

PERSONAL INFORMATION

Lauren iu FRANGU



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Date of birth 10/08/1956 | Nationality Romanian | Gender male

September 1987 – onwards

Assistant, assistant professor, associate professor, professor
University "Dun rea de Jos" of Gala i, Romania, www.ugal.ro

- Teaching electronic circuits, signal processing, industrial electronics, power supplies, pattern recognition, image processing

September 1981 – Sept. 1987

- Research in pattern recognition, signal processing, embedded systems, control systems

Electronics engineer

Mittal Steel, St. Smârdan 1, Gala i, Romania

- Maintenance and tuning of power electronics, control equipment and industrial computer

Iron and steel industry

WORK EXPERIENCE

1991-2001

PhD in Control Systems, University "Dun rea de Jos" of Gala i, Romania
Title of thesis: Advanced control systems, based on pattern recognition, neural networks and image processing

1976-1981

Engineer, master degree in "Electronics and telecommunications", University Politehnica of Bucharest, Romania

Main subjects: electronic circuits, signal processing, industrial electronics, electronic devices and technology, automatic control

EDUCATION AND TRAINING

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B2	B2	B2
French	B2	B2	B2	B2	B2

Communication skills

- Team work, developed in industry and university
- Communication skills, developed in university

Organisational / managerial skills

Leadership, developed as head of department (6 years) and as project manager (15 years)

Job-related skills

- Signal processing (pattern recognition, image processing, neural networks)
- Control systems, telepresence and teleoperation
- Electronic circuits, embedded systems, power electronics

Computer skills

- Programming in assembly language, Matlab, C, Pascal

 ADDITIONAL INFORMATION

Driving licence ▪ B

Professional memberships

- IEEE member
- Member of Romanian Society for Control and Computer Engineering

Selected Books

L. Frangu: Recunoașterea formelor și Prelucrarea Imaginilor (Pattern Recognition and Image processing, in Romanian), Ed. Academica, Galați, 2001 (ISBN 973-8316-18-9)

Chapters in books

1. D. Aiordăchioaie, L. Frangu, S. Epure, R. Belea: Chapter 2, Airborne Ultrasonic Imaging: SONAR based Image Generation for Autonomous Vehicles, în: N. Bizon, L. Dăscălescu, and N. M. Tabatabaei (Ed.), *Autonomous Vehicles: Intelligent Transport Systems and Smart Technologies*, Nova Science Publishers Inc., USA, 40 pag., 2014, ISBN: 978-1-63321-324-1
2. E. Ceangă, L. Frangu: Pattern recognition control systems – a distinct direction in intelligent control, in: *Advances in Automatic Control*, edited by Mihail Voicu, Kluwer, 2004 (ISBN 1-4020-7607-X, pp. 21-38)

Selected Papers

1. A. Pricopie, L. Frangu, S. Caraman: A preventive maintenance strategy for an actuator using Markov models, IFAC 2020, The 21 Intl. Federation of Automatic Control World Congress, July 12-17, Berlin, Germany, 2020
2. A. Pricopie, L. Frangu, M. Miron, S. Caraman: An improved degradation model for preventive maintenance, ICSTCC 2020 - The 24rd Intl. Conf. on System Theory, Control and Computing, October 8-10, Sinaia, Romania, 2020
3. M. Miron, L. Frangu, L. Luca, S. Caraman: Artificial Neural Network Approach for Fault Recognition in a Wastewater Treatment Process, 22nd Intl. Conf. on System Theory, Control and Computing (ICSTCC2018), Sinaia, Romania, October 2018
4. L. Baicu, S. Caraman, L. Frangu, M. Miron: Measurement of the biomass concentration from a bioprocess by image processing techniques, 5th Intl. Symp. on Electrical and Electronics Engineering, October 20 – 22, Galați, România. (ISEEE-2017)
5. C. Chiculiș, L. Frangu: A Low-Cost Car Vibration Acquisition System, IEEE 21st International Symposium for Design and Technology in Electronic Packaging, SIITME 2015, Brașov, 22–25 octombrie 2015, pp. 281-285
6. D. Aiordăchioaie, L. Frangu, S. Epure: Airborne ultrasonic image generation with biomimetic sonar head, *IET Radar, Sonar & Navigation*, vol. 7, issue 9, December 2013, pp. 933 – 949, DOI: [10.1049/iet-rsn.2012.0334](https://doi.org/10.1049/iet-rsn.2012.0334)
7. D. Aiordăchioaie, L. Frangu: Some Results on Ultrasonic Image Generation with Biomimetic Sonar Head and Focused Narrow Beams, *Advances in Intelligent Systems and Computing*, Springer, vol. 195, 2013, pp. 595-604
8. L. Frangu, M. Măzreel, C. Chiculiș: Audio Source Localization, using a Network of Embedded Devices, *Advances in Electrical and Computer Engineering*, www.aece.ro, ISSN 1582-7445, e-ISSN: 1844-7600, nr. 2/2010, pp. 130-134

Research grants as project manager

2014-2017: Grant PN-II-PT-PCCA-2013-4, National Research Council, Intelligent management and monitoring of pavements and roads, using modern image processing techniques (coordinated by University Babeș-Bolyai of Cluj-Napoca)

2006-2010: Grant FP6 033279 (SENSE), Embedded systems for audio and video surveillance (coordinated by AIT Vienna), some results at <http://www.etc.ugal.ro/research/embedded.htm>

2006-2008: Grant CEEEX 146/2006 National Research Council, Holonic manufacturing control platform, with multiple robots and image processing (coordinated by Politehnica University of Bucharest)

2005-2008: Grant CEEEX 24/2005 National Research Council, Sharing the teaching and research resources (coordinated by University of Craiova)

2004-2006: Grant 430/2004, National Research Council, “Interaction between the artificial intelligence systems and the environment, applied to autonomous vehicles”