MVJCE - Robotics and Automation Laboratory (RAL)

MVJCE - Robotics and Automation Laboratory (RAL) was established in 2016 under the Department of Electronics & Communication Engineering. The goal of this lab is to educate the undergraduate and post- graduate students in the field of robotics so they will get a technically advanced platform to complete their mini projects and also final year projects. The lab is well equipped with all the advanced tools and equipments to enable students to implement their ideas and bring them to life. In house trainings can be provided to interested candidates. The research activities in this lab focus on a new generation of smart, embedded mechanical and Mechatronics systems. The recent explosion of communications capabilities, coupled with ongoing advances in computing effectiveness and revolutions in miniaturization of processors/ sensors/ actuators, has accelerated the pace of implementing truly distributed smart embedded systems with a variety of emergent applications.

Robotics and automation systems find its application in many domains such as security, surveillance and reconnaissance, planetary exploration, search and rescue, cleanup of hazardous waste, mining, transportation, manufacturing, rehabilitation and service, agricultural industry, biomedical industry, ocean and coastal engineering, and aerospace engineering. The ultimate goal is to develop theoretical foundations and gain practical knowledge.

The lab also houses state – of – the - art prototype robots such as – Hex Crawler Robot, MOBILO (Mobile operated Robot), OMIBO (Omni wheel operated robot), MARSIAN (Mars Rover Prototype), JCBIAN (Pneumatic back Hoe Loader), FLEXO (Robotic hand), Optimus (Flying Robot).


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