Dhruv Metha Ramesh

dhruv.metha@rutgers.edu • +1 (732) 799-5136 • https://dhruvmetha.github.io • Github: dhruvmetha

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

WORK EXPERIENCE

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

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] Dhruv Metha Ramesh, 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*, Dhruv Metha Ramesh*, 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] Haonan Chang, Dhruv Metha Ramesh, 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

[4] Aravind Sivaramakrishnan, Sumanth Tangirala, Dhruv Metha Ramesh, Edgar Granados, and Kostas E. Bekris, “KRAFT: Sampling-Based Kinodynamic Replanning and Feedback Control over Approximate, Identified Models of Vehicular Systems”.

[5] Osher Azulay, Dhruv Metha Ramesh, Nimrod Curtis, and Avishai Sintov, “Visuotactile-Based Learning for Insertion with Compliant Hands ”.

RELEVANT SKILLS

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)*