

Curriculum Vitae

Personal Information **Daniela FAUR**



Location: [Redacted]
 Phone: [Redacted]

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Skype ID: [Redacted]

Sex F | Data of birth: [Redacted] Nationality Romanian

WORK EXPERIENCE

2002-current date Politehnica University of Bucharest, 313 Splaiul Independetei 313, Bucharest, Romania
 Faculty of Electronics, Telecommunications and Information technology

Assoc. Professor Department of Applied Electronics and Information Engineering

Responsibilities:

- Teaching activity (Information Theory, Remote Sensing Image Processing, Sensors and transducers
- Organizing students' tasks, projects, and graduate thesis.
- Intensive research activity related to information measures for image complexity analysis and anomaly detection in remote sensing data for security and risk applications.

Business or sector: Education and training

Senior Researcher CEOSpaceTech – Research centre for Spatial Information

Main role: project manager / team leader in European and national research projects in the field of Earth Observation data processing responsible to:

- Manage the technology, people, and tasks in order to reach targets and deliver the results on time and within the budget.
- Define and review the requirements to ensure that produced algorithms accomplish the needs.
- Develop projects' reports and deliverables.
- Write scientific papers to disseminate the results; participate and present these papers in international conferences.
- Drive the project by leading by example and motivated all concerned until the project accomplish its goal.

Business or sector: Scientific research and technology development

EDUCATION AND TRAINING

2002-2006 **Ph.D. in Electrical Engineering, Cum Laude** EQF 8
 POLITEHNICA University of Bucharest - Thesis: Knowledge based image understanding. Applications in Earth Observation Images Classification

- Remote sensing image formation, signal processing and statistics, remote sensing images classification and segmentation, statistical models to understand the EO data information content.

1997-2002 **BSc. (Diplomat Engineer)** EQF 6

POLITEHNICA University of Bucharest - Faculty of Electrical Engineering

- Management in Electrical Engineering

PERSONAL SKILLS

Mother tongue(s)	Romanian				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	B2	B2	B1	B1	B2
	Levels A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user				

Communication skills

- excellent communication skills gained through my experience as a teacher
- effective listening skills, expressing ideas
- native interpersonal skills
- assertiveness

Organisational / managerial skills

- excellent team leader as my assets are determination and great communication skills
- extremely positive attitude and a very friendly nature
- results oriented
- taking initiative
- problem solving

Job-related skills

- preparing written communications
- good analytical skills
- people management skills

Digital competence

SELF ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- Microsoft Project
- MATLAB, Mathcad, R, Python
- ENVI, QGIS
- Latex

Other skills

- arts and craft : jewellery maker, painting

Driving licence B

ADDITIONAL INFORMATION

Affiliation	IEEE Member
Researcher ID	http://www.researcherid.com/rid/C-8801-2012
Publication	A selection of peer review papers below.
Research projects	The list of scientific and technology projects below.

Selection of papers / journal papers with peer review

- I. Calota, D. Faur and M. Datcu, "Bag-of-Words for Transfer Learning," 2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS, 2021, pp. 808-811, doi: 10.1109/IGARSS47720.2021.9554776.
- I. Calota, D. Faur and M. Datcu, "Low Resolution for DNN in SAR," 2020 IEEE Radar Conference (RadarConf20), 2020, pp. 1-5, doi: 10.1109/RadarConf2043947.2020.9266608.
- I. Calota, D. Faur and M. Datcu, "DNN-Based Semantic Extraction: Fast Learning from Multispectral Signatures," IGARSS 2020 - 2020 IEEE International Geoscience and Remote Sensing Symposium, 2020, pp. 3672-3675, doi: 10.1109/IGARSS39084.2020.9323350.
- Daniela, Faur, Griparis, A., Stolca, A., Mougnaud, P., & Datcu, M. (2019, July). An Interactive Visual Analytics Tool for Big Earth Observation Data Content Estimation. In IGARSS 2019-2019 IEEE International Geoscience and Remote Sensing Symposium (pp. 9518-9521). IEEE.
- A. Griparis, D. Faur and M. Datcu – Quantitative evaluation of feature space transformation methods used for applications of visual semantic clustering of EO Images, In IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Vol. 10, Issue 6, pp:2902-2909,2017
- A. Griparis, D. Faur and M. Datcu - Dimensionality Reduction for Visual Data Mining of Earth Observation Archives, In IEEE Geoscience and Remote Sensing Letters Vol: 13 Issue: 11 pp:1701-1705, 2016
- A. Griparis, D. Faur and M. Datcu, "Feature space dimensionality reduction for the optimization of visualization methods," 2016 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Beijing, 2016, July 10-15 Accepted paper.
- C. O. Dumitru, S. Cui, D. Faur and M. Datcu, "Data Analytics for Rapid Mapping: Case Study of a Flooding Event in Germany and the Tsunami in Japan Using Very High-Resolution SAR Images," In IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, vol. 8, no. 1, pp. 114-129, Jan. 2015.
- A. Griparis, D. Faur and M. Datcu, "Feature space dimensionality reduction for the optimization of visualization methods," 2015 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Milan, 2015, pp. 1120-1123.
- C.Patrascu, D. Faur, A.A.Popescu, Datcu, M., "Class evolution data analytics from sar image time series using information theory measures," Image Processing (ICIP), 2014 IEEE International Conference on , vol., no., pp.91,95, 27-30 Oct. 2014
- A. Popescu, C. Vaduva, D. Faur, I. , M. Datcu, -"A remote sensing image processing framework for damage assessment in a forest fire scenario"- Book Series: European Signal Processing Conference Pages: 2496-2500 Published: 2012
- C. Vaduva, D. Faur, I. Gavut, Data Mining and Spatial Reasoning for Satellite Image Characterization, Proceedings of the 2010 8th International Conference on Communications (COMM) Pages: 173-176
- D., Faur, M.Datcu, I.Gavat - Changes Characterization for Anomaly Detection In Earth Observation Images based on Information Measures, OPTIM 2006 –10th International Conference on Optimization of Electrical and Electronic Equipments, Brasov, May 18-19, 2006.
- D. Faur, I.Gavat, M. Datcu, Saliient Remote Sensing Image Segmentation Based on Rate-Distortion Measure, IEEE Geoscience and Remote Sensing Letters, vol.6, nr.4, October 2009, ISSN 1545-596X, pp.855-859

Projects/ Role

- S4UG - Space for Urban Green Feasibility Study, ESA contract reference No 4000137640/22/NL/FGL, 2022-2023, UPB Project manager
- CENTURION - Copernicus Datacube / AI Datacube services for society, industry and new market generation, project nr. 101004311/2021, Topic DT-SPACE-25-EO-2020, RIA, Call H2020-SPACE-2020, 2021-2024, UPB Project manager
- DRAGON 5 - Large-scale spatial-temporal analysis for dense satellite image series with deep learning, ESA NASSC Dragon 5 Cooperation, 2020-2024, ID 58190, Europe Principal Investigator, UPB Project manager
- SPERO - Tehnologii spațiale în managementul dezastrelor și crizelor majore, manifestate la nivel local, național și regional, PN-III- P2-2.1- SOL-2016- 03-0046, contract UEFISCDI 3/Sol/2017
- SPACE ENDEAVOUR – Endeavour Space Hubs, H2020-EU.2.1.6.1. Enabling European competitiveness, non-dependence and innovation of the European space sector, 2019-2021, UPB Project manager
- e-VADE - Interactive Visual Analysis Tool for Earth Observation – ESA funding in the frame of Romanian ITT, 2017-2019, Principal Investigator
- ROCEO – Romanian Cluster for Earth Observation, STAR STRATEGY – SUPPORT, ctr. 109/07.11.2016, 2016-2019, - UPB Project manager
- GEOOIM - Platform for Geoinformation In Support of Disaster Management, PNCDI II PARTENERIATE ctr.202/ 04.07.2012, 2012-2014 – UPB Project manager \ Principal Investigator
- LEOSITS - Long Term Data Exploitation for Satellite Image Time Series - Extraction of Classes for Scene Dynamic STAR - ROSA, ctr. 52/19.11.2012, 2012-2015 – UPB Project manager \ Principal Investigator
- VATEO- Visual Analytics Tool for Earth Observation Images, PNCDI II Parteneriate, ctr. 300/2014 Derulare 2014-2017, UPB Project manager
- URMA- Multi-layer Geohazards Information system concept for urban areas, ESA, ITT,
- OSIRIDE - Open source image retrieval - Integration of Developed Tools , ESA, GSTP
- DAMATS - Data Mining for Analysis and Exploitation of Next Generation of Time Series, ESA, GSTP
- SPACETECH- Competence Centre for Smart Sensors and Big Data Technology for Space Applications, STAR C2 Research programme for development and innovation – Space Technology and advanced research – Competence Centers in Spatial Technologies.
- CONCEDE - Content Based Query Concept for Exploration and Discovery of Information in Earth Observation and Medical Libraries, STAR - ROSA ctr.28/19.11.2012
- ROKEO - Romanian Centered Knowledge Earth Observation (ESA-PECS grant), 2009-2012
- ROSAR – CEEX – New applications of Synthetic Aperture Radar SAR data, ctr. PNCDI II 81-007/200, 2007-2010.
- SIGUR – CEEX- Satellite Based Emergency Response Services,ctr.PNCDI II 81-015, 2007- 2010.
- GEOINF- CEEX - Geoinformation Search Engine Prototype ctr. PNCDI II 81-045/2007, 2007-2010
- SEOKIMS - CEEX- Expert system for natural risk management., ctr. CEEX nr. 100/01.08.2006, 2006- 2008
- FP-6 STREAM Technology to support sustainable humanitarian crisis management, 2005-2008.

Books/ Books chapters

- Gavat, D., Faur –Grundlagen der Nachrichtentechnik, Printech Publishing House, 2016
- D. Faur, C. Pătrașcu, A. Popescu, C. Dănilor – Teoria transmisiunii informației. Aplicații, Printech, 2016
- B. Pantellmon, C., Iliescu, D., Faur – Mesurs électriques et transducteurs, Matrix-Rom, ISBN 973-755-045-5, 2006
- B. Pantellmon, C., Iliescu, D., Faur – Mesurs électriques et transducteurs. Travaux de laboratoire. Editura Printech, ISBN

C. Vaduva, D. Faur , A. Popescu, Gavai, Datcu, Chapter "Semantic Map Generation from Satellite Images for Humanitarian Scenarios Applications" , *ADVANCED CONCEPTS FOR INTELLIGENT VISION SYSTEMS, PROCEEDINGS* Book Series: *Lecture Notes In Computer Science* Volume: 5259 Pages: 606-617 Published: 2008, WOS:000262163800073
D.,Faur, I. Gavai, and M. Datcu. Mutual Information based measures for image content characterization, *Springer Berlin/ Heidelberg* , volume 4177, chapter *Current Topics In Artificial Intelligence, Lectures Notes In Computer Science*, 2006, pp. 342-349. ISBN 3-540-45914-6