

# Rohit Menon

PhD Candidate in Robotics

University of Bonn, Humanoid Robots Lab

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[Google Scholar](#) | [ResearchGate](#) | [GitHub](#)

## Education

### **Ph.D. in Computer Science (Ongoing)**

*University of Bonn*

2022 – Present

*Bonn, Germany*

- Focus: Active Perception, Semantic Mapping, and Uncertainty-Aware AI for Agricultural Robotics.
- Advisor: Prof. Dr. Maren Bennewitz, Humanoid Robots Lab.

### **M.Sc. in Automation and Robotics**

*TU Dortmund University*

2012 – 2015

*Dortmund, Germany*

- Master's Thesis at DLR (German Aerospace Center) on Shared Autonomy for Assistive Robotics.

### **B.E. in Electrical Engineering**

*University of Mumbai (SPCE)*

2004 – 2008

*Mumbai, India*

- Silver Medal for academic excellence in the Bachelor's Program.

## Professional Experience

### **Research Associate**

*Humanoid Robots Lab, University of Bonn*

2022 – Present

*Bonn, Germany*

- Leading research on autonomous fruit mapping and multi-arm manipulation in the PhenoRob Cluster of Excellence.
- Developing evidential deep learning frameworks for uncertainty-aware semantic surface mapping.

### **Founding Engineer & Group Lead (AI in Manipulation)**

*NEURA Robotics*

2019 – 2022

*Metzingen, Germany*

- Spearheaded the AI division focusing on industrial manipulation and human-robot engagement.
- Developed deep-learning based pick-and-place systems and multi-sensor fusion for collision avoidance.

### **Researcher (Robot Control)**

*DFKI (Robotics Innovation Center)*

2015 – 2019

*Bremen, Germany*

- Contributed to EU projects (Hybr-IT, TransFIT, NeTTUN) on mobile manipulation and trajectories.
- Served as DFKI Project Coordinator for the EIT Digital project iLevator (2016).

### **Master Thesis Student**

*DLR - German Aerospace Center*

2014 – 2015

*Wessling, Germany*

- Developed shared autonomy interfaces for assistive robotic hands.

## Honors & Awards

- **Best Poster Award**, IROS Workshop on Perception and Planning for Mobile Manipulation (2025).
- **Deutschlandstipendium**, Awarded by the German Federal Government (2013).
- **Silver Medal**, Bachelor in Electrical Engineering, SPCE, University of Mumbai (2008).
- **Ratan Tata Scholarship**, Awarded for excellence in engineering (2006 – 2008).

## Selected Publications

- **Menon, R.**, et al. “Open-Vocabulary and Semantic-Aware Reasoning for Search and Retrieval of Objects in Dynamic and Concealed Spaces.” *IROS Workshop on Perception and Planning for Mobile Manipulation*, 2025. (**Best Poster**)

- **Menon, R.**, Dengler, N., Pan, S., Chenchani, G.K., Bennewitz, M. “EvidMTL: Evidential Multi-Task Learning for Uncertainty-Aware Semantic Surface Mapping from Monocular RGB Images.” *IROS*, 2025.
- **Menon, R.**, Dengler, N., Bennewitz, M. “GO-VMP: Global Optimization for View Motion Planning in Fruit Mapping.” *IROS*, 2025.
- Lenz, C.\*, **Menon, R.\***, et al. “Hortibot: An Adaptive Multi-Arm System for Robotic Horticulture of Sweet Peppers.” *IROS*, 2024.
- Marangoz, S.\*, **Menon, R.\***, et al. “DawnIK: Decentralized Collision-Aware Inverse Kinematics Solver for Heterogeneous Multi-Arm Systems.” *IEEE Humanoids*, 2023.
- **Menon, R.**, et al. “NBV-SC: Next Best View Planning Based on Shape Completion for Fruit Mapping.” *IROS*, 2023.

### **Professional Service**

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- **Reviewer:** IEEE RA-L, IJRR, ICRA, IROS, CASE, Humanoids, RSS 2026.

### **Public Engagement**

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- **Pint of Science (Bonn):** “From Pixels to Peppers: Active Perception in Robotic Agriculture” (2024).
- **WDR Bonn:** Television interview on the HortiBot system and the future of robotics (2024).