandarin): Native Fluency
- English: Advanced Proficiency
- French: Advanced Proficiency

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 Buccieri (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)		
			Xing Wei		Master at USYD
2024/25		BEng	Yuming Zhang	1 × IEEE VIS workshop paper	Work in industry
			Yongxuan Teng		Work in industry
			Dingkang Yang		Master at Monash
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	