## Europass Curriculum Vitae



#### Personal information

First name(s) / Surname(s)

Address(es)

Telephone(s)

Fax(es)

E-mail

marion@comm.pub.ro

Marghescu, Ion

Nationality

Romanian

Date of birth

Gender

male

### Work experience

Dates

1995 - Present

Occupation or position held

Professor

Main activities and responsibilities

Teaching and research activities in Mobile and personal Communications, Digital and analog Signal Processing, Radio communications Systems, Analog and Digital Communications, scientific adviser of licence or Master thesis, scientific advisor of PhD students General manager of the Communications and Signal Processing Research Center; director or team member of more national and European R&D projects

Name and address of employer

University "Politehnica" of Bucharst, Electronics, Telecommunications and Information Technology, Faculty, Dept. of Telecommunications, 313, Independentei Blvd. Bucharest

Type of business or sector

Education

Dates

1991 - 1995

Occupation or position held

Associate Professor

Main activities and responsibilities

Teaching and research activities in Mobile and personal Communications, Digital and analog Signal Processing, Radio communications Systems, Analog and Digital Communications, scientific adviser of licence thesis, director or team member of more national and European R&D projects

Name and address of employer

University "Politehnica" of Bucharst, Electronics, Telecommunications and Information Technology, Faculty, Dept. of Telecommunications, 313 Independentei Blvd., Bucharest 6

Type of business or sector

Education

Dates 1979 - 1990

Occupation or position held | Led

Lecturer

Main activities and responsibilities

Teaching, applications and research activities in Mobile and personal Communications, Digital and Analog Signal Processing, Radio communications Systems, Analog and Digital Communications, scientific adviser of licence thesis, director or team member of more national R&D projects

Name and address of employer

University "Politehnica" of Bucharest, Electronics, Telecommunications and Information Technology, Faculty, Dept. of Telecommunications, 313, Independentei Blvd. Bucharest

Type of business or sector

Education

Dates

1968 - 1979

Occupation or position held

Assistant Professor

Main activities and responsibilities

Applications (lab activities ar seminars) in Signals, Circuits and Systems, Digital and analog Signal Processing, Antennas and Propagation.

Name and address of employer

University "Politehnica" of Bucharst, Electronics, Telecommunications and Information Technology, Faculty, Dept. of Telecommunications, 313, Independentei Blvd. Bucharest

Type of business or sector | E

Education

### **Education and training**

Dates | 1970 - 1979

Title of qualification awarded

PhD degree in Radio Communications

Principal subjects/occupational skills covered

Radio Communications Systems and Equipment, Signal Processing in Radio Communications

Name and type of organisation providing education and training

The Polytechnic Institute of Bucharest,, Electronics and Telecommunications Faculty

Dates O

October 1962- July 1967

Title of qualification awarded

Engineer, Radiotechniques Specialization

Principal subjects/occupational skills

covered

Mathematics, Physics, Mechanics, Electrotechniques Basics, Radiotechniques Basics, Television, Information Transmission Theory, Radio Receivers Equipment Radio transmitters, Antennas and Propagation etc.

Name and type of organisation providing education and training

The Polytechnic Institute of Bucharest, Electronics and Telecommunications Faculty

Dates

September 1958- July 1962

Title of qualification awarded

Baccalaureate

Principal subjects/occupational skills

High School,

Name and type of organisation providing education and training

High School Vânju Mare, Mehedinți

# Personal skills and competences

Mother tongue(s)

Romanian

Other language(s)

Self-assessment

European level (\*)

**English** 

	Underst	tanding		Spea	Writing				
	Listening	Reading	S	poken interaction	S	ooken production			
	good	Excellent		good		good	good		

French		good		good		Average		good		Average		
German		Average		Average		Average		Average		Average		
Social skills and competences	(*) Common European Framework of Reference for Languages  A very good team worker;											

Organisational skills and competences

Managerial skills: Director of 5 projects supported by CNCSIS, a project supported by ANSTI, a project supported by MEC and World Bank, a project supported by Romanian Academy, a project in the PNII IDEI frame, a project in the PNII Partnership frame; team member in 6 European Projects; President of "Electronica 2000" foundation;

General Manager of The Research Center for Communications and Signal Processing (3CPS);

Referent for presentations of PhD degree thesis in Romania and abroad;

Co-chair in more national and international Conferences; President of CT 267 Standardization Technical Committee;

Technical skills and competences De

Design and testing of communications systems and equipment at the physical layer;

Computer skills and competences

Microsoft Office, MATLAB-Simulink, Simulating Media (OPNET)

Other skills and competences

Driving licence | Diving Licence B Cat.

**Additional information** 

Romania Academy Traian Vuia Prise; Agir Prise for the GSM book;

More than 120 papers published in Technical Journals or in Proceedings of International Conferences (indexed in International Data Bases: ISI, Scopus, IEEE Explore, etc.) and more than 20 books and

manuals.

**Annexes** 

A List of Recently Published Papers and Books; A list of R&D projects.

### Selected list of publications and R&D projects

### A. SELECTED BOOKS

- 1. I. Marghescu, N. St. Nicolaescu: Reţele de radiocomunicaţii, UPB, 1995
- 2. I. Constantin, I. Marghescu: Transmisiuni analogice și digitale, Ed. Tehnică București 1995.
- 3. I. Marghescu, N. St. Nicolaescu, N. Cotanis: Comunicații mobile terestre, Ed. Tehnică, 1997.
- 4. I. Marghescu, D. Zamfirescu, I. Dragu, Z. Vâlsan, Sisteme de Radiocomunicaţii, culegere de probleme, UPB, 1997.
- 5. I. Marghescu, N. N. Cotanis, St. Nicolaescu,: Comunicații mobile terestre, ediția II revăzută, Ed. Tehnică, 1999.
- 6. Ad. Mateescu, I. Marghescu şi alţii: Sisteme şi reţele GSM, Editura Tehnică, 1999.
- 7. S.V.Nicolaescu (coordonator), I. Marghescu și alții, *Accesul wireless de bandă largă*, vol. I și II, Editura Printech, Bucuresti, 2008, ISBN 978-606-521-080-6, 978-606-521-081-3.
- 8. S.V. Nicolaescu, I. Marghescu, I. Bogdan, I. Dragu şi alţii, Securitatea în reţelele Wi-Fi, Editura Agir, 2008, ISBN 978-973-720-199-7.

# B. PAPERS PUBLISHED IN TECHNICAL JOURNALS OR IN PROCEEDINGS OF INTERNATIONAL CONFERENCES (last 5 years)

- 1. A. Păun, C. Vlădeanu, I. Marghescu, S. El Assad, J.-C. Carlach şi R. Quéré, "New Recursive Convolutional GF(2N) Encoders for Parallel Turbo-TCM Schemes," IEEE 6th Advanced Int. Conf. on Telecomm. AICT 2010, Barcelona, Spania, mai 9-15, 2010, pag. 182-186.
- 2. C. Vladeanu, S. El Assad, J.-C. Carlach, R. Quéré şi I. Marghescu, "Recursive GF(2N) *Encoders Using Left-Circulate Function for Optimum PSK-TCM Schemes*," Elsevier Signal Processing, vol. 90, nr. 9, pag. 2708-2713, sept. 2010 doi:10.1016/j.sigpro.2010.03.021.
- 3. A.F. Păun, C. Vlădeanu, I. Marghescu, S. El Assad și A. Marţian, "On the QAM Parallel Turbo-TCM Schemes using Recursive Convolutional GF(2N) Encoders," 18th European Signal Proc. Conf. EUSIPCO 2010, Aalborg, Danemarca, 2010, aug. 23-27.
- 4. A. Marţian, I. Marcu, I. Marghescu, "Spectrum Occupancy in an Urban Environment: A Cognitive Radio Approach" Proc. 6th Advanced International Conference on Telecommunications (AICT 2010), Barcelona, mai 2010, pp 25-29.
- 5. A. Marţian, C. Vlădeanu, I. Marcu, I. Marghescu, "Spectrum Sensing for Cognitive Radio: Evaluation of Occupancy in an Urban Environment," International Journal of Advances in Telecommunications, 2010.
- 6. A. Marţian, A. Achim, O. Fratu, I. Marghescu, "Analysis of Frequency Spectrum Usage from a Cognitive Radio Perspective," 3rd International Workshop on Cognitive Radio and Advanced Spectrum Management, ISABEL Roma 2010, COGART workshop;
- 7. Elena Simona Lohan, Alexandru Rusu-Csanadra, Ion Marghescu, Hybrid Aquisition of CBOC Galileo Signals under Multiple Correct-window Hypothesis, Proceedings of Spacomm, Budapest, 27-22 April 2011;
- 8. Elena Simona Lohan, Alexandru Rusu-Casandra, Oana Cramariuc, Ion Marghescu, Bogdan Cramariuc: End-User Attitudes towards Location-Based Services and Future Mobile Wireless Devices: The Students' Perspective. Information 2(3): 426-454 (2011)
- 9. Crăciun Florin, Marghescu Ion, Fratu Octavian RAKE receiver performances for PAMTH-UWB systems, TELFOR, Belgrad, 2011 pp. 289-293

- 10. Alexandru Rusu-Casandra, Elena-Simona Lohan, Ion Marghescu, "Impact of Narrowband Interference on Unambiguous Acquisition Approaches in Galileo", Conference Proceedings of the 1st International Conference on Localization and GNSS 2011 ICL-GNSS, ISBN: 978-1-4577-0187-0, Tampere, Finland, Iunie 2011
- 11. Elena-Simona Lohan, Oana Cramariuc, Alexandru Rusu-Casandra, Ion Marghescu, Bogdan Cramariuc, "User Requirements in the Context of Future Location Based Services as Seen From a Survey Among Romanian Students", Conference Proceedings of the 1st International Conference on Localization and GNSS 2011 ICL-GNSS, ISBN: 978-1-4577-0187-0, Tampere, Finland, Iunie 2011
- 12. G. Marghescu, I. Marghescu, *ICT-Based Assessment in Romanian Engineering Education*, 14th International Conference Evaluation in the Balkan Countries, Alexandra Pejatovic (editor), Belgrade 2011, Education and Pedagogy in Balkan Countries, ISBN 978-86-82019-66-4, Publisher: University of Belgrad, pp. 477-481.
- 13. A. Rusu-Casandra, E. S. Lohan, G. Seco-Granados, I. Marghescu, "Investigation of Narrowband Interference Filtering Algorithms for Galileo CBOC Signals", the 3rd European Conference of Communications, Paris, France, Dec. 2012.
- 14. G. Marghescu, I. Marghescu, Réflexion sur la raison écologique d'une citoyenneté de la Terre, XXXIVe Congrès ASPLF, Louvain-La-Neuve, Bruxelles, 21-25 août 2012
- 15. G. Marghescu, I. Marghescu, *The New Institutional Model of the 21st Century University: Academic Capitalism*, 15th International Conference BASOPED Educational Reform in the 21st Century in Balkan Countries, 28-30 June 2012, Bucharest.
- 16. A. Iordache, I. Marghescu, *LTE downlink performance*, 10th International Symposium on Electronics and Telecommunications (ISETC), 2012. page(s): 159 162.
- 17. A. Iordache, I. Marghescu, *LTE network time synchronization*, 10th International Symposium on Electronics and Telecommunications (ISETC), 2012, Page(s): 179 182.
- 18. V. Savu, I. Marghescu et all: Antenna design for electromagnetic waves propagation studies through the salt ore, "U.P.B. Sci. Bull., Series C, Vol. 75, Iss. 2, 2013, ISSN 2286 3540.
- 19. Alexandru Martian, Calin Vladeanu, Octavian Fratu, Ion Marghescu, Safwan El Assad, Spectral Occupancy Measurements in Rural and Urban Environments: Analysis and Comparison, AICT, 2013, Rome.
- 20. Alexandru Martian; Alexandru Vulpe, Razvan Craciunescu, Octavian Fratu, Ion Marghescu *Perspectives on Dynamic Spectrum Access Procedures in TV White Spaces, GWS, New Jersey, USA, 2013.*
- 21. C. Tamas, M. Pantazica, C. Grecu, I. Marghescu, *Integrated Circuits Characterization Platform (ICCP), Alba Iulia ISSE* 2013;
- 22. C. Tamas, M. Pantazica, C. Marghescu, I. Marghescu, Controller for Reducing the EMI in Gas Gauge and Battery Management Units, Alba Iulia, ISSE 2013;
- 23. Valeriu Savu, Razvan Craciunescu, Octavian Fratu, Simona Halunga, Ion Marghescu; Cosmic Radiation Detector Performances in Salt Mines; 11th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services, Telsiks 2013, Serbia, Nis, October 16-19, 2013, Volume 02, pages. 631-634, ISBN 978-1-4799-0899-8.
- 24. Martian, A, Craciunescu, R, Vulpe, A, Fratu, O, Marghescu I, Perspectives on Dynamic Spectrum Access Procedures in TV White Spaces, 16TH INTERNATIONAL SYMPOSIUM ON WIRELESS PERSONAL MULTIMEDIA COMMUNICATIONS (WPMC) Book Series: International Symposium on Wireless Personal Multimedia Communications, 2013
- 25. Ammar Ali SAHRAB, Ion MARGHESCU, MIMO-OFDM: Maximum Diversity Using Maximum Likelihood Detector, The 10th International Conference IEEE Communications Bucharest, 2014, pp::. 437-441;

- 26. Valentin STANCIU, Alexandru MARTIAN, Cezar SOCOTEANU, Ion MARGHESCU, *Data Collection for Spectrum Sensing Algorithms based on USRP* The 10th International Conference IEEE Communications Bucharest, 2014, pp. 403-407;
- 27. Sahrab, Ammar Ali; Marghescu, Ion; MIMO-OFDM: Maximum diversity using maximum likelihood detector, 10th International Conference on Communications (COMM), 2014
- 28. Martian, Alexandru; Sandu, Bogdan Tudor; Fratu, Octavian; Marghescu, Ion; Craciunescu, Razvan; Spectrum sensing based on spectral correlation for cognitive radio systems, 4th International Conference on Wireless Communications, Vehicular Technology, Information Theory and Aerospace & Electronic Systems (VITAE), 2014
- 29. Nastase, Cosmina-Valentina; Martian, Alexandru; Vladeanu, Calin; Marghescu, Ion; An accurate average energy detection algorithm for spectrum sensing in cognitive radio systems, IEEE 11th International Symposium on Electronics and Telecommunications (ISETC), 2014.
- 30. Paun, M; Tamas, R; Marghescu, I; A Software Radio approach for Electric Arc locating, IEEE 13th International Conference on Engineering of Modern Electric Systems (EMES), 2015.
- 31. M. Păun, R. Tamaș, I. Marghescu, A Software-Defined Radio Approach for Direction Finding, U.P.B. Scientific Bulletin C Series, U.P.B. Sci. Bull., Series C, Vol. 77, Iss. 4, pp. 235-244, 2015 ISSN 2286-3540
- 32. M. Păun, R. Tamaș, I. Marghescu, Angle-of-Arrival Estimation in Multipath Environments Using Sliding Antenna Arrays, Progress in Electromagnetics Research Letters (JPIER-L), Vol. 54, pp. 101-105, Jul. 2015.
- 33. M. Păun, R. Tamaș, I. Marghescu, *Configurable Radio for Electric Arc Locating*, Constanta Maritime University Annals, Vol. 23, pp. 119-124, Aug. 2015.
- 34. M. Păun, I. Candel, R. Tamaş, C. Ioana, I. Marghescu, A Software-Defined Radio Approach for Locating Electric Arcs, IEEE International Conference on Microwaves, Communications, Antennas and Electronic Systems (COMCAS), Nov. 2015, Tel-Aviv (Israel).
- 35. M. Păun, R. Tamaș, I. Marghescu, A Software Radio Approach for Locating Unintentional Ozone-Generating Sources, in Proc. of IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom), May 2015, Constanta (Romania).
- 36. AA Sahrab, I Marghescu, Enhanced IRC-SIC algorithm with beamforming for MU-MIMO systems. 2015 International Symposium on Signals, Circuits and Systems (ISSCS), pp. 1-4., 2015,
- 37. M Oproiu, A Vulpe, I Marghescu, Analysis and Measurements of Wi-Fi Offloading Solutions, chapter in the Book Future Access Enablers for Ubiquitous and Intelligent Infrastructures, Volume 159 of the series Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Springer international Publishing House, pp 127-134
- 38. Cosmina-Valentina Năstase, Octavian Fratu, Alexandru Martian, Ion Marghescu, chapter in book Future Access Enablers for Ubiquitous and Intelligent Infrastructures, Volume 159 of the series Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications EngineeringSpringer International Publishing, pp. 142-148, 2015
- 39. Oproiu, Madalina; Vulpe, Alexandru; Marghescu, Ion; Effects of enabling carrier aggregation in a mobile operator network, 23rd Telecommunications Forum Telfor (TELFOR), Beograd, 2015, pp. 91-94