

Gireesh Nandiraju

Galbot Co. Ltd., Beijing

f20170720h@alumni.bits-pilani.ac.in ✉, user432.github.io

Research Interests

Embodied AI, Robotics, Mobile Manipulation, Contact-Rich Manipulation

Education

- 2024–Present **PhD in Computer Science**, *Peking University*, Beijing, China
- Advised by Prof. He Wang
 - Supported by the Beijing Government Scholarship (4+ years of support)
- 2017–2021 **B.E. in Electronics and Instrumentation Engineering**, *Birla Institute of Technology and Science, Pilani (BITS Pilani)*, Hyderabad, India

Publications

- [7] Tan-Dzung Do, **Nandiraju Gireesh**, Jilong Wang, He Wang. *Watch Less, Feel More: Sim-to-Real RL for Generalizable Articulated Object Manipulation via Motion Adaptation and Impedance Control*. **Under Review** at IEEE International Conference on Robotics and Automation (**ICRA 2025**) 🌐
- [6] Jiazhao Zhang*, **Nandiraju Gireesh***, Jilong Wang, Xiaomeng Fang, Chaoyi Xu, Weiguang Chen, Liu Dai, He Wang. *GAMMA: Graspability-Aware Mobile Manipulation Policy Learning based on Online Grasping Pose Fusion*. In IEEE International Conference on Robotics and Automation (**ICRA 2024**) 📄 🌐
- [5] **Nandiraju Gireesh***, Ayush Agrawal*, Ahana Dutta*, Snehasis Banerjee, Mohan Sridharan, Brojeshwar Bhowmick, Madhava Krishna. *Sequence Agnostic Multi-Object Navigation*. In IEEE International Conference on Robotics and Automation (**ICRA 2023**) 📄
- [4] **Nandiraju Gireesh**, D. A. Sasi Kiran, Snehasis Banerjee, Mohan Sridharan, Brojeshwar Bhowmick, Madhava Krishna. *Object Goal Navigation using Data Regularized Q-Learning*. In 18th IEEE International Conference on Automation Science and Engineering (**IEEE CASE 2022**) 📄
- [3] D. A. Sasi Kiran*, Kritika Anand*, Chaitanya Kharyal*, Gulshan Kumar, **Nandiraju Gireesh**, Snehasis Banerjee, Ruddra dev Roychoudhury, Mohan Sridharan, Brojeshwar Bhowmick, Madhava Krishna. *Spatial Relation Graph and Graph Convolutional Network for Object Goal Navigation*. In 18th IEEE International Conference on Automation Science and Engineering (**IEEE CASE 2022**) 📄
- [2] Mandan Naresh, **Nandiraju Gireesh**, Paresh Saxena, Manik Gupta. *SAC-ABR: Soft Actor-Critic based deep reinforcement learning for Adaptive BitRate streaming*. In 14th IEEE International Conference on COMmunication Systems & NETworkS (**IEEE COMSNETS 2022**) 📄 **IEEE**
- [1] Xingyi Yang, **Nandiraju Gireesh**, Eric Xing, Pengtao Xie. *XRayGAN: Consistency-preserving Generation of X-ray Images from Radiology Reports*. arXiv Pre-print 📄

Research Experience

- Mar 23 – Aug 24 **Research Intern**, *PKU EPIC Lab*
Advisor: Prof. He Wang
- May 21–Mar 23 **Research Assistant**, *Robotics Research Center (RRC), IIIT Hyderabad*
Advisors: Prof. K Madhava Krishna, Prof. Mohan Sridharan, and Dr. Brojeshwar Bhowmick
- Jan 21–May 21 **Undergraduate Thesis Student**, *Data Science Lab, BITS Hyderabad*
Advisor: Prof. Paresh Saxena

Mar 20–Aug 20 **Research Intern**, *AI-for-Healthcare Lab, UC San Diego*
Advisor: Prof. Pengtao Xie

Awards

2024–Present Beijing Government Scholarship (BGS)
2018–2021 Prime Minister's Scholarship Scheme (PMSS)

Talks & Presentations

May 2024 *Audio-visual learning for Contact-rich Manipulation*, Galbot
Mar 2024 *Impedance-control for Contact-rich Manipulation*, EPIC Lab - PKU
Dec 2023 *Latest trends in Mobile Manipulation*, Galbot
Apr 2023 *Embodied Mobile Manipulation*, EPIC Lab - PKU
Jan 2023 *Sequence-Agnostic Multi-Object Navigation*, RnD Showcase - IIIT Hyd, 2023
Jan 2022 *Object Goal Navigation using Data Regularized Q-Learning*, RnD Showcase - IIIT Hyd, 2022

Research Mentorship

Ayush Agrawal (RRC Intern, IIIT-H)
Ahana Dutta (B.Tech + MS at IIIT-H)