

PERSONAL INFORMATION

Florin Dumitru M. MOLDOVEANU

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POSITION
IOSUD UTBV

PhD supervisor ;
Doctoral studies field: Control Engineering;
Since: 2007.

EXPERTISE FIELD AND
RESEARCH INTEREST AREAS

- Control Systems for Electrical Drives with Induction Machines;
- Variable Structure Control Systems (Sliding Mode Regime);
- Discrete Event Dynamic Systems;
- Robotic Control Systems.

WORK EXPERIENCE

Dates **Teaching staff member**

Faculty of Electrical Engineering and Computer Science, Transilvania University of Brasov,
29 Eroilor Blvd., 500036 Brasov, Romania (<http://www.unitbv.ro>)

- 2021 – prezent: assoc. professor;
- 2006 – 2021: full professor;
- 1999 – 2006: assoc. professor;
- 1983 – 1999: lecturer;
- 1978 – 1983: assistant.

Main activities and responsibilities:

- Teaching;
- Coordinating.

Education at university level.

EDUCATION AND TRAINING

1991 - 1998

Doctoral studies

Nivel 8 CEC

Transilvania University of Brasov, Romania

- Domain: Electrical Drives

1970 - 1975

Bachelor of engineering

Nivel 6 CEC

Transilvania University of Brasov, Romania

- Electro-mechanical engineering

1966 - 1970

High school graduate with baccalaureate

Nivel 4 CEC

“Radu Negru” National College, Fagaras, Romania

- General education

PERSONAL SKILLS

Mother tongue(s)

Romanian

| Other language(s) | UNDERSTANDING | | SPEAKING | | WRITING |
|-------------------|---------------|---------|--------------------|-------------------|---------|
| | Listening | Reading | Spoken interaction | Spoken production | |
| French | B2 | B2 | B2 | B1 | B2 |
| English | A2 | A2 | A2 | A2 | A2 |

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills ▪ Good communication skills gained through my experience as teacher.

Organisational / managerial skills

- 2011-2017: Head of "Intelligent Process Control" research department of the CDI Institute: PRO-DD High Tech Products for Sustainable Development;
- 2012 – 2020: President of the Scientific Committee of Transilvania University's Senate;
- 2007-2016: Member of the Scientific Council of the Technological and Business Incubator of Transilvania University of Brasov – ITA UniTBv;
- 2005 – 2016: President of the Brasov branch of the Romanian Society of Control Engineering and Technical Informatics;
- 2004 – 2008: Vice-dean of the Faculty of Electrical Engineering and Computer Science;
- 1996 – 2000: Scientific secretary of the Faculty of Electrical Engineering;
- 1986 – 1990: Scientific secretary of the Department of Electrical Drives.

Job-related skills

- PhD supervisor in Control Engineering;
- Teaching and coordinating in the following subjects: Systems Theory, Analysis and Design of Digital Circuits, Variable Structure Control Systems, Programmable Logic Circuits.

Computer skills ▪ Competent with most Microsoft Office™ . programmes.

Other skills

- Social skills: team spirit, helping initiative, cooperation, listening and acting;
- Organizing students' activities.

ADDITIONAL INFORMATION

Publications

- 11 books and book chapters;
- 58 papers published in journals and conference proceedings, indexed in ISI Web of Knowledge, IEEE Xplore, Scopus, Science Direct, Elsevier, Springerlink databases.

Projects ▪ 16 grants / projects

Memberships

- Institute of Electrical and Electronics Engineers – IEEE, Industrial Electronics Society, member no. 41377873;
- SRAIT – Romanian Society of Control Engineering and Technical Informatics, member no.1307;

Citations ▪ 679 citations in BDI indexed articles (ISI web of Knowledge, Scopus, IEEE Xplore, Science Direct, Elsevier, Springerlink databases).

H Index 3 (ISI); 9 (Scopus); 10 (Google Scholar)

ANNEXES

List of Coordinated PhD Theses

1. Intelligent Distributed System for Multi-axis Motion Control Applied to Industrial Robots.

2. Simultaneous Localization and Mapping of Indoor Environments by Using Vision Based Mobile Robots.
3. Research on Digital Image Processing in Active Vision Controlled Mobile Robots.
4. Parallel Processing in the Multiscale Modeling of Coronary Hemodynamics.
5. Research on 3D Object Volumetric Estimation Using in Robotic Graping.
6. Complex Event Processing over Inexact Attributes.
7. Applied Research Regarding Constraints Based Cognitive Computing Mechanisms and their Usage on Autonomic Control Systems.
8. Contributions to the System on Chip Data Security using PUF Circuits.
9. Human Cardiovascular System Modeling and Simulation, using Digital Image Processing and Artificial Intelligence Techniques.
10. Deep Learning for Medical Image Generation, Non-invasive Diagnosis and Privacy Preservation.
11. Personalized, High Performance, Hemodynamics Simulation of Human Circulatory System, using the Lattice-Boltzmann Method.
12. Statistical Processing of Local and Geospatial Data within Autonomous Driving Systems.

Relevant publications (selection)

1. OGREZEANU I., VIZITIU A., CIUȘDEL C., PUIU A., COMAN S., BOLDIȘOR C., ITU A., DEMETER R., MOLDOVEANU F., SUCIU C., ITU L., Privacy-Preserving and Explainable AI in Industrial Applications, Applied Sciences, Vol. 12(13), June 2022, ISSN: 2076-3417 (FI = 2.838), <https://doi.org/10.3390/app12136395>.
2. Itu, L.M., Sharma, P., Suci, C., Moldoveanu, F., Comaniciu, D. Personalized Blood Flow Computations: A Hierarchical Parameter Estimation Framework for Tuning Boundary Conditions. International Journal for Numerical Methods in Biomedical Engineering, Vol. 33, Issue 3, March 2017, p. e02803, ISSN: 2040-7947, DOI: 10.1002/cnm.2803, Accession Number WOS: 000395407900006 (FI = 2.338), <https://doi.org/10.1002/cnm.2803>.
3. Stanciu, A., Cîrstea, M., Moldoveanu, F. Analysis and Evaluation of PUF based SoC Designs for Security Applications. IEEE Transactions on Industrial Electronics, Vol. 63, Issue 9, Sept. 2016, p. 5699-5708, ISSN: 0278-0046, DOI: 10.1109/TIE.2016.2570720, Accession Number WOS: 000384641600040 (FI = 7.168), <https://doi.org/10.1109/TIE.2016.2570720>.
4. Măceșanu, G., Comnac, V., Moldoveanu, F., Grigorescu, S.M. A Time-Delay Control Approach for a Stereo Vision Based Human-Machine Interaction System. Journal of Intelligent and Robotic Systems: Theory and Applications, Springer, Netherlands, Vol. 76, Issue 2, Nov. 2014, p. 297-313, ISSN: 0921-0296, DOI: 10.1007/s10846-013-9994-4, Accession Number WOS: 000342439900008 (FI = 1.178), <https://doi.org/10.1007/s10846-013-9994-4>.
5. Cociăș, T.T., Moldoveanu, F., Grigorescu, S.M. Generic Fitted Shapes (GFS): Volumetric Object Segmentation in Service Robotics. Robotics and Autonomous Systems, Elsevier, Netherlands, Vol. 61, No. 9, Sept. 2013, p. 960-972, ISSN: 0921-8890, DOI: 10.1016/j.robot.2013.04.020, Accession Number WOS: 000328012200005 (FI = 1.105), <https://doi.org/10.1016/j.robot.2013.04.020>.
6. Grigorescu, S.M., Măceșanu, G., Cociăș, T.T., Puiu, D., Moldoveanu, F. Robust Camera Pose and Scene Structure Analysis for Service Robotics. Robotics and Autonomous Systems, Elsevier, Netherlands, Vol. 59, No. 11, Nov. 2011, p. 899-909, ISSN: 0921-8890, DOI: 10.1016/j.robot.2011.07.005, Accession Number WOS: 000295912100004 (FI = 1.056), <https://doi.org/10.1016/j.robot.2011.07.005>.
7. Suliman, C., Cruceru, C., Moldoveanu, F. Kalman Filter Based Tracking in an Video Surveillance System. Advances in Electrical and Computer Engineering, Vol. 10, No. 2, 2010, p. 30-34, ISSN: 1582-7445, e-ISSN: 1844-7600, DOI: 10.4316/AECE.2010.02005, Accession Number WOS: 000280312600005 (FI = 0.700), <https://doi.org/10.4316/AECE.2010.02005>.

18.05.2026

Florin Dumitru MOLDOVEANU