Gireesh Nandiraju

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▬▬ 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.* In 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

Sep 24 – Present **Student Researcher**, *Galbot*
Advisor: Prof. He Wang

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)