



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

4th INTERNATIONAL CONFERENCE

ON

**ROBOTICS, INTELLIGENT
AUTOMATION AND CONTROL
TECHNOLOGIES
(RIACT 2023)**

**Theme: AI & Intelligent control techniques in
Robotics and Automation**

Oct 20-22, 2023

In Association with



**Hochschule Bochum
Bochum University
of Applied Sciences**



SCHOOL OF MECHANICAL ENGINEERING

VIT CHENNAI, TAMILNADU, INDIA

<http://chennai.vit.ac.in>

VIT – A place to learn; A chance to grow

ABOUT VIT

Founded in 1984, VIT has made a mark in the field of higher education in India imparting quality education in a multi-cultural ambience, intertwined with extensive application-oriented research. VIT was established with the aim to provide quality higher education on par with International Standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. VIT was established by well-known educationalist and former parliamentarian, Dr. G. Viswanathan, Founder and Chancellor, a visionary who transformed VIT into a center of excellence in higher technical education. Govt. of India recognized VIT as an Institution of Eminence (IoE). ARIIA, Govt. of India recognized VIT as a No. 1 Private University for Innovation. MHRD, Govt of India ranked VIT as No.11 among the Engineering Institutions (NIRF-2022 ranking). VIT Chennai is ably spearheaded by Dr. Sekar Viswanathan, Vice President, Dr. Rambabu Kodali, Vice Chancellor and Dr. V. S. Kanchana Bhaaskaran, Pro-Vice Chancellor. They share in the mission to make VIT a global center towards academic and research excellence.

The focus is to:

- To maximize the Industrial connectivity
- To create Centers of Excellence in contemporary areas of research.
- To enrich technological and managerial human capital nurtured in a multicultural ambience.
- To provide a common platform for the agglomeration of ideas of personnel from various walks of life for learning enrichment.
- To create opportunities and exploit the available resources to benefit industry/society.
- To encourage participation in the national agenda of knowledge building.
- To foster international collaborations for mutual benefit in areas of research.



ABOUT SCHOOL

The School of Mechanical Engineering (SMEC) at VIT Chennai was established to impart state-of-the art education, training and research in the field of Mechanical Engineering. SMEC provides undergraduate program (B.Tech) in Mechanical Engineering and postgraduate program (M.Tech) in CAD/CAM and Mechatronics Engineering and Ph.D. / M.S. (Research). The School has highly qualified faculty members with good theoretical background and valuable industrial experience in diverse fields like Thermal and Automotive Engineering, Design and Manufacturing, Mechatronics and Material sciences. The school has 100% of teaching faculty with doctorates giving high emphasis for research along with innovative teaching methods which helps to involve students in research and project based learning in the school. The research outcomes in the form of publications and patents are the testament to the world class, global standard infrastructure and research laboratory facilities available in the school. The outreach programs of the school include organizing Value Added Programs and workshops for teachers, industry personnel and students for various organizations in relevant areas periodically.

RIACT 2023

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THEMES OF RIACT 2023

- Robot Design, Control & Communications
- Mobile & Autonomous Robots
- Intelligent Automation Systems
- Industry Internet of Things

- Robust & Adaptive Control Systems
- Automation in Life Sciences

CALL FOR ORIGINAL RESEARCH WORK IN KEY TOPICS (BUT ARE NOT LIMITED TO) RELATED TO RIACT 2023

• Robot Design, Development & Control	• Intelligent Automation Systems	• AI in Robotics
• Modelling & Simulation	• Intelligent Transportation	• Industrial IoT
• Kinematics & Dynamics	• Intelligent Fault Detection and Diagnosis	• Deep learning in Robotics
• Robotic Perception	• Intelligent Components for Control	• Cognitive Automation
• Mobile & Autonomous Robots	• Industrial Networks and Automation	• Biologically inspired Control systems
• Rehabilitation Robots & Devices	• Control and adaptation Techniques	• SLAM
• Humanoid & Smart Robots	• Automation in Life Sciences	• ROS
• Military Robots	• Robust/Adaptive Control of Robotic System	• Image Processing & Vision Systems
• Service & Medical Robots	• Optimization and Optimal Control	• Human-Machine Interface
• Agricultural Robots	• Motion Planning and Control	• Actuators & Sensors
• Space & Underwater Robots	• Cognitive Control Architectures, Compliance and Impedance Control	• Computer and microprocessor-based control
• Collaborative Robots	• Control and Supervision Systems	• CAD/CAM/CAE
• Micro/Nano Robotics	• Vehicle Control Applications	• Mechatronic Systems