# Qianqian Wang

University of California, Berkeley 2121 Berkeley Way, Berkeley, CA 94704 qianqianwang@berkeley.edu qianqianwang68.github.io

## Education Cornell University, Cornell Tech 2018 - 2023Ph.D. in Computer Science Thesis: Modeling the 3D World and its Motion Advisors: Noah Snavely, Bharath Hariharan Zhejiang University 2014 - 2018B.E. in Information Engineering Advisor: Xiaowei Zhou Academic Position University of California, Berkeley 2023 - Present Postdoctoral Scholar Advisors: Angjoo Kanazawa, Alexei A. Efros Honors and Awards 2025 CVPR Best Paper Honorable Mention Cornell CIS Dissertation Award 2024 ICCV Best Student Paper Award 2023 CVPR Best Paper Honorable Mention Award 2023

2022 2022

2022

2022

2019

2016

2015

### **Publications**

**EECS Rising Stars** 

Google PhD Fellowship

Samsung Scholarship

National Scholarship

Meta PhD Fellowship Finalist

Cornell TA Outstanding Award

(\* Equal Contribution; † Equal Advising)

NVIDIA Academic Hardware Grant

- [1] Qianqian Wang\*, Vickie Ye\*, Hang Gao\*, Weijia Zeng\*, Jake Austin, Zhengqi Li, Angjoo Kanazawa, "Shape of Motion: 4D Reconstruction from a Single Video", International Conference on Computer Vision (ICCV), 2025.
- [2] Haiwen Feng\*, Junyi Zhang\*, Qianqian Wang, Yufei Ye, Pengcheng Yu, Michael J. Black, Trevor Darrell, Angjoo Kanazawa, "St4RTrack: Simultaneous 4D Reconstruction and Tracking in the World", International Conference on Computer Vision (ICCV), 2025.
- Qianqian Wang\*, Yifei Zhang\*, Aleksander Holynski, Alexei A. Efros, Angjoo Kanazawa, "Continuous 3D Perception Model with Persistent State", Computer Vision and Pattern Recognition (CVPR), 2025. (Oral)

- [4] Nan Huang, Wenzhao Zheng, Chenfeng Xu, Kurt Keutzer, Shanghang Zhang, Angjoo Kanazawa, Qianqian Wang, "Segment Any Motion in Videos", Computer Vision and Pattern Recognition (CVPR), 2025.
- [5] Zhengqi Li, Richard Tucker, Forrester Cole, Qianqian Wang, Linyi Jin, Vickie Ye, Angjoo Kanazawa, Aleksander Holynski, Noah Snavely, "MegaSaM: Accurate, Fast, and Robust Structure and Motion from Casual Dynamic Videos", Computer Vision and Pattern Recognition (CVPR), 2025. (Best Paper Honorable Mention)
- [6] Qiyang Qian, Hansheng Chen, Masayoshi Tomizuka, Kurt Keutzer, Qianqian Wang<sup>†</sup>, Chenfeng Xu<sup>†</sup>, "Bridging Viewpoint Gaps: Geometric Reasoning Boosts Semantic Correspondence", Computer Vision and Pattern Recognition (CVPR), 2025.
- [7] Justin Kerr, Chung Min Kim, Mingxuan Wu, Brent Yi, Qianqian Wang, Ken Goldberg, Angjoo Kanazawa, "Robot See Robot Do: Imitating Articulated Object Manipulation with Monocular 4D Reconstruction", Conference on Robot Learning (CoRL), 2024. (Oral)
- [8] Yuxi Xiao\*, Qianqian Wang\*, Shangzhan Zhang, Nan Xue, Sida Peng, Yujun Shen, Xiaowei Zhou, "SpatialTracker: Tracking Any 2D Pixels in 3D Space", Computer Vision and Pattern Recognition (CVPR), 2024. (Spotlight)
- [9] Qianqian Wang, Yen-Yu Chang, Ruojin Cai, Zhengqi Li, Bharath Hariharan, Aleksander Holynski, Noah Snavely, "Tracking Everything Everywhere All at Once", International Conference on Computer Vision (ICCV), 2023. (Best Student Paper)
- [10] Zhengqi Li, Qianqian Wang, Forrester Cole, Richard Tucker, Noah Snavely, "DynIBaR: Neural Dynamic Image-Based Rendering", Computer Vision and Pattern Recognition (CVPR), 2023. (Best Paper Honorable Mention)
- [11] Luming Tang\*, Menglin Jia\*, Qianqian Wang\*, Cheng Perng Phoo, Bharath Hariharan, "Emergent Correspondence from Image Diffusion", Neural Information Processing Systems (NeurIPS), 2023.
- [12] Ruojin Cai, Joseph Tung, Qianqian Wang, Hadar Averbuch-Elor, Bharath Hariharan, Noah Snavely, "Doppelgangers: Learning to Disambiguate Images of Similar Structures", International Conference on Computer Vision (ICCV), 2023. (Oral)
- [13] Haotong Lin, Qianqian Wang, Ruojin Cai, Sida Peng, Hadar Averbuch-Elor, Xiaowei Zhou, Noah Snavely, "Neural Scene Chronology", Computer Vision and Pattern Recognition (CVPR), 2023.
- [14] Zhengqi Li, Qianqian Wang, Noah Snavely, Angjoo Kanazawa, "InfiniteNature-Zero: Learning Perpetual View Generation of Natural Scenes from Single Images", European Conference on Computer Vision (ECCV), 2022. (Oral)
- [15] Jiaming Sun, Xi Chen, Qianqian Wang, Zhengqi Li, Hadar Averbuch-Elor, Xiaowei Zhou, Noah Snavely, "Neural 3D Reconstruction in the Wild", SIGGRAPH, 2022.
- [16] Qianqian Wang, Zhengqi Li, David Salesin, Noah Snavely, Brian Curless, Janne Kontkanen, "3D Moments from Near Duplicate Photos", Computer Vision and Pattern Recognition (CVPR), 2022.
- [17] Haoyu Guo, Sida Peng, Haotong Lin, Qianqian Wang, Guofeng Zhang, Hujun Bao, Xiaowei Zhou, "Neural 3D Scene Reconstruction with the Manhattan-world Assumption", Computer Vision and Pattern Recognition (CVPR), 2022. (Oral)
- [18] Yuan Liu, Sida Peng, Lingjie Liu, Qianqian Wang, Peng Wang, Christian Theobalt, Xiaowei Zhou, Wenping Wang, "Neural Rays for Occlusion-aware Image-based Rendering", Computer Vision and Pattern Recognition (CVPR), 2022.
- [19] Qianqian Wang, Zhicheng Wang, Kyle Genova, Pratul Srinivasan, Howard Zhou, Jon Barron, Ricardo Martin-Brualla, Noah Snavely, Thomas Funkhouser, "IBRNet: Learning Multi-View Image-Based Rendering", Computer Vision and Pattern Recognition (CVPR), 2021.
- [20] Sida Peng\*, Junting Dong\*, Qianqian Wang, Shangzhan Zhang, Qing Shuai, Hujun Bao, Xiaowei Zhou, "Animatable Neural Radiance Fields for Human Body Modeling", International Conference on Computer Vision (ICCV), 2021.

- [21] Kai Zhang\*, Fujun Luan\*, Qianqian Wang, Kavita Bala, Noah Snavely, "Inverse Rendering with Spherical Gaussians for Physics-based Material Editing and Relighting", Computer Vision and Pattern Recognition (CVPR), 2021.
- [22] Sida Peng, Yuanqing Zhang, Yinghao Xu, Qianqian Wang, Qing Shuai, Hujun Bao, Xiaowei Zhou, "Neural Body: Implicit Neural Representations with Structured Latent Codes for Novel View Synthesis of Dynamic Humans", Computer Vision and Pattern Recognition (CVPR), 2021. (Best Paper Finalist)
- [23] Qianqian Wang, Xiaowei Zhou, Bharath Hariharan, Noah Snavely, "Learning Feature Descriptors using Camera Pose Supervision", European Conference on Computer Vision (ECCV), 2020. (Oral)
- [24] Jin Sun, Hadar Averbuch-Elor, Qianqian Wang, Noah Snavely, "Hidden Footprints: Learning Contextual Walkability from 3D Human Trails", European Conference on Computer Vision (ECCV), 2020.
- [25] Qianqian Wang, Xiaowei Zhou, Kostas Daniilidis, "Multi-Image Semantic Matching by Mining Consistent Features", Computer Vision and Pattern Recognition (CVPR), 2018.

## **Invited Talks**

Invited Talks	
Learning to Perceive the 4D World Online CVPR'25 ScanNet++ Workshop	2025
4D Digital Twins from Videos in the Wild CVPR'25 3D Digital Twin Workshop	2025
Continuous 3D Perception Model with Persistent State CVPR'25 2nd Point Cloud Tutorial NeuroAILab, Stanford University AI Seminar, Scaled Foundations	2025 2025 2025
Perceiving and Understanding the Dynamic 3D World UIUC Vision Seminar	2024
Recovering the Structure of the Dynamic 3D World Michigan AI Symposium	2024
Recovering the 4D World Behind Any Video Stanford Vision and Learning Lab (SVL), Stanford University	2024
Toward Dense and Long-Range Motion Estimation in Videos Stanford Vision and Learning Lab (SVL), Stanford University NVIDIA Toronto AI Lab	2024 2023
Modeling the 3D World and its Motion Berkeley Artificial Intelligence Research (BAIR) Lab, UC Berkeley Scene Representation Group, MIT CSAIL CAIR, Chinese Academy of Sciences	2024 2023 2023
Generalizable Neural Rendering for Novel View Synthesis Visual Informatics Group, University of Texas at Austin GAMES Webinar	2022 2022
Services and Professional Activities	
Conference Reviewer: CVPR, ICCV, ECCV, NeurIPS, ICRA Journal Reviewer: SIGGRAPH, SIGGRAPH Asia, IJCV Volunteer: CVPR Travel Grants Reviewer Area Chair: WACV	2019 - Present 2019 - Present 2022 2024

# Teaching

Guest Lecturer, UC Berkeley CS180: Intro to Computer Vision and Computational Photography	2024
Teaching Assistant, Cornell University, Cornell Tech	
CS 5670: Introduction to Computer Vision	2019 - 2023
Teaching Assistant, Cornell University, Cornell Tech	
CS 5781: Machine Learning Engineering	2021
Teaching Assistant, Cornell University, Cornell Tech	
CS 5787: Deep Learning	2020
Teaching Assistant, Cornell University	
CS 4700: Artificial Intelligence	2018
Research and Industry Experience	
Research and Industry Experience  Google DeepMind, Research Consultant	2024 - 2025
	2024 - 2025
Google DeepMind, Research Consultant	2024 - 2025 $2023 - 2024$
Google DeepMind, Research Consultant Google Research	
Google DeepMind, Research Consultant Google Research Visiting Researcher	2023 - 2024
Google DeepMind, Research Consultant Google Research Visiting Researcher Student Researcher, Advisor: Aleksander Holynski	2023 - 2024 $2023$
Google DeepMind, Research Consultant Google Research  Visiting Researcher Student Researcher, Advisor: Aleksander Holynski Research Intern, Advisors: Brian Curless, Janne Kontkanen	2023 - 2024 $2023$ $2022$

Python, PyTorch, TensorFlow, C/C++, MATLAB, Java