## ROBOTS IN ACTION PROFESSIONAL CONTEST 2023

As we usually do every year, on June 9, 2023, the Robotics Society of Romania, Târgoviște branch, organized the professional student competition "ROBOTS IN ACTION", the 16th edition. Students and master's students of the Faculty of Electrical Engineering, Electronics and Information Technology, within the "Valahia" University in Târgoviște, were involved in this engineering applications competition.



After many years, we managed to organize the event face to face, having a new experience. Our annual event took place together with another event, also belonging to our faculty, namely the Session of Student Scientific Communications - "Automated Control and Applied Informatics in Laboratory and Industrial Processes" - CAIA 2023, reached its 4th edition. A number of 15 student applications from our entire faculty were entered in the competition, in different fields that have become benchmarks in our event: Robotics, Automation, Informatics or Mechatronics. These 15 were joined by another 30 theoretical papers registered at the above-mentioned Scientific Communications Session.

Taking into account the fact that these conferences took place a month earlier than the supporting diploma and dissertation works, our students presented their engineering achievements, videos about their applications, live snapshots, demonstrations of personal works, putting to work innovations in front of those present, teaching staff, other students, representatives of the socio-economic and business environment from the South Muntenia area.

As always, images from the event could also be viewed through a LIVE broadcast of the event, at the following addresses: <u>http://www.robotics-society.ro/filiale.html</u>, http://www.srr.ssai.valahia.ro, but also on our YouTube channel.

In the XVI edition, we found, among others, technical-engineering applications made in our faculty, such as: Autonomous vehicle for reading data from an operating space, Modeling and implementation of a disassembly process of a complex part in a dedicated station, Identifying the position of parts with Matlab and using the data to drive an ABB Industrial Robot, in an assembly process, Portable Navigation for cars, Implementation of an automatic system for monitoring and controlling water recirculation in a hydro-industrial system, Designing of a sorting station in a Flexible Manufacturing System, Design and development of a control system, using a Siemens Programmable Automation, Sensors and sensory systems in flexible manufacturing, Modeling and control of a robotic arm, Designing an automated irrigation control system for some agricultural areas, SCADA system for controlling a three-phase motor, Designing a handling station in a Flexible Manufacturing System, Mobile application for scanning barcodes and displaying prices in a store, Programming an ABB robot in a Flexible Manufacturing Line.

And this year, we were visited by students from all the National Colleges in Dâmbovița, as well as representatives of employers, managers and human resources specialists, so that many students could be recruited as future engineers.

At the end, various prizes and diplomas were awarded to all participants.

Associate Professor, Ph. D. Eng. Paul Ciprian PATIC "Valahia" University of Targoviste