



ADMISSION TO DOCTORAL STUDIES

Session September 2024

Field of doctoral studies: Mechatronics and Robotics

Doctoral supervisor: Conf. Dr. Gigel Macesanu

TOPICS FOR THE ADMISSION TO DOCTORAL STUDIES

TOPIC 1: *Adaptive Control for Human-Robot Interaction in Unstructured Environments*

Recommended bibliography:

- [1] G. Macesanu, S. Grigorescu, F. Moldoveanu, "Controlul sistemelor cu vedere activă în interacțiunea om-mașină", 2014, Ed. Universitatii Transilvania din Brasov.
- [2] R. Jahanmahin, et. al, "Human-robot interactions in manufacturing: A survey of human behavior modeling", Robotics and Computer-Integrated Manufacturing, Elsevier, 2022.
- [3] Peter Corke, Robotics, Vision and Control, Springer, 2017.
- [4] B. Siciliano, et. al, "Robotics: Modelling, Planning and Control", Springer, 2009.

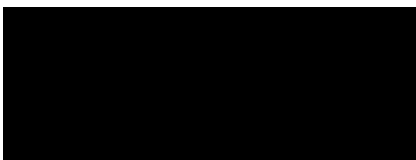
TOPIC 2: *Integration of Decentralized Multi-Robot Systems in Smart-City Infrastructure*

Recommended bibliography:

- [1] G. Macesanu, S. Grigorescu, F. Moldoveanu, "Controlul sistemelor cu vedere activă în interacțiunea om-mașină", 2014, Ed. Universitatii Transilvania din Brasov.
- [2] R. Jahanmahin, et. al, "Human-robot interactions in manufacturing: A survey of human behavior modeling", Robotics and Computer-Integrated Manufacturing, Elsevier, 2022.
- [3] N. Nedjah, A. A. Abd El-Latif, et.al, "Robotics and AI for Cybersecurity and Critical Infrastructure in Smart Cities", Springer, 2022.
- [4] Peter Corke, "Robotics, Vision and Control", Springer, 2017.
- [5] B. Siciliano, et. al, "Robotics: Modelling, Planning and Control", Springer, 2009.

Doctoral supervisor,

Conf. Dr. Gigel Macesanu



Coordinator of the field of doctoral studies,

Prof. Dr. Sorin Grigorescu

