

## 4<sup>th</sup> 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



## **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
<ul> <li>Modelling &amp; Simulation</li> </ul>	Intelligent Transportation	Industrial IoT
• Kinematics & Dynamics	<ul> <li>Intelligent Fault Detection and Diagnosis</li> </ul>	<ul> <li>Deep learning in Robotics</li> </ul>
Robotic Perception	• Intelligent Components for Control	• Cognitive Automation
<ul><li>Mobile &amp; Autonomous Robots</li></ul>	• Industrial Networks and Automation	<ul> <li>Biologically inspired Control systems</li> </ul>
• Rehabilitation Robots & Devices	Control and adaptation Techniques	• SLAM
<ul> <li>Humanoid &amp; Smart Robots</li> </ul>	Automation in Life Sciences	• ROS
Military Robots	Robust/Adaptive     Control of Robotic     System	<ul><li>Image Processing &amp; Vision Systems</li></ul>
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 microproce ssor-based control
• Collaborative Robots	<ul><li>Control and Supervision Systems</li></ul>	• CAD/CAM/CAE
Micro/Nano     Robotics	Vehicle Control Applications	Mechatronic     Systems