

#### PERSONAL INFORMATION

## Laurențiu FRANGU



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

WORK EXPERIENCE September 1987 - onwards

#### Assistant, assistant professor, associate professor, professor

University "Dunărea de Jos" of Galați, Romania, www.ugal.ro

- Teaching electronic circuits, signal processing, industrial electronics, power supplies, pattern recognition, image processing
- Research in pattern recognition, signal processing, embedded systems, control systems Electronics engineer

Mittal Steel, St. Smârdan 1, Galați, Romania

 Maintenance and tuning of power electronics, control equipment and industrial computer Iron and steel industry

# **EDUCATION AND TRAINING**

September 1981 - Sept. 1987

1991-2001

### PhD in Control Systems, University "Dunărea de Jos" of Galați, 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

# 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. 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
- 2. 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
- 3. L. Frangu, M. Măzărel, C. Chiculiță: 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
- 4. C. Chiculiță, L. Frangu: A Teleoperation experiment to control the "Plate and ball", *Annals of the University of Craiova Series: Automation, Computers, Electronics and Mechatronics*, vol. 4(31), no.2/2007, ISSN 1841-0626, pp. 18-23
- 5. E. Lungu, D. Coltuc, L. Frangu, Computing negentropy based signatures for texture recognition, *Analele Universității* "Dunărea de Jos" din Galați, fascicula 3, 2007, ISSN 1221-454X, pp. 47-52

#### 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 tehniques (coordinated by University Babes-Bolyai of Cluj-Napoca)

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

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

2005-2008: Grant CEEX 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"

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