Dhruv Metha Ramesh

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EDUCATION Rutgers University, New Brunswick, NJ, USA

Ph.D. in Computer Science 2022 – Present

• Advisor: Abdeslam Boularias and Kostas E. Bekris

■ Cumulative GPA: 3.92 / 4.0

Master of Science (M.S.) in Computer Science 2021 – 2022

■ Transferred to Ph.D.

B.M.S College of Engineering, Bengaluru, India

Bachelor of Engineering (B.E.) in Computer Science & Engineering 2015 – 2019

■ Cumulative GPA: 8.8 / 10.0

Computer Science Dept, Rutgers University, New Brunswick NJ, USA 2022 – Present

EXPERIENCE Instructor / Graduate Teaching Assistant

CS562: Advanced Robotics

■ CS440/520: Introduction to Artificial Intelligence

Leanovate Solutions, Bengaluru, India 2018 – 2020

Software Engineer

 Indoor Navigation System: Developed a Bluetooth-based mobile app with occupancy detection for indoor navigation in commercial spaces.

Front-End Lead: Led ReactJS development for a space management platform, enhancing room booking layouts, converting modules to PWA, and standardizing code practices.

■ Client Presentations: Presented product releases to clients and stakeholders.

PUBLICATIONS JOURNAL AND CONFERENCE PAPERS

[1] <u>Dhruv Metha Ramesh</u>, Aravind Sivaramakrishnan, Shreesh Keskar, Kostas E. Bekris, Jingjin Yu, Abdeslam Boularias, "PROBE: Proprioceptive Obstacle Detection and Estimation while Navigating in Clutter" in *IEEE International Conference on Robotics and Automation (ICRA)*, 2025.

- [2] Isidoros Marougkas*, <u>Dhruv Metha Ramesh*</u>, Joe H. Doerr, Edgar Granados, Aravind Sivaramakrishnan, Abdeslam Boularias, Kostas E. Bekris, "Integrating Model-based Control and RL for Sim2Real Transfer of Tight Insertion Policies" in *IEEE International Conference on Robotics and Automation (ICRA)*, 2025.
- [3] Osher Azulay, <u>Dhruv Metha Ramesh</u>, Nimrod Curtis, and Avishai Sintov, "Visuotactile-Based Learning for Insertion with Compliant Hands" in *Robotics and Automation Letters (RA-L)*, 2025
- [4] Haonan Chang, <u>Dhruv Metha Ramesh</u>, Shijie Geng, Yuqiu Gan, Abdeslam Boularias, "Mono-STAR: Mono-camera Scene-level Tracking and Reconstruction", in *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.

UNDER REVIEW

[5] Aravind Sivaramakrishnan, Sumanth Tangirala, <u>Dhruv Metha Ramesh</u>, Edgar Granados, and Kostas E. Bekris, "KRAFT: Sampling-Based Kinodynamic Replanning and Feedback Control over Approximate, Identified Models of Vehicular Systems".

RELEVANT SKILLS

WORK

Python, C++, PyTorch, Robot Operating System (ROS), MuJoCo, IsaacGym, Stable Baselines3

ROBOT SYSTEMS Unitree Go1, KUKA LBR iiwa14, MuSHR

CONFERENCE AND JOURNAL REVIEWING

- Robotics: Science and Systems (R:SS) 2023-2024
- IEEE International Conference on Robotics and Automation (ICRA) 2022-2025
- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2022-2023
- Conference on Robot Learning (CoRL) 2024
- Conference on Neural Information Processing Systems (NeuRIPS) 2024
- *IEEE Robotics and Automation Letters (RA-L)*