PERSONAL INFORMATION

Ginerică Cosmin-George

cosmin.ginerica@unitbv.ro

PROFESSIONAL EXPERIENCE

01.10.2024-Present

Assistant professor

Transilvania University, Brașov, România

- Department of Automation and Computer Science, Faculty of Electrical Engineering and Computer Science
- Domains: robotics, artificial intelligence, computer vision

01.01.2022-Prezent

Project manager

Elektrobit Automotive, Brașov, România

- Managing a software development team responsible for implementing Adaptive Autosar- specific modules.
- Tasks planning work
- Managing cross-team interactions

Activity sector Automotive industry

05.08.2013-01.01.2022

Software engineer

Elektrobit Automotive, Brașov, România

- Research in artificial intelligence
- Research in computer vision
- Automotive software development

Activity sector Automotive industry

EDUCATION

01.10.2019-18.04.2024

PhD Thesis

Thesis domain: Mechatronics and Robotics, thesis title: „Navigation of autonomous robots using artificial intelligence techniques", scientific supervisor Prof. dr. eng. Sorin GRIGORESCU, Interdisciplinary Doctoral School, Transilvania University of Brașov.

01.10.2014-01.07.2016

Master's Degree

Field of study: Systems Engineering, Advanced Systems in Automation and Information Technologies study program, Faculty of Electrical Engineering and Computer Science, Transilvania University of Brașov.

01.10.2010-01.07.2014

Bachelor's Degree

Field of study Systems Engineering, Automatic Control and Applied Informatics study program, Faculty of Electrical Engineering and Computer Science, Transilvania University, Brașov.

01.10.2006-01.07.2010

Highschool Diploma

Grigore Antipa College, Brasov (România)

PERSONALE COMPETENCIES

Mother tongue: Romanian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Conversation	Oral speech	
English	C2	C2	B2	B2	B2
German	A2	A2	A1	A1	A2

Communication
- good communication skills, due to collaboration with international teams in the workplace.

Managerial competencies
- leadership
- conflict resolution
- efficient time organization and task management

General technical competencies
- good knowledge of the Python programming language, due to previous experience gained in the workplace
- good knowledge of the C++ programming language, due to experience gained in the workplace
- good knowledge of the field of Artificial Intelligence, due to individual study and research carried out in the development of the doctoral thesis.
- good knowledge of the field of Computer Vision, due to individual study and research carried out in the development of the doctoral thesis.
- good knowledge of the field of Mechatronics and Robotics, due to individual study and research carried out in the development of the doctoral thesis.

General IT competencies
- Microsoft Office™ suite
- Atlassian suite (Jira, Confluence, etc.)

RESEARCH

Publications
Presentations
Projects
Conferences

- S.M. Grigorescu, G. Macesanu, T.T. Cocias, B. Trasnea, C. Ginerica, „Generative training images for machine learning-based object recognition system”, European Patent Application, Patent no. EP 3 343 432 A1, Date of publication: 04.05.2017.
- S.M. Grigorescu, C. Ginerica, „Recunoașterea formelor. Îndrumar de laborator. Set de lucrări practice privind procesarea statistică a datelor pentru disciplina Machine Learning”, Editura Universității Transilvania, ISBN 978-606-19-0894-3, 2017.
- C. Ginerica, M. Zaha, L. Floroian, D. Cojocaru, S. Grigorescu, “A Vision Dynamics Learning Approach to Robotic Navigation in Unstructured Environments”, Robotics 2024; 13(1):15, https://doi.org/10.3390/robotics13010015.
- C. Ginerica, M. V. Zaha, F. Gogianu, L. Busoniu, B. Trasnea and S. M. Grigorescu, "ObserveNet Control: A Vision-Dynamics Learning Approach to Predictive Control in Autonomous Vehicles," in IEEE Robotics and Automation Letters, doi: 10.1109/LRA.2021.3096157.

Publications
Presentations
Projects
Conferences

- C. Ginerica, D. Cojocaru, S. Grigorescu, „A Vision-Dynamics Learning Approach to Prediction-Based Control in Autonomous Vehicles”, International Symposium on Signals, Circuits & Systems - ISSCS 2021.
- C. Ginerica, V. Isofache, S. Grigorescu, „Vision Dynamics: Environment Modelling, Path Planning and Control Based on Semantic Segmentation”, International Joint Conference OPTIM-ACEMP 2021.
- S.M. Grigorescu, C. Ginerica, M. Zaha, G. Macesanu, B. Trasnea, ”LVD-NMPC: A Learning-based Vision Dynamics Approach to Nonlinear Model Predictive Control for Autonomous Vehicles”, Advanced Robotic Systems, Sage Journals, 2021.
- B. Trasnea; C. Ginerica, M. Zaha, G. Măceşanu, C. Pozna, S. Grigorescu, OctoPath: An OcTree-Based Self-Supervised Learning Approach to Local Trajectory Planning for Mobile Robots. Sensors 2021, 21, 3606. https://doi.org/10.3390/s21113606.