

Xi WANG

CONTACT INFORMATION

Team VISTA, LIX, Ecole Polytechnique
91120 Palaiseau, France

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[Bio Page](#)

EDUCATION

Ph.D., Computer Science, Univ. of Rennes I, Inria/Irisa, France **2018–2022**
Supervisors: Prof. Eric Marchand, Prof. Marc Christie
Thesis: *Robustness of vSLAM techniques to light changing conditions*

M.Sc., Electronics, Univ. of Paris-Saclay/École Supérieure d'Électricité, France **2015–2016**
Major: Automatic, Signal and Image Processing

Dipl.-Ing., Electrics and Electronics, Univ. of Paris-Sud, France **2013–2016**
Engineering School: Polytech Paris-Sud

B.Eng., Electronics, Xidian Univ., China **2010–2014**
Major: Electronical Information: Antenna and microwave

RESEARCH INTERESTS

vSLAM, 3D Reconstruction, Computational Cinematography, NeRF, Generative Models, Animation

PROFESSIONAL EXPERIENCE

Postdoctoral Researcher, [VISTA](#), LIX, Ecole Polytechnique, Palaiseau, France **2023–now**
Topics: Neural Radiance Field (NeRF); Generative Model; Computational Cinematography.
Supervised by: Prof. [Vicky Kalogeiton](#)

Postdoctoral Researcher, Inria/IRISA, Univ. Rennes 1, Rennes, France **2022–2023**
Topics: Neural Radiance Field (NeRF); virtual camera control; human motion.
Participated in EU H2020 Project: [Invictus](#)

Research Internship, Beijing Film Academy, Peking Univ., Lab [AICFVE](#), China **2019–2021**
Collaborators: Dr. Bin Wang, Prof. Baoquan Chen and Hongda Jiang
Topics: Deep neural network driven animation and virtual camera control

Research Engineer Internship, Company [Solidanim](#), France **2019–2020**
Topics: Augmented reality, optic calibration and on-set Previs system
Created optics calibration, hand-eye calibration, trajectory filtering, IMU sync toolbox

Teaching Assistant, Univ. of Rennes I, France **2019-2020**
Courses: Image Processing (spring 19, spring 20), Augmented Reality (fall 19, fall 20)

Research Engineer, Inria Rennes/IRISA, France **2017-2018**
Topics: vSLAM robustness under light changing condition
Prepared for Ph.D candidacy in the team

HONORS AND AWARDS

[ACM Motion in Games Best Paper Award \(Non-Student Category\)](#), 2023
[2nd Prize of PhD Thesis Foundation Rennes 1](#), 2022
[IROS RoboCup Best Paper Award Finalist](#), 2020

TEACHING
EXPERIENCE

INF634 - Computer Vision (Diffusion Model Part), 2024
 MAP/INF630 - Case Studies in Artificial Intelligence and Visual Computing, 2023–2024
 Image Processing, Univ. of Rennes I, France, 2019–2020
 Augmented Reality, Univ. of Rennes I, France, 2019–2020

ACADEMIC SERVICES

Review for venues: RA-L, TVCG, ACCV, ICCV, ECCV, CVPR ICIP, ICRA, IROS

INVITED TALKS

Invited Talks on "Generative and Discriminative: a Co-Evolving System", Mar 2024, seminar GTTI of lab Borelli at ENS Saclay, Paris, France
 Invited Talks on "Computer vision and Computational Cinematography", Nov 2023, seminar Softskills of DataAI IP Paris, Paris, France
 Invited Talks on "An Odyssey to Computational Cinematography", June 2023, Dell Tech Generations, Shanghai, China
 Invited Talks on "From SLAM Robustness to Computational Cinematography", April 2023, LIX, École Polytechnique, Palaiseau, France

PUBLICATIONS

11. Hongda, J., **Wang, X.**, Christie, M., Liu, L., Chen, C., *Cinematographic Camera Diffusion Model, Computer Graphics Forum (Eurographics), 2024*
10. Bourel, F., **Wang, X.**, Teng, E., Ortenzi, V., Myhill, A., Christie, M., *Real-time Computational Cinematographic Editing for Broadcasting of Volumetric-captured events: an Application to Ultimate Fighting, Proceedings of the 16th ACM SIGGRAPH Conf. on Motion, Interaction and Games (MIG), 2023 , Best Paper Award*
9. Courant, R., **Wang, X.**, Christie, M., Kalogeiton, V., *BluNF: Blueprint Neural Field, Proceedings of the IEEE/CVF Intl. Conf. on Computer Vision (ICCV) Workshop, 2023*
8. **Wang, X.**, Courant, R., Shi, J., Marchand, E., Christie, M. *JAWS: Just A Wild Shot for Cinematic Transfer in Neural Radiance Fields, Proceedings of the IEEE/CVF Conf. on Computer Vision and Pattern Recognition (CVPR), 2023*
7. **Wang, X.**, Christie, M., Marchand, E. *Binary Graph Descriptor for Robust Relocalization on Heterogeneous Data, IEEE Robotics and Automation Letters (RA-L), 2022*
6. Jiang, H.*, Christie, M., **Wang, X.**, Liu, L., Wang, B., Chen, B. *Camera Keyframing with Style and Control, ACM Transactions on Graphics (Proceedings of SIGGRAPH ASIA) 2021*
5. **Wang, X.**, Christie, M., Marchand, E. *TT-SLAM: Dense Monocular SLAM for Planar Environments, IEEE Intl. Conf. on Robotics and Automation (ICRA) 2021*
4. **Wang, X.**, Christie, M., Marchand, E. *Relative Pose Estimation and Planar Reconstruction via Superpixel-Driven Multiple Homographies, IEEE/RSJ Intl. Conf. on Intelligent Robot Systems (IROS) 2020 , RoboCup Best Paper Award Finalist*
3. Jiang, H.*, Wang, B.*, **Wang, X.**, Christie, M., Chen, B. *Example-driven virtual cinematography by learning camera behaviors, ACM Transactions on Graphics (Proceedings of SIGGRAPH) 2020*
2. **Wang, X.**, Christie, M., Marchand, E. *Optimized Contrast Enhancements to Improve Robustness of Visual Tracking in a SLAM Relocalisation Context, Proceedings of IEEE/RSJ Intl. Conf. on Intelligent Robot Systems (IROS) 2018*
1. **Wang, X.**, Christie, M., Marchand, E. *Multiple layers of contrasted images for robust feature-based visual tracking, Proceedings of IEEE Intl. Conf. on Image Processing (ICIP) 2018*