



PERSONAL INFORMATION

Name	Marius Mircea BALAS
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Nationality	Romanian
Date and place of birth	July 12, 1956, Oradea, Romania

WORK EXPERIENCE

TOTAL YEARS OF EXPERIENCE August 1980 - today

<ul style="list-style-type: none">• Dates (from – to)• Employer• Type of business or sector• Occupation or position held• Main activities and responsibilities	<p>1992-today</p> <p>Aurel Vlaicu University of Arad, B-dul Revolutiei 310130 Arad, Romania</p> <p>Education</p> <p>Professor</p> <p>Teaching (courses and laboratories): Electronics (linear and digital), Automate control, Computer modelling, identification and simulation, Neuro-fuzzy systems, Power electronics, System engineering, Renewable energies, etc.</p> <p>Research: Intelligent System Research Center</p>
<ul style="list-style-type: none">• Dates (from – to)• Employer• Type of business or sector• Occupation or position held• Main activities and responsibilities	<p>1984-1992</p> <p>Scientific Research Institute for Railway Cars of Arad, Romania</p> <p>Research & Development</p> <p>Engineer at the Research Department, Chief of the Electric Testing Laboratory</p> <p>Design and Research</p>
<ul style="list-style-type: none">• Dates (from – to)• Employer• Type of business or sector• Occupation or position held• Main activities and responsibilities	<p>1980-1984</p> <p>The Tool-Machines Enterprise <i>Infratirea</i> of Oradea, Romania</p> <p>Industry</p> <p>Electronic Engineer</p> <p>Experience in PLCs, CNCs and laser interferometers</p>
<ul style="list-style-type: none">• Dates• Employer	<p>2004 and 2006</p> <p>Invited Professor at the Southern University of Toulon-Var, France</p>

EDUCATION AND TRAINING

• <i>Date</i>	2021
• <i>Title of qualification awarded</i>	Habilitation
• <i>Dates (from – to)</i>	1995-2001
• <i>The institution</i>	Politehnica University of Timisoara, Romania
• <i>Principal skills covered</i>	Electronic Engineering and Telecommunications
• <i>Title of qualification awarded</i>	Doctor
• <i>Dates (from – to)</i>	1975-1980
• <i>The institution</i>	Politehnica University of Timisoara, Romania
• <i>Principal skills covered</i>	Electronic Engineering and Telecommunications
• <i>Title of qualification awarded</i>	Diplomat Engineer

SKILLS AND COMPETENCES

MOTHER TONGUE

Romanian

OTHER LANGUAGES

English Full professional proficiency C1 (reading, writing, verbal skills)

French Full professional proficiency (reading, writing and verbal skills)

ORGANIZATIONAL COMPETENCES

Coordinator for several research projects.
Co-organizing the Control Engineering and Industrial Software Branch of the university and the afferent laboratories.
Co-organizing the Summer School "SOFT COMPUTING" 2003, 2004, 2005 and 2006 Arad.
General Co-Chair of the International Workshop IEEE SOFA 2005-2018.
Member of several organizing committees for different national and international scientific meetings: ISREIE, SOCO, EMEIT, etc.
Coordinator for numerous student research projects.

TECHNICAL SKILLS AND COMPETENCES

Technological background acquired in tool machines and railway transportation. Hardware (electronic equipment, PLC, FPGA, sensors, etc.) and software skills relied to electronics, automatic control, computer modeling, Artificial Intelligence and measurements.
Matlab, Xilinx ISE/Vivado, CLIPS, LPA, etc.

PUBLICATIONS

- ResearcherID: A-8146-2010
- Scopus Author ID: 7004861128
- ORCID: 0000-0001-9092-4730
- Brainmap: U-1700-027Z-9558
- 7 invention patents (two of them international)
- 50 indexed publications (Thomson Reuters), 37 Scopus publications
- 7 books and 14 book chapters, 192 scientific papers and conferences;
- Member of editorial boards: IJSDA, Acta Technica Jaurinensis, etc.
- Reviewer for Doctoral thesis, book chapters, journal articles, etc.

ORIGINAL CONCEPTS

The fuzzy-interpolative systems, the passive greenhouse, the intelligent roof-top greenhouse iRTG, the constant time to collision optimization of the traffic, the imposed distance braking, internal model bronze casting, PWM inverter for railway coaches in tropical environments, the rejection of the switching controllers effect by phase trajectory analysis, Fermat neuron, etc.

AFFILIATIONS

Senior Member IEEE; etc. SRAIT (Societatea Română de Automatică și Informatică Tehnică), AGIR (Asociația Generală a inginerilor din România), etc.

Arad, Dec. 31, 2025

