University Academic Curriculum Vitae

Personal information
Name RABERT RAJESH MALLAVARAPU
Place of birth:
Date of birth:
Nationality:
Number of children:
Address:
Telephone numbers:
- Mobile

Education since leaving school
- 2017 Bachelors of Applied Science Mechanical Engineering, University Of Windsor, Canada.
- 2023 Masters in Industrial Mechanical Engineering (Automation), Free University Of Bozen-Bolzano, Italy

Professional experience

From / to	Job title	Name of Institution	level	responsibilities
2019-2020	Manufacturing Engineer	Rigmaster Power Ltd	Junior	Evaluated manufacturing processes based on quality criteria, such as efficiency and speed. Organize and manage manufacturing workflows and resources.
2024-2025	Assistant Researcher	Free University of Bozen-Bolzano	Assistant	Developed advanced perception systems for tracking humans to enhance Human-Robot-interaction.

Statement of interest
I am an Industrial-Mechanical Researcher specializing in Robotic Systems Development and Automation, with a strong focus on Human-Robot Interaction and collaborative applications. My expertise spans robot motion planning, vision sensors, AI applications, sensor fusion, localization, and navigation. Through my work, I have deployed vision-based safety systems in ROS and developed motion planning and control strategies for redundant robotic systems.
Currently, my research is centered on advancing motion planning and control for redundant mobile manipulator systems to enhance the resilience and adaptability of smart factories. I am particularly interested in leveraging AI-driven automation and sensor fusion to improve efficiency and safety in industrial environments. Through my contributions, I aim to drive innovation in intelligent manufacturing and collaborative robotics.

Language competence

Language	Writing	Speaking
English	C1	C1
Italian	A2	A2
German	A1	A1