2207, West Resource Building, Peking University 100871 Beijing, China y.li@stu.pku.edu.cn yuyangli.com in yuyangl **O** YuyangLee



Yuyang Li

	Education
2020 - 2024	Department of Automation, Tsinghua University
	Bachelor of Engineering
	Core Member & Technical Leader, Cultivating Talents Program in General AI.
2024 – Present	Institute for AI, Peking University (PKU)
	Ph.D. Student
	Graduate Student Member of IEEE
	Research
	Research Interests
	Robotics , Dexterous manipulation and tool-use, visuo-tactile perception, robotic simulation.

Computer Vision & Graphics, Human-object/scene interaction, 3D representations, affordance learning.

Research Experience

Apr 2023 CoRe Lab, Institute for AI, PKU Student Research Assistant – Present Cognitive robotics Advisor: Prof. Yixin Zhu Sept 2021 National Key Lab for General AI, BIGAI Research Intern – Present Robotic manipulation, 3D Human-object interaction Advisor: Dr. Tengyu Liu

Publications

* equal contributor [†] corresponding author

Preprints

Yuyang Li*, Wenxin Du*, Chang Yu*, Puhao Li, Zihang Zhao, Tengyu Liu, Chenfanfu 2025 Jiang[†], Yixin Zhu[†], Siyuan Huang[†]

Taccel: Scaling Up Vision-based Tactile Robotics via High-performance GPU Simulation

Under review

Xiaomeng Zhu*, Yuyang Li*, Leiyao Cui, Huan-ang Gao, Yixin Zhu, Hao Zhao 2025 Afford-X: A Generalizable and Slim Affordance Reasoning Framework for Taskoriented Manipulation

Preprint, under review

Journal Publications

Zihang Zhao*, Wanlin Li*, Yuyang Li*, Tengyu Liu*, Boren Li, Meng Wang, Yao Su, Qining Wang, Hangxin Liu[†], Kaspar Althoefer[†], Yixin Zhu[†], Song-Chun Zhu
Embedding high-resolution touch across robotic hands enables adaptive human-like grasping

Nature Machine Intelligence

2024 Zihang Zhao*, **Yuyang Li***, Wanlin Li, Zhenghao Qi, Lecheng Ruan[†], Yixin Zhu[†], Kaspar Althoefer

Tac-Man: Tactile-Informed Prior-Free Manipulation of Articulated Objects IEEE Transactions on Robotics (T-RO)

2024 **Yuyang Li**, Bo Liu, Yiran Geng, Puhao Li, Yaodong Yang, Yixin Zhu, Tengyu Liu[†], Siyuan Huang[†]

Grasp Multiple Objects with One Hand

IEEE Robotics and Automation Letters (RA-L), presented at IROS 2024 (oral)

Conference Publications

 Haoran Geng*, Feishi Wang*, Songlin Wei*, Yuyang Li*, Bangjun Wang*, Boshi An*, Charlie Tianyue Cheng*, ..., Siyuan Huang, Yue Wang, Jitendra Malik, Pieter Abbeel
RoboVerse: A Unified Platform, Benchmark and Dataset for Scalable and Generalizable Robot Learning

R:SS 2025

2025 Kailin Li, Puhao Li, Tengyu Liu[†], **Yuyang Li**, Siyuan Huang[†]

ManipTrans: Efficient Dexterous Bimanual Manipulation Transfer via Residual Learning

CVPR 2025

2024 Puhao Li*, Tengyu Liu*, **Yuyang Li**, Muzhi Han, Haoran Geng, Shu Wang, Yixin Zhu, Song-Chun Zhu, Siyuan Huang[†]

Learning Novel Manipulation Skills with Agent-Agnostic Value and Action Representations

IROS 2024 (oral pitch)

2024 Kairui Ding, Boyuan Chen, Ruihai Wu, **Yuyang Li**, Zongzheng Zhang, Huan-ang Gao, Siqi Li, Yixin Zhu, Guyue Zhou, Hao Dong, Hao Zhao

PreAfford: Affordance-based Pre-grasping across Objects and Scenes IROS 2024 (oral pitch), EDM Workshop best poster finalist

2024 Haoran Geng*, **Yuyang Li***, Jie Yang, Feishi Wang, Ran Gong, Peiyuan Zhi, Puhao Li, Ruimao Zhang, Yixin Zhu, Baoxiong Jia, Siyuan Huang

RoboVerse: A Unified Simulation Framework for Scaling Vision-Language Manipulation

CVPR 2024 Embodied AI Workshop

2023 Puhao Li*, Tengyu Liu*, **Yuyang Li**, Yiran Geng, Yixin Zhu, Yaodong Yang, Siyuan Huang[†]

GenDexGrasp: Generalizable Dexterous Grasping ICRA 2023

Awards and Scholarships

- 2025 Exccelence Award in Research (for Interns), BIGAI
- 2024 First Prize of Research Nova, BIGAI
- 2024 Excellent Research Award, PKU IAI AI Day
- 2024 Research Rising Star Award, PKU CoRe Lab
- 2024 Outstanding Research Project Contributor, PKU CoRe Lab
- 2023 Excellence Award in Research, Huang Yicong Scholarship in Tong Class, Tsinghua University
- 2023 Merit Award in Social Work, Huang Yicong Scholarship in Tong Class, Tsinghua University
- 2023 Scientific Innovation Scholarship, Tsinghua University
- 2023 Hefengzhengze Academic Merit Scholarship, Tsinghua University
- 2023 **Outstanding Participant**, *PKU School of AI Summer Camp for Outstanding College Students*, Peking University
- 2022 Outstanding Contribution Award (for Interns), BIGAI
- 2022 Scientific Innovation Scholarship, Tsinghua University
- 2021 Academic Merit Scholarship, Dept. of Automation, Tsinghua University
- 2021 Scientific Innovation Scholarship, Tsinghua University

Professional Activities

Conference and Journal Reviewer

- 2025 AAAI, ICLR, CVPR, ICRA, ICML, ICCV, NeurIPS, CoRL, and IROS
- 2024 CVPR, ICLR, ICML, ECCV, and IROS
- 2023 CVPR, and NeurIPS Teaching Assistant

- Fall 2024 Cognitive Reasoning (22530005/PK22530005/04835070/04804023) Peking University
- Fall 2023 Cognitive Reasoning (22530005/PK22530005/04804023) Peking University

Technical Competitions

- 2021 15th Intelligent Vehicle Competition, THU Second Prize **Open Source Contribution** 2023-Present Simulately (simulately.wiki), 450+ stars Social Service Workshop on Cognitive Reasoning, Peking University 2024 Volunteer 2021-2024 Technical Team, THU Student Network Service Core Member 2021-2022 THU Microsoft Student Club Core Member 2021-2022 THU Future Innovation Group of AI and Education Chairman 2021 110th Anniv. of Tsinghua University Volunteer
- 2018-2019 Model U.N. Assoc., Yinchuan No.2 High School President, Tech Lead

Updated on June 9, 2025