MANIPAL
ACADEMY of HIGHER EDUCATION
(Institution of Eminence Deemed to be University)

Dr TMA Pai 1898 - 1979
125 ANNIVERSARY Years

G20 भारत 2023 INDIA

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

MANIPAL
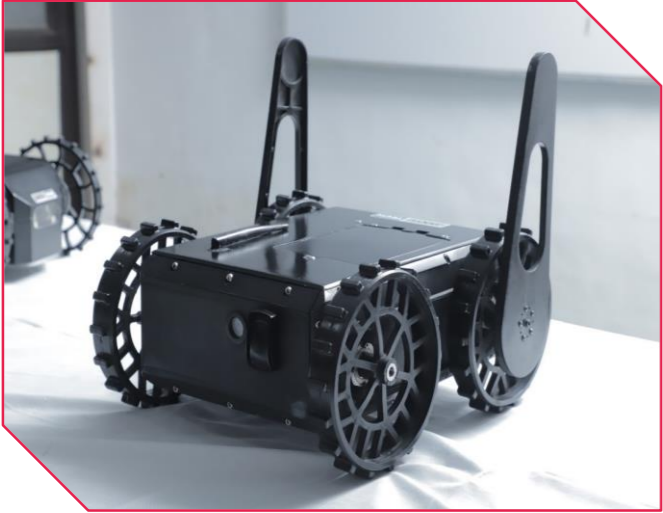INSTITUTE OF TECHNOLOGY
(A constituent unit of MAHE, Manipal)

One Week Workshop
on
Robotics and Industrial Automation
(RIA-2023)
25th to 29th September 2023

Organized by
Department of Mechatronics
Manipal Institute of Technology,
MAHE, Manipal, Karnataka, India

under 125th birth anniversary of our founder, the late Dr. T. M. A Pai

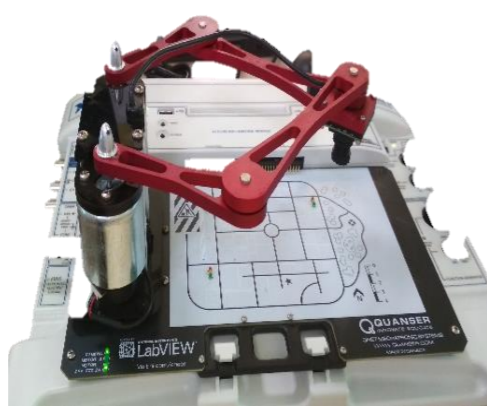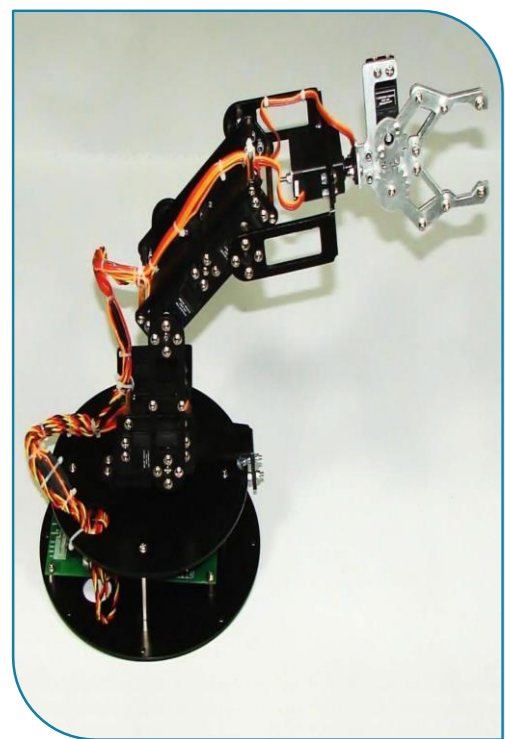## About the Mechatronics Department, MIT, Manipal

The Department of Mechatronics established in the year 2006 offers undergraduate (B.Tech. in Mechatronics), post-graduate (M. Tech. in Industrial Automation and Robotics) and Ph.D. programs in Mechatronics. It has state-of-art research facilities to support academics and advanced research. Department is well equipped with laboratories set up in collaboration with Bosch Rexroth India Pvt. Ltd., ABB, Bangalore, IIT Bombay, and Beckhoff Automation India Pvt. Ltd. along with Texas Instruments.

About Workshop RIA-2023

This workshop offers an unique opportunity to acquire comprehensive knowledge and strengthen skills in the field of robotics and industrial automation. This will provide a forum for discussion on fundamental aspect of robotics and industrial automation theoretically as well as practically. The workshop is designed for academia and research scholar interested in robotics and automation.

Topic to be Covered

- Fundamental of Robotics & Industrial Applications
- Kinematic and Dynamic Modeling of Robots
- Forward and Inverse Kinematics of Serial and Parallel Robots.
- Basics of Robot Dynamics, Joint Space and Task Space
- Sensor Integration and Control of Robot Drives using Microcontroller.
- Modeling and Control of Robots
- Robot Vision for Industrial Applications
- **Hands-on Sessions:**
  Exploration of Robot Studio, Robot Analyzer, Collaborative Robot (UR 5 Cobot), Raspberry-Pi, OpenCV for Industrial Applications

OpenCV

Organizing Chairman
Dr. D. V. Kamath,
Professor & Head,
Dept. of Mechatronics, MIT, Manipal

Workshop Coordinators
Dr. Ankur Jaiswal, MIT, Manipal
Dr. Umesh Kumar Sahu, MIT, Manipal
Dr. Vijay Babu Koreboina, MIT, Manipal

Registration Fee
Non-MAHE/ External Participants
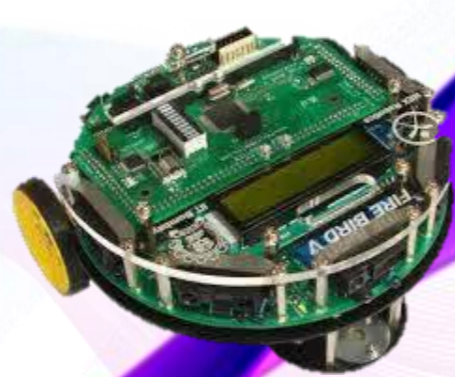Student- ₹ 500/-
Faculty- ₹ 1000/-
Participants from MAHE:
Student- ₹ 400/-
Faculty- ₹ 800/-
(Inclusive of GST)

Scan to Register

4 QUALITY EDUCATION

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

17 PARTNERSHIPS FOR THE GOALS

Registration Details: (Fill after Registration)
https://forms.gle/NPnzfpLm2dA8WQa37