Xiaolong Wang

• https://xiaolonw.github.io/
• https://scholar.google.com/citations?user=Y8O9N_0AAAAJ&hl=en

Education

- **Carnegie Mellon University** — Pittsburgh, PA, USA
  Ph.D. in Robotics — 2014 - 2019
  Thesis: Learning and Reasoning with Visual Correspondence in Time
  Advisor: Abhinav Gupta

- **Sun Yat-Sen University** — Guangzhou, China
  M.S. in Computer Science — 2011 - 2014

- **South China Agricultural University** — Guangzhou, China
  B.E. in Software Engineering — 2007 - 2011

Work Experience

- **Assured Robot Intelligence**
  Co-Founder — May 2025 - Present

- **University of California, San Diego**
  Associate Professor, Electrical and Computer Engineering — July 2025 - Present
  Assistant Professor, Electrical and Computer Engineering — July 2020 - July 2025
  Affiliate Faculty, Computer Science and Engineering

- **NVIDIA**
  Researcher — April 2024 - April 2025

- **Berkeley AI Research (BAIR), UC Berkeley**
  Postdoctoral Fellow — 2019 - 2020
  Supervisor: Alexei A. Efros and Trevor Darrell

- **Berkeley AI Research (BAIR), UC Berkeley**
  Visiting Researcher — 2018 - 2019
  Supervisor: Alexei A. Efros

- **Facebook AI Research (FAIR), Meta**
  Research Intern — May 2017 - Dec 2017
  Supervisor: Kaiming He and Ross Girshick

- **Allen Institute for Artificial Intelligence (AI2)**
  Research Intern — May 2015 - Dec 2015
  Supervisor: Ali Farhadi

Honors and Awards

- **Sloan Research Fellowship** 2025
- **J. K. Aggarwal Prize** 2024
- **Best Paper Award on Mobile Manipulation, IROS** 2025
- **Best Paper Award, ICRA** 2024
- **NSF Faculty Early Career Development Program (CAREER) Award** 2023
- **Intel Rising Star Faculty Award** 2023
- **Cisco Faculty Research Award** 2023
- **Adobe Data Science Research Award** 2023
- **Amazon Research Awards** 2022, 2023
- **Best Paper Award**, CoRL Workshop on Language Grounding and Robot Learning 2023
- **Best Paper Award**, CoRL Workshop on Towards Reliable and Deployable Systems 2023
- **Sony Research Award** 2021
- **Facebook PhD Fellowship** 2018
- **NVIDIA PhD Fellowship** 2017
- **Best Student Paper Award, ICME** 2014
- **ACM-ICPC World Finals, Honorable Mention** 2010

Professional Service

- **Workshop and Tutorial Co-Organizer**:
  - Workshop on Human to Robot (H2R) in CoRL 2025
  - Workshop on Dexterous Manipulation in RSS 2025
  - Workshop on Dexterous Manipulation in RSS 2024
  - Workshop on Efficient Deep Learning for Foundation Models in ECCV 2024
  - Workshop on Test-Time Adaptation: Model, Adapt Thyself! in CVPR 2024
  - Workshop on Learning Dexterous Manipulation in RSS 2023
  - Workshop on 4D Hand Object Interaction in CVPR 2023
  - Workshop on Learning Dexterous Manipulation in RSS 2023
  - Workshop on Generalizable Policy Learning in the Physical World in ICLR 2022
  - 3rd Tutorial on Learning Learning Representations via Graph-structured Networks in CVPR 2021.
  - Workshop on Self-Supervised Learning: Theory and Practice in NeurIPS 2022 Representations via Graph-structured Networks in CVPR 2021
  - Comprehensive Tutorial on Video Modeling in CVPR 2021
  - Workshop on Sensing, Understanding and Synthesizing Humans in ECCV 2020
  - 2nd Tutorial on Learning Representations via Graph-structured Networks in CVPR 2020.
  - Tutorial on Learning Representations via Graph-structured Networks in CVPR 2019.
  - Workshop on Multi-Modal Learning from Videos in CVPR 2019.

- **Area Chair and Section Co-Chair**:
  - Conference on Robot Learning (CoRL) 2025, 2024
  - European Conference on Computer Vision (ECCV) 2024, 2022
  - International Conference on Computer Vision (ICCV) 2025, 2023, 2021
  - Computer Vision and Pattern Recognition (CVPR) 2024, 2022, 2021

  - International Conference on Robotics and Automation (ICRA) 2025, 2021
  - International Conference on Intelligent Robots and Systems (IROS) 2025, 2023, 2022
  - Neural Information Processing Systems (NeurIPS) 2025, 2024, 2023
  - International Conference on Learning Representations (ICLR) 2025, 2024, 2023

- **Journal and Conference Reviewer:**
  - Science Robotics
  - International Journal of Robotics Research (IJRR)
  - IEEE Transactions on Robotics (TRO)
  - IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
  - International Journal of Computer Vision (IJCV)
  - IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
  - IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
  - Computer Vision and Pattern Recognition (CVPR)
  - European Conference on Computer Vision (ECCV)
  - International Conference on Computer Vision (ICCV)
  - International Conference on Robotics and Automation (ICRA)
  - Conference on Robot Learning (CoRL)

Invited Talks

- *Humanoid Policy ~ Human Policy*
  RSS 2025 Workshop on Egocentric Perception and Action for Robot Learning June 2025
- *Humanoid Policy ~ Human Policy*
  CVPR 2025 Egocentric Vision (EgoVis) Workshop June 2025
- *Modeling Humans for Humanoid Robots*
  CVPR 2025 Workshop on Embodied Humans June 2025

  CVPR 2025 Workshop on Humanoid Agents June 2025
- *Humanoid Policy Human Policy*
  CVPR 2025 Egocentric Vision (EgoVis) Workshop June 2025
- *Learning Generalizable Manipulation from Sim and Real Data*
  CVPR 2025 Workshop on 3D Digital Twin June 2025
- *Modeling Humans for Humanoid Robots*
  UW Robotics Colloquium March 2025
- *Modeling Humans for Humanoid Robots*
  ICPR 2024 Keynote on From Perception to Embodied AI: Modeling Humans for Humanoid Robots Dec 2024
- *Modeling Humans for Humanoid Robots*
  Stanford Robotics Seminar Nov 2024
- *Generalizing Humanoid Robots*
  CoRL 2024 Workshop on Whole-body Control Nov 2024
- *Dexterous Manipulation with Real and Sim Data*
  CoRL 2024 Workshop on Dexterous Manipulation Nov 2024
- *Learning Humanoid Robotics*
  TTIC Summer Workshop on Multimodal Artificial Intelligence Aug 2024

- *Learning to (Learn at Test Time)*
  CVPR 2024 Workshop on Transformers for Vision (T4V) June 2024
  CVPR 2024 Workshop on Prompting in Vision June 2024
  Qualcomm Seminar Aug 2024
  Google Computer Vision Seminar Aug 2024
  NVIDIA Research Seminar Sep 2024
- *Generalizable 3D Spatial Perception and Control*
  CVPR 2024 Workshop on Multimodalities for 3D Scenes June 2024
- *Feature Fields for Manipulation*
  CVPR 2024 Workshop on Implicit Neural Representation for Vision June 2024
- *Spatial Perception and Control in the Wild*
  CVPR 2024 Workshop on Computer Vision in the Wild June 2024
  CVPR 2024 Workshop on Visual Perception via Learning in an Open World June 2024
- *Learning Humanoid Robots*
  ICRA 2024 Workshop on Agile Robotics: From Perception to Dynamic Action May 2024
- *Learning Generalizable Feature Fields for Mobile Manipulation*
  ICRA 2024 Workshop on Neural Fields In Robotics May 2024
- *Learning Humanoid Robots*
  5NRP Workshop March 2024
  Intel's Rising Star Tech talk March 2024
  USC Robotics Seminars March 2024
- *Human-Centric Robot Learning*
  NSF SAIL Workshop Oct 2023
  TTI/Vanguard: [next] Workshop Dec 2023
- *Generalizable Geometric Robot Learning*
  UPenn GRASP seminar Nov 2023
  CoRL 2023 Deployable Workshop Oct 2023
- *Geometric Robot Learning for Generalizable Dexterous Manipulation*
  CVPR 2023 Workshop on 3D Vision and Robotics June 2023
- *3D Scene Understanding for Locomotion Control*
  CVPR 2023 Workshop on 3D Scene Understanding for Vision, Graphics, and Robotics June 2023
- *Geometric Robot Learning for Generalizable Skills Acquisition*
  MIT Embodied Intelligence Seminar May 2023
  Stanford SVL Seminar June 2023
- *Generalization in Neural Radiance Fields*
  ICLR 2023 Workshop on Neural Fields across Fields May 2023
- *Generalizing Dexterous Manipulation by Learning from Humans*
  ICLR 2022 Workshop on Generalizable Policy Learning in the Physical World Apr 2022
- *Learning to Perceive Videos for Embodiment*
  ICCV 2021 Tutorial on Large Scale Holistic Video Understanding Oct 2021
- *Learning to Perceive Videos for Embodiment*
  Invited Talk in CMU VASC Seminar Jul 2021
- *Self-Supervised Representation Learning with Videos*

CVPR 2021 Large-scale Video Object Segmentation Challenge Workshop Jun 2021

- *Generalization in Robot Learning with Self-Supervision*
  Invited Talk in ASU Seminar on Frontier topics in Vision and/or Language Feb 2021
- *Self-Supervised Learning for Perception and Action in Time*
  Invited Talk in Nvidia Aug 2020
- *Self-Supervised Learning for Correspondence and 3D Reconstruction in Time*
  ECCV 2020 Workshop on 4D Vision Aug 2020
- *Learning Long-term Visual Dynamics*
  CVPR 2020 Tutorial on Learning Representations via Graph-structured Networks Jun 2020
- *Beyond Human Supervision: Learning with Self-Supervision and Self-Play*
  Invited Talk in Pixel Cafe, University of California San Diego Sep 2019
- *Scaling Learning with Self-Supervision and Self-Play*
  BAIR/BDD Computer Vision Workshop, University of California, Berkeley Sep 2019
- *Learning and Reasoning with Visual Correspondence in Time*
  University of California San Diego Mar 2019
  University of Illinois at Urbana-Champaign Mar 2019
  University of Massachusetts Amherst Mar 2019
- *Exploiting Redundancy for Learning Visual Representations*
  Invited Talk in University of California, Los Angeles Oct 2018
- *Looking into Recognition in the Deep Era*
  Computer Vision Seminar, University of California, Berkeley Oct 2018
- *Adversaries for Detection and Action*,
  CVPR Tutorial on GANs Jun 2018
- *Videos as Space-Time Region Graphs*,
  CVPR Workshop on Fine-grained Instructional Video undERstanding (FIVER) Jun 2018
- *Non-local Neural Networks*
  Grad Fellow FastForward, NVIDIA's GPU Technology Conference (GTC) Mar 2018
- *Learning Visual Representations for Object Detection*
  AI Seminar sponsored by Apple Oct 2017
- *Designing Deep Networks for Surface Normal Estimation*
  Mid-Atlantic Computer Vision (MACV) Workshop Mar 2015

Full Publication List

Peer-Reviewed Conference Publications

[146] Ri-Zhao Qiu*, Shiqi Yang*, Xuxin Cheng*, Chaitanya Chawla, Jialong Li, Tairan He, Ge Yan, David J. Yoon, Ryan Hoque, Lars Paulsen, Ge Yang, Jian Zhang, Sha Yi, Guanya Shi, **Xiaolong Wang**, *Humanoid Policy ~ Human Policy*, in Conference on Robot Learning (CoRL), 2025.

[145] Sha Yi*, Xueqian Bai*, Adabhav Singh, Jianglong Ye, Michael T Tolley, **Xiaolong Wang**, *Co-Design of Soft Gripper with Neural Physics*, in Conference on Robot Learning (CoRL), 2025.

[144] Ge Yan, Jiyue Zhu, Yuquan Deng, Shiqi Yang, Ri-Zhao Qiu, Xuxin Cheng, Marius Memmel, Ranjay Krishna, Ankit Goyal, **Xiaolong Wang**, Dieter Fox, *ManiFlow: A Dexterous*

Manipulation Policy using Flow Matching, in Conference on Robot Learning (CoRL), 2025.

[143] Ge Yang, Adam Rashid, Yajvan Ravan, Zhutian Yang, Qinxi Yu, **Xiaolong Wang**, Phillip Isola, *Lucid-XR: An Extended-Reality Data Engine for Robotic Manipulation*, in Conference on Robot Learning (CoRL), 2025.

[142] Binghao Huang, Jie Xu, Iretiayo Akinola, Wei Yang, Balakumar Sundaralingam, Rowland O'Flaherty, Dieter Fox, **Xiaolong Wang**, Arsalan Mousavian, Yu-Wei Chao, Yunzhu Li, *VT-Refine: Learning Bimanual Assembly with Visuo-Tactile Feedback via Simulation Fine-Tuning*, in Conference on Robot Learning (CoRL), 2025.

[141] Runyu Ding*, Yuzhe Qin*, Jiyue Zhu*, Chengzhe Jia, Shiqi Yang, Ruihan Yang, Xiaojuan Qi, **Xiaolong Wang**, *Bunny-VisionPro: Real-Time Bimanual Dexterous Teleoperation for Imitation Learning*, in International Conference on Intelligent Robots and Systems (IROS), 2025.

[140] Ri-Zhao Qiu, Yafei Hu, Ge Yang, Yuchen Song, Yang Fu, Jianglong Ye, Jiteng Mu, Ruihan Yang, Nikolay Atanasov, Sebastian Scherer, **Xiaolong Wang**, *Learning Generalizable Feature Fields for Mobile Manipulation*, in International Conference on Intelligent Robots and Systems (IROS), 2025.

[139] Ge Yan*, Yueh-Hua Wu*, **Xiaolong Wang**, *DNAct: Diffusion Guided Multi-Task 3D Policy Learning*, in International Conference on Intelligent Robots and Systems (IROS), 2025.

[138] Qi Wu, Zipeng Fu, Xuxin Cheng, **Xiaolong Wang**, Chelsea Finn, *Helpful DoggyBot: Open-World Object Fetching using Legged Robots and Vision-Language Models*, in International Conference on Intelligent Robots and Systems (IROS), 2025.

[137] Yu Sun*, Xinhao Li*, Karan Dalal*, Jiarui Xu, Arjun Vikram, Genghan Zhang, Yann Dubois, Xinlei Chen†, **Xiaolong Wang**†, Sanmi Koyejo†, Tatsunori Hashimoto†, Carlos Guestrin†, *Learning to (Learn at Test Time): RNNs with Expressive Hidden States*, in International Conference on Machine Learning (ICML), 2025.

[136] Jianglong Ye*, Keyi Wang*, Chengjing Yuan, Ruihan Yang, Yiquan Li, Jiyue Zhu, Yuzhe Qin, Xueyan Zou, **Xiaolong Wang**, *Dex1B: Learning with 1B Demonstrations for Dexterous Manipulation*, in Robotics: Science and Systems (RSS), 2025.

[135] Jialong Li, Xuxin Cheng, Tianshu Huang, Shiqi Yang, Ri-Zhao Qiu, **Xiaolong Wang**, *AMO: Adaptive Motion Optimization for Hyper-Dexterous Humanoid Whole-Body Control*, in Robotics: Science and Systems (RSS), 2025.

[134] An-Chieh Cheng*, Yandong Ji*, Zhaojing Yang*, Zaitian Gongye, Xueyan Zou, Jan Kautz, Erdem Bıyık, Hongxu Yin, Sifei Liu, **Xiaolong Wang**, *NaVILA: Legged Robot Vision-Language-Action Model for Navigation*, in Robotics: Science and Systems (RSS), 2025.

[133] Karan Dalal*, Daniel Koceja*, Gashon Hussein*, Jiarui Xu*, Yue Zhao+, Youjin Song+, Shihao Han, Ka Chun Cheung, Jan Kautz, Carlos Guestrin, Tatsunori Hashimoto, Sanmi Koyejo, Yejin Choi, Yu Sun, **Xiaolong Wang**, *One-Minute Video Generation with Test-Time Training*, in Conference on Computer Vision and Pattern Recognition (CVPR), 2025.

[132] Jiteng Mu, Nuno Vasconcelos, **Xiaolong Wang**, *EditAR: Unified Conditional Generation with Autoregressive Models*, in Conference on Computer Vision and Pattern Recognition (CVPR), 2025.

[131] Hongjun Wang, Wonmin Byeon, Jiarui Xu, Jingwei Gu, **Xiaolong Wang**, Kai Han, Jan Kautz, Sifei Liu, *Parallel Sequence Modeling via Generalized Spatial Propagation Network*, in Conference on Computer Vision and Pattern Recognition (CVPR), 2025.

[130] Chenhao Lu*, Xuxin Cheng*, Jialong Li*, Shiqi Yang, Mazeyu Ji, Chengjing Yuan, Ge Yang, Sha Yi, **Xiaolong Wang**, *Mobile-TeleVision: Predictive Motion Priors for Humanoid Whole-Body Control*, in International Conference on Robotics and Automation (ICRA), 2025.

[129] Ri-Zhao Qiu*, Yuchen Song*, Xuanbin Peng*, Sai Aneesh Suryadevara, Ge Yang, Minghuan Liu, Mazeyu Ji, Chengzhe Jia, Ruihan Yang, Xueyan Zou, **Xiaolong Wang**, *WildLMa: Long Horizon Loco-Manipulation in the Wild*, in International Conference on Robotics and Automation (ICRA), 2025.

[128] Tairan He, Wenli Xiao, Toru Lin, Zhengyi Luo, Zhenjia Xu, Zhenyu Jiang, Jan Kautz, Changliu Liu, Guanya Shi, **Xiaolong Wang**, Linxi Fan, Yuke Zhu, *Hover: Versatile neural whole-body controller for humanoid robots*, in International Conference on Robotics and Automation (ICRA), 2025.

[127] Cheng-Chun Hsu, Bowen Wen, Jie Xu, Yashraj Narang, **Xiaolong Wang**, Yuke Zhu, Joydeep Biswas, Stan Birchfield, *SPOT: SE (3) Pose Trajectory Diffusion for Object-Centric Manipulation*, in International Conference on Robotics and Automation (ICRA), 2025.

[126] Xueyan Zou, Yuchen Song, Ri-Zhao Qiu, Xuanbin Peng, Jianglong Ye, Sifei Liu, **Xiaolong Wang**, *3D-Spatial Multimodal Memory*, in International Conference on Learning Representations (ICLR), 2025.

[125] Runjie Yan, Yinbo Chen, **Xiaolong Wang**, *Consistent Flow Distillation for Text-to-3D Generation*, in International Conference on Learning Representations (ICLR), 2025.

[124] Nicklas Hansen, Jyothir SV, Vlad Sobal, Yann LeCun, **Xiaolong Wang**, Hao Su, *Hierarchical World Models as Visual Whole-Body Humanoid Controllers* , in International Conference on Learning Representations (ICLR), 2025.

[123] Isabella Liu, Hao Su, **Xiaolong Wang**, *Dynamic Gaussians Mesh: Consistent Mesh Reconstruction from Monocular Videos*, in International Conference on Learning Representations (ICLR), 2025.

[122] Xialin He, Chengjing Yuan, Wenxuan Zhou, Ruihan Yang, David Held, **Xiaolong Wang**, *Visual Manipulation with Legs*, in Conference on Robot Learning (CoRL), 2024.

[121] Ruihan Yang, Zhuoqun Chen, Jianhan Ma, Chongyi Zheng, Yiyu Chen, Quan Nguyen, **Xiaolong Wang**, *Generalized Animal Imitator: Agile Locomotion with Versatile Motion Prior*, in Conference on Robot Learning (CoRL), 2024.

[120] Mazeyu Ji, Ri-Zhao Qiu, Xueyan Zou, **Xiaolong Wang**, *GraspSplats: Efficient Manipulation with 3D Feature Splatting*, in Conference on Robot Learning (CoRL), 2024.

[119] Minghuan Liu, Zixuan Chen, Xuxin Cheng, Yandong Ji, Ruihan Yang, **Xiaolong Wang**, *Visual Whole-Body Control for Legged Loco-Manipulation*, in Conference on Robot Learning (CoRL), 2024.

[118] Xuxin Cheng*, Jialong Li*, Shiqi Yang, Ge Yang, **Xiaolong Wang**, *Open-TeleVision: Teleoperation with Immersive Active Visual Feedback*, in Conference on Robot Learning (CoRL), 2024.

[117] Jun Wang*, Ying Yuan*, Haichuan Che*, Haozhi Qi*, Yi Ma, Jitendra Malik, **Xiaolong Wang**, *Lessons from Learning to Spin "Pens"*, in Conference on Robot Learning (CoRL), 2024.

[116] Shiqi Yang, Minghuan Liu, Yuzhe Qin, Runyu Ding, Jialong Li, Xuxin Cheng, Ruihan Yang, Sha Yi, **Xiaolong Wang**, *ACE: A Cross-Platform Visual-Exoskeletons System for Low-Cost Dexterous Teleoperation*, in Conference on Robot Learning (CoRL), 2024.

[115] Ri-Zhao Qiu, Ge Yang, Weijia Zeng, **Xiaolong Wang**, *Feature Splatting: Language-Driven Physics-Based Scene Synthesis and Editing*, in European Conference on Computer Vision (ECCV), 2024.

[114] Jiteng Mu, Michaël Gharbi, Richard Zhang, Eli Shechtman, Nuno Vasconcelos, **Xiaolong Wang**, Taesung Park, *Editable Image Elements for Controllable Synthesis*, in European Conference on Computer Vision (ECCV), 2024.

[113] Ruihan Yang, Yejin Kim, Aniruddha Kembhavi, **Xiaolong Wang**, Kiana Ehsani, *Harmonic Mobile Manipulation*, in International Conference on Intelligent Robots and Systems (IROS), 2024.
(**Oral Presentation**)

[112] Xuxin Cheng*, Yandong Ji*, Junming Chen, Ruihan Yang, Ge Yang, **Xiaolong Wang**, *Expressive Whole-Body Control for Humanoid Robots*, in Robotics: Science and Systems (RSS), 2024.

[111] Yang Fu, Sifei Liu, Amey Kulkarni, Jan Kautz, Alexei A. Efros, **Xiaolong Wang**, *COLMAP-Free 3D Gaussian Splatting* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2024.
(**Highlight**)

[110] Yinbo Chen, Oliver Wang, Richard Zhang, Eli Shechtman, **Xiaolong Wang**†, Michaël Gharbi†, *Image Neural Field Diffusion Models* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2024.
(**Highlight**)

[109] Mengqi Zhang*, Yang Fu*, Zheng Ding, Sifei Liu, Zhuowen Tu, **Xiaolong Wang**, *HOIDiffusion: Generating Realistic 3D Hand-Object Interaction Data* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

[108] Hongchi Xia*, Yang Fu*, Sifei Liu, **Xiaolong Wang**, *RGBD Objects in the Wild: Scaling Real-World 3D Object Learning from RGB-D Videos* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

[107] Jiarui Xu, Xingyi Zhou, Shen Yan, Xiuye Gu, Anurag Arnab, Chen Sun, **Xiaolong Wang**, Cordelia Schmid, *Pixel Aligned Language Models* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

[106] Jun Wang*, Yuzhe Qin*, Kaiming Kuang, Yigit Korkmaz, Akhilan Gurumoorthy, Hao Su, **Xiaolong Wang**, *CyberDemo: Augmenting Simulated Human Demonstration for Real-World Dexterous Manipulation* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

[105] Yang Fu, Shalini De Mello, Xueting Li, Amey Kulkarni, Jan Kautz, **Xiaolong Wang**, Sifei Liu, *3D Reconstruction with Generalizable Neural Fields using Scene Priors* , in International Conference on Learning Representations (ICLR), 2024.

[104] An-Chieh Cheng, Xueting Li, Sifei Liu, **Xiaolong Wang**, *TUVF: Learning Generalizable Texture UV Radiance Fields* , in International Conference on Learning Representations (ICLR), 2024.

[103] Nicklas Hansen, Hao Su, **Xiaolong Wang**, *TD-MPC2: Scalable, Robust World Models for Continuous Control* , in International Conference on Learning Representations (ICLR), 2024.
(**Spotlight Presentation**)

[102] Lirui Wang, Yiyang Ling*, Zhecheng Yuan*, Mohit Shridhar, Chen Bao, Yuzhe Qin, Bailin Wang, Huazhe Xu, **Xiaolong Wang**, *GenSim: Generating Robotic Simulation Tasks via Large Language Models* , in International Conference on Learning Representations (ICLR), 2024.
(**Spotlight Presentation**)

[101] Entong Su, Chengzhe Jia, Yuzhe Qin, Wenxuan Zhou, Annabella Macaluso, Binghao Huang,

Xiaolong Wang, *Sim2Real Manipulation on Unknown Objects with Tactile-based Reinforcement Learning* , in International Conference on Robotics and Automation (ICRA), 2024.

[100] Ying Yuan*, Haichuan Che*, Yuzhe Qin*, Binghao Huang, Zhao-Heng Yin, Kang-Won Lee, Yi Wu, Soo-Chul Lim, **Xiaolong Wang**, *Robot Synesthesia: In-Hand Manipulation with Visuotactile Sensing* , in International Conference on Robotics and Automation (ICRA), 2024.

[99] Open X-Embodiment, *Open X-Embodiment: Robotic Learning Datasets and RT-X Models* , in International Conference on Robotics and Automation (ICRA), 2024.

[98] Binghao Huang*, Yuanpei Chen*, Tianyu Wang, Yuzhe Qin, Yaodong Yang, Nikolay Atanasov, **Xiaolong Wang**, *Dynamic Handover: Throw and Catch with Bimanual Hands* , in Conference on Robot Learning (CoRL), 2023.

[97] Yunhai Feng*, Nicklas Hansen*, Ziyan Xiong*, Chandramouli Rajagopalan, **Xiaolong Wang**, *Finetuning Offline World Models in the Real World* , in Conference on Robot Learning (CoRL), 2023.
(**Oral Presentation**)

[96] Yanjie Ze*, Ge Yan*, Yueh-Hua Wu*, Annabella Macaluso, Yuying Ge, Jianglong Ye, Nicklas Hansen, Li Erran Li, **Xiaolong Wang**, *GNFactor: Multi-Task Real Robot Learning with Generalizable Neural Feature Fields* , in Conference on Robot Learning (CoRL), 2023.
(**Oral Presentation**)

[95] Jiteng Mu, Shen Sang, Nuno Vasconcelos, **Xiaolong Wang**, *ActorsNeRF: Animatable Few-shot Human Rendering with Generalizable NeRFs* , in International Conference on Computer Vision (ICCV), 2023.

[94] Jianglong Ye, Naiyan Wang, **Xiaolong Wang**, *FeatureNeRF: Learning Generalizable NeRFs by Distilling Foundation Models* , in International Conference on Computer Vision (ICCV), 2023.

[93] Nicklas Hansen*, Zhecheng Yuan*, Yanjie Ze*, Tongzhou Mu*, Aravind Rajeswaran+, Hao Su+, Huazhe Xu+, **Xiaolong Wang**+, *On Pre-Training for Visuo-Motor Control: Revisiting a Learning-from-Scratch Baseline* , in International Conference on Machine Learning (ICML), 2023.

[92] Yang Fu, Ishan Misra, **Xiaolong Wang**, *MonoNeRF: Learning Generalizable NeRFs from Monocular Videos without Camera Poses* , in International Conference on Machine Learning (ICML), 2023.

[91] Xuanchen Lu, **Xiaolong Wang**, Judith E. Fan, *Learning dense correspondences between photos and sketches* , in International Conference on Machine Learning (ICML), 2023.

[90] Zhao-Heng Yin*, Binghao Huang*, Yuzhe Qin, Qifeng Chen, **Xiaolong Wang**, *Rotating without Seeing: Towards In-hand Dexterity through Touch* , in Robotics: Science and Systems (RSS), 2023.

[89] Yuzhe Qin, Wei Yang, Binghao Huang, Karl Van Wyk, Hao Su, **Xiaolong Wang**, Yu-Wei Chao, Dieter Fox, *AnyTeleop: A General Vision-Based Dexterous Robot Arm-Hand Teleoperation System* , in Robotics: Science and Systems (RSS), 2023.

[88] Ruihan Yang, Ge Yang, **Xiaolong Wang**, *Neural Volumetric Memory for Visual Locomotion Control* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2023.
(**Highlight**)

[87] Jiarui Xu, Sifei Liu*, Arash Vahdat*, Wonmin Byeon, **Xiaolong Wang**, Shalini De Mello, *Open-Vocabulary Panoptic Segmentation with Text-to-Image Diffusion Models* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2023.
(**Highlight**)

[86] Yuying Ge, Annabella Macaluso, Li Erran Li, Ping Luo, **Xiaolong Wang**, *Policy Adaptation from Foundation Model Feedback* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

[85] Chen Bao, Helin Xu, Yuzhe Qin, **Xiaolong Wang**, *DexArt: Benchmarking Generalizable Dexterous Manipulation with Articulated Objects* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

[84] Jiashun Wang, Xueting Li, Sifei Liu, Shalini De Mello, Orazio Gallo, **Xiaolong Wang**, Jan Kautz, *Zero-shot Pose Transfer for Unrigged Stylized 3D Characters* , in Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

[83] Jianglong Ye*, Jiashun Wang*, Binghao Huang, Yuzhe Qin, **Xiaolong Wang**, *Learning Continuous Grasping Function with a Dexterous Hand from Human Demonstrations* , in International Conference on Intelligent Robots and Systems (IROS), 2023.

[82] Yanjie Ze*, Nicklas Hansen*, Yinbo Chen, Mohit Jain, **Xiaolong Wang**, *Visual Reinforcement Learning with Self-Supervised 3D Representations* , in International Conference on Intelligent Robots and Systems (IROS), 2023.

[81] Chenhongyi Yang*, Jiarui Xu*, Shalini De Mello, Elliot J. Crowley, **Xiaolong Wang**, *GPViT: A High Resolution Non-Hierarchical Vision Transformer with Group Propagation* , in International Conference on Learning Representations (ICLR), 2023.
(**Spotlight Presentation**)

[80] Nicklas Hansen, Yixin Lin, Hao Su, **Xiaolong Wang**, Vikash Kumar, Aravind Rajeswaran, *MoDem: Accelerating Visual Model-Based Reinforcement Learning with Demonstrations.* , in International Conference on Learning Representations (ICLR), 2023.

[79] Kaifeng Zhang, Yang Fu, Shubhankar Borse, Hong Cai, Fatih Porikli, **Xiaolong Wang**, *Self-Supervised Geometric Correspondence for Category-Level 6D Object Pose Estimation in the Wild.* , in International Conference on Learning Representations (ICLR), 2023.

[78] Yang Fu, **Xiaolong Wang**, *Category-Level 6D Object Pose Estimation in the Wild: A Semi-Supervised Learning Approach and A New Dataset*, in Conference on Neural Information Processing Systems (NeurIPS), 2022.

[77] Sateesh Kumar, Jonathan Zamora*, Nicklas Hansen*, Rishabh Jangir, **Xiaolong Wang**, *Graph Inverse Reinforcement Learning from Diverse Videos*, in Conference on Robot Learning (CoRL), 2022., (**Oral Presentation**)

[76] Yueh-Hua Wu*, Jiashun Wang*, **Xiaolong Wang**, *Learning Generalizable Dexterous Manipulation from Human Grasp Affordance*, in Conference on Robot Learning (CoRL), 2022.

[75] Yuzhe Qin*, Binghao Huang*, Zhao-Heng Yin, Hao Su, **Xiaolong Wang**, *Generalizable Point Cloud Policy Learning for Sim-to-Real Dexterous Manipulation*, in Conference on Robot Learning (CoRL), 2022.

[74] Yinbo Chen, **Xiaolong Wang**, *Transformers as Meta-Learners for Implicit Neural Representations*, in European Conference on Computer Vision (ECCV), 2022.

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