

Jane Wu

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ACADEMIC EMPLOYMENT

University of California, Berkeley 2023 -
Postdoctoral Fellow, Electrical Engineering & Computer Science *Berkeley, CA*
Advisor: Jitendra Malik

EDUCATION

Stanford University 2018 - 2023
Ph.D., Computer Science *Stanford, CA*
Advisor: Ronald Fedkiw

Harvey Mudd College 2014 - 2018
B.S., Computer Science, Mathematics *Claremont, CA*
Graduated with high distinction and departmental honors in Computer Science

HONORS AND AWARDS

Rising Stars in EECS, MIT 2024
Mathematical Sciences Postdoctoral Research Fellowship, National Science Foundation 2023 -
UC President's Postdoctoral Fellowship, University of California, Berkeley 2023 -
METEOR Postdoctoral Fellowship, MIT CSAIL (went to UC Berkeley) N/A
Rising Stars in Computer Graphics, Women in Computer Graphics Research (WiGRAPH) 2022 - 2023
Gerald J. Lieberman Fellowship, Stanford University 2022 - 2023
Awarded annually to twelve doctoral students across schools
JEDI Appreciation Award, Stanford Computer Science 2021
For ongoing dedication towards justice, equity, diversity, and inclusion (JEDI)
Two Sigma Ph.D. Fellowship Runner Up, Two Sigma 2021
Stanford School of Engineering Fellowship, Stanford University 2018 - 2019
CS230 Deep Learning Final Project Prize, Stanford University Fall 2018
Don Chamberlin Research Award, Harvey Mudd College 2018
For successfully completing a significant piece of computer science research
Computer Science Clinic Team Award, Harvey Mudd College 2018
Recognizing service to the team, the sponsor, and the entire CS Clinic Program
CRA Outstanding Undergraduate Researcher Award, Computing Research Association 2017

RESEARCH AND WORK EXPERIENCE

Research Assistant, Stanford Artificial Intelligence Lab, Stanford University 9/2018 - 9/2023
Advisor: Ronald Fedkiw

Research Intern, Project Starline, Google 6/2021 - 9/2021, 6/2022 - 6/2023
Managers: Michael Broxton, Lynn Tsai

R&D Software Engineer , Simulation Technology, NVIDIA <i>Manager: Ken Museth</i>	9/2021 - 6/2022
Research Intern , AI-Algorithms Team, NVIDIA Research <i>Manager: Anima Anandkumar</i>	6/2020 - 9/2020
Autonomous Vehicles Intern , AV Obstacle Perception Team, NVIDIA <i>Manager: Sangmin Oh</i>	6/2019 - 6/2020, 9/2020 - 6/2021
Technical Assistant , Controls and Dynamical Systems, California Institute of Technology <i>Advisors: Richard Murray, Christopher Clark</i>	6/2018 - 8/2018
Undergraduate Researcher , Lab for Autonomous and Intelligent Robotics, Harvey Mudd <i>Advisor: Christopher Clark</i>	1/2017 - 8/2018
Undergraduate Researcher , Human Experience and Agent Teamwork Lab, Harvey Mudd <i>Advisor: Jim Boerkoel</i>	9/2015 - 5/2016

PUBLICATIONS

1. “Weakly-Supervised 3D Reconstruction of Clothed Humans via Normal Maps”, **J. Wu**, Thomas, Fedkiw, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), February 2025.
2. (Preprint) “Reconstructing Hand-Held Objects in 3D”, **J. Wu**, Pavlakos, Gkioxari, Malik, arXiv: 2404.06507, April 2024.
3. (Preprint) “Inpaint3D: 3D Scene Content Generation using 2D Inpainting Diffusion”, Prabhu, **J. Wu**, Tsai, Hedman, Goldman, Poole, Broxton, arXiv: 2312.03869, December 2023.
4. “HazardNet: Road Debris Detection by Augmentation of Synthetic Models”, Choe, **J. Wu**, Lin, Kwon, Park, CVPR Workshop on Autonomous Driving, June 2023.
5. “Deep Energies for Estimating Facial Pose and Expression”, **J. Wu**, Bao, Yao, Fedkiw, Communications on Applied Math and Computation, March 2023.
6. “Recovering Geometric Information with Learned Texture Perturbations”, **J. Wu**, Jin, Geng, Zhou, Fedkiw, Symposium on Computer Animation (SCA), September 2021.
7. (Preprint) “Skinning a Parameterization of Three-Dimensional Space for Neural Network Cloth”, **J. Wu**, Geng, Zhou, Fedkiw, arXiv: 2006.04874, June 2020.
8. “Virtual Planning and Testing of AUV Paths for Underwater Photogrammetry”, Lewis, Yager, Keller, Galvan, Bingham, Ting, **J. Wu**, Gambin, Clark, Wood, International Joint Conference on Computer Vision, Imaging, and Computer Graphics Theory and Applications (VISIGRAPP), February 2020.
9. “Multi-AUV Motion Planning for Archaeological Site Mapping and Photogrammetric Reconstruction”, **J. Wu**, Bingham, Ting, Yager, Wood, Gambin, Clark, Journal of Field Robotics, August 2019.
10. “Intelligent Shipwreck Search Using Autonomous Underwater Vehicles”, Rutledge, Yuan, **J. Wu**, Wood, Gambin, Clark, IEEE International Conference on Robotics and Automation (ICRA), May 2018.
11. “Trust and Cooperation in Human-Robot Decision Making”, **J. Wu**, Paeng, Boerkoel et al., AI-HRI, AAAI Fall Symposium Series, November 2016.
12. “Human-Robot Trust and Cooperation Through a Game Theoretic Framework”, Paeng, **J. Wu**, Boerkoel, AAAI Student Abstract, February 2016.
13. “Towards directed energy planetary defense”, Lubin et al., SPIE: Optical Engineering, February 2014.
14. “Directed energy planetary defense”, Lubin et al., SPIE Proceedings, Vol. 8876, September 2013.

INVITED TALKS

Reconstructing Hand-Object Interactions in 3D at Internet Scale Tsinghua University	8/2024
Reconstructing Humans and Human-Object Interactions at Scale Kyushu University Computer Vision Laboratory	8/2024
Reconstructing Cloth, Humans, and Human-Object Interactions Kyoto University Computer Vision Laboratory	7/2024
Reconstruction from Recognition and Retrieval UC President's Postdoctoral Fellowship Program (PPFP) Spring Academic Retreat	4/2024
Neural Representations for Reconstruction and Rendering MIT Computer Graphics/Vision Seminar	10/2022
Neural Representations for Reconstruction and Rendering UC Berkeley Computer Vision Group Meeting	9/2022
Learning to Predict High Frequency Signals via Low Frequency Embeddings Silicon Valley ACM SIGGRAPH Chapter, Virtual Speaker Event	2/2022

LEADERSHIP AND SERVICE

Organizer , 10th Annual Stanford-Berkeley Women in CS/EE Research Meetup	4/2024
Organizer , 8th Annual Stanford-Berkeley Women in CS/EE Research Meetup	4/2022
Founding Member , Stanford CS Ph.D. Student Advisory Council	8/2020 - 6/2022
Co-chair , Stanford Graduate Women in Computer Science (WiCS)	6/2019 - 6/2021
Student member , Computer Science Diversity Committee, Stanford University	9/2020 - 6/2021
Student reader , Computer Science Ph.D. Admissions Committee, Stanford University	11/2019 - 3/2021
Co-organizer , Workshop on Deformable Object Simulation in Robotics, RSS	2021
Conference Reviewer , WACV 2022-2024, CVPR 2022-2024, 3DV 2022, ECCV/ICCV 2022-2024, SIGGRAPH 2024	

TEACHING EXPERIENCE

Course Assistant , Stanford University CS Department	Fall 2019 - Winter 2022
· CS148: Introduction to Computer Graphics and Imaging (Fall 2019 - 2021)	
· CS205L: Continuous Mathematical Methods (Winter 2020 - 2022)	

GRANTS

UC President's Postdoctoral Fellowship and Hiring Incentive , University of California	2023
· Awarded \$156k fellowship salary, benefits, research and program travel funds over 2 years.	
· UC President's Hiring Incentive totaling \$425k over 5 years for faculty appointment at any UC campus.	
Mathematical Sciences Postdoctoral Research Fellowship , National Science Foundation	2023
· Awarded \$190k fellowship stipend and benefits over 2-3 years.	
Research Grant , Sony	2021
· Awarded \$100k to Ron Fedkiw's group (Ph.D. advisor) for real-time cloth simulation on the PlayStation5.	