

2207, West Resource Building, Peking University
100871

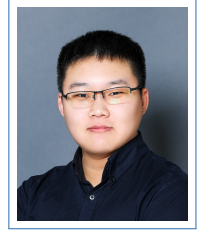
Beijing, China

✉ y.li@stu.pku.edu.cn

🌐 <https://yuyangli.li>

🌐 [yuyangl](#)

🌐 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

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

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

Under review

2025 Xiaomeng Zhu*, **Yuyang Li***, Leiyao Cui, Huan-ang Gao, Yixin Zhu, Hao Zhao

Afford-X: A Generalizable and Slim Affordance Reasoning Framework for Task-oriented Manipulation

Preprint, under review

- 2025 Zihang Zhao*, Zhenghao Qi*, **Yuyang Li**, Leiyao Cui, Zhi Han[†], Lecheng Ruan[†], Yixin Zhu[†]
TacMan-Turbo: Proactive Tactile Control for Robust and Efficient Articulated Object Manipulation
 Under review
[Journal Publications](#)
- 2025 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), to be presented at IROS 2025
- 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](#)
- 2025 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 **Excellence 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

- Journal **Robotics and Computer-Integrated Manufacturing**
 2026 **ICLR**
 2025 **AAAI, ICLR, CVPR, ICRA, ICML, ICCV, NeurIPS, CoRL, IROS**
 2024 **CVPR, ICLR, ICML, ECCV, and IROS**
 2023 **CVPR, and NeurIPS**

Teaching Assistant

- Fall 2025 **Cognitive Reasoning (22530005/04835070/04804023)**, *Peking University*
 Fall 2024 **Cognitive Reasoning (22530005/PK22530005/04835070/04804023)**, *Peking University*
 Fall 2023 **Cognitive Reasoning (22530005/PK22530005/04804023)**, *Peking University*

Book Chapters

Computer Vision: Cognitive Models for Visual Commonsense Reasoning, Springer, ISBN: 978-3031981067, Chapter 5: Tool-use

Invited Talks

- Jun 2025 NVIDIA-Tongji Workshop on Embodied AI *Tongji Univ., Shanghai*
 Dec 2024 The First Forum on Frontiers of General AI *BIGAI, Beijing*
 Jun 2024 NVIDIA-CoRe Workshop on Interactive Reasoning *PKU, Beijing*

Technical Competitions

2021 **15th Intelligent Vehicle Competition**, THU

Second Prize

Open Source Contribution

2025-Present **Taccel Simulator**, 100+ stars

2024-2025 **RoboVerse**, 1.4k+ stars

2023-Present **Simulately** (simulately.wiki), 500+ stars

Social Service

2024 Workshop on Cognitive Reasoning, Peking University

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 September 12, 2025