

Hongjie Fang

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Education

Shanghai Jiao Tong University 2022/09 – present
Ph.D. Student, Wu Wenjun Honorable Class, Computer Science and Engineering Shanghai, China

Shanghai Jiao Tong University 2018/09 – 2022/06
Bachelor of Engineering, major in Computer Science and Engineering, Shanghai, China
Bachelor of Economics, minor in Finance
• GPA 4.03 / 4.3, Ranking: 2 / 149.

Awards

Shanghai Outstanding Graduates 2022
85' Alumni and Yang Yuanqing Education Fund Scholarship 2021
Shanghai Scholarship 2020
Fuguang Scholarship 2018 - 2022
Zhiyuan Scholarship 2018 - 2022
National Olympics in Informatics (NOI) Bronze Medal 2017
National Olympics in Informatics in Provinces (NOIP) First Prize 2015 & 2016

Publications

- AirExo: Low-Cost Exoskeletons for Learning Whole-Arm Manipulation in the Wild
Hongjie Fang*, Hao-Shu Fang*, Yiming Wang*, Jieji Ren, Jingjing Chen, Ruo Zhang, Weiming Wang, Cewu Lu
IEEE International Conference on Robotics and Automation (ICRA), 2024.
- TransCG: A Large-Scale Real-World Dataset for Transparent Object Depth Completion and A Grasping Baseline
Hongjie Fang, Hao-Shu Fang, Sheng Xu, Cewu Lu
IEEE Robotics and Automation Letters (RA-L), 2022; Presented at ICRA 2023.
- RH20T: A Comprehensive Robotic Dataset for Learning Diverse Skills in One-Shot
Hao-Shu Fang, **Hongjie Fang**, Zhenyu Tang, Jirong Liu, Chenxi Wang, Junbo Wang, Haoyi Zhu, Cewu Lu
IEEE International Conference on Robotics and Automation (ICRA), 2024
- RISE: 3D Perception Makes Real-World Robot Imitation Simple and Effective
Chenxi Wang, **Hongjie Fang**, Hao-Shu Fang, Cewu Lu
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024.
- Open X-Embodiment: Robotic Learning Datasets and RT-X Models
Open X-Embodiment Collaboration, 147 authors
IEEE International Conference on Robotics and Automation (ICRA), 2024.
Best Conference Paper Award
- AnyGrasp: Robust and Efficient Grasp Perception in Spatial and Temporal Domains
Hao-Shu Fang, Chenxi Wang, **Hongjie Fang**, Minghao Gou, Jirong Liu, Hengxu Yan, Wenhai Liu, Yichen Xie, Cewu Lu
IEEE Transaction on Robotics (T-RO), 2023; Presented at ICRA 2024.
- Flexible Handover with Real-Time Robust Dynamic Grasp Trajectory Generation
Gu Zhang, Hao-Shu Fang, **Hongjie Fang**, Cewu Lu
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023.
- Graspness Discovery in Clutters for Fast and Accurate Grasp Detection
Chenxi Wang*, Hao-Shu Fang*, Minghao Gou, **Hongjie Fang**, Jin Gao, Cewu Lu
IEEE/CVF International Conference on Computer Vision (ICCV), 2021.
- Target-Referenced Reactive Grasping for Dynamic Objects
Jirong Liu, Ruo Zhang, Hao-Shu Fang, Minghao Gou, **Hongjie Fang**, Chenxi Wang, Sheng Xu, Hengxu Yan, Cewu Lu
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

Preprints

1. Towards Effective Utilization of Mixed-Quality Demonstrations in Robotic Manipulation via Segment-Level Selection and Optimization
Jingjing Chen, **Hongjie Fang**, Hao-Shu Fang, Cewu Lu
arXiv, 2024.
2. CAGE: Causal Attention Enables Data-Efficient Generalizable Robotic Manipulation
Shangning Xia, **Hongjie Fang**, Hao-Shu Fang, Cewu Lu
arXiv, 2024.

Academic Services

Reviewer for journal *RA-L*.

Reviewer for conferences including *ICRA, IROS, etc.*

Teaching

Teaching Assistant, <i>Algorithm and Complexity</i>	<i>Spring, 2022</i>
Teaching Assistant, <i>C++ Programming Language (Honor)</i>	<i>Fall, 2020</i>
Teaching Assistant, <i>Data Structure (Honor)</i>	<i>Spring, 2019</i>
Teaching Assistant, <i>Linear Algebra (Honor)</i>	<i>Fall 2021 & Fall, 2022</i>
Teaching Assistant, <i>Mathematical Analysis (Honor)</i>	<i>Fall, 2020 & Fall, 2021</i>

Invited Talks

- 03/2024, Echo AI Talk, USyd, *Towards Efficient Robot Imitation Learning from Human Demonstrations.*