

PERSONAL INFORMATION

SIMONA COMAN



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Sex F | Nationality Romanian

WORK EXPERIENCE

March 2023- ongoing

Associate Professor

Transilvania University of Brasov, Electrical Engineering and Computer Science Faculty
29 Eroilor Street, 500036, Braşov, România, unitbv.ro

Responsible for planning and elaborating the course, seminar and lab applications (Systems Theory I, Systems Theory II, Discrete Systems, Adaptive and Robust Systems)

October 2009- February 2023

Assistant Professor

Transilvania University of Brasov, Electrical Engineering and Computer Science Faculty
29 Eroilor Street, 500036, Braşov, România, unitbv.ro

Responsible for planning and elaborating the course, seminar and lab applications (Systems Theory I, Systems Theory II, Discrete Systems, Adaptive and Robust Systems)

March 2008 – September 2009

Teaching Assistant

Transilvania University of Brasov, Electrical Engineering and Computer Science Faculty
29 Eroilor Street, 500036, Braşov, România, unitbv.ro

Responsible for planning and elaborating the seminar and lab applications (Systems Theory I, Systems Theory II, Discrete Systems, Adaptive and Robust Systems)

October 2003 – February 2008

Associate Teaching Assistant

Transilvania University of Brasov, Electrical Engineering and Computer Science Faculty
29 Eroilor Street, 500036, Braşov, România, unitbv.ro

Responsible for planning and elaborating the seminar and lab applications (Systems Theory I, Systems Theory II, Discrete Systems, Adaptive and Robust Systems)

ACADEMIC BACKGROUND

2003-2007 PhD Studies

Transilvania University of Brasov

Domain: Electrical Engineering

- Main topics: Network industrial communication protocols used in the energetic domain; Software reliability principles applied to energetic systems

2003-2005 Master Studies

Transilvania University of Brasov

Specialisation: Information and Communication Systems & Technology

- Main courses: Software quality, Digital Communications, Digital Signal Processors in Telecommunications, Dynamic Systems with Discrete Events, Distributed Application Design

1998-2003 Bachelor Studies

Transilvania University of Brasov, Electrical Engineering and Computer Science Faculty

Domain: Systems Engineering

Specialisation: Automatics and Industrial Computer Science

- Main courses: Programming Languages, Databases, System Theory, Computer Networks, Control Systems, Electrical Drives, Automation, Electronic Circuits and Devices, Transducers and Sensors, Microprocessor Systems, Computer Architecture, Integrated Software Systems

PERSONAL SKILLS AND COMPETENCES

Mother tongue Romanian

Other language	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Certificate No. 19/2010					

Communications skills Good communication skills acquired through experience as a project manager and teacher

Organizational / Managerial skills

- Leading and advising students in the development of graduation projects.
- Ability to understand and systematize tasks within a team acquired through coordinating the research project

Job-Related skills

- Extensive experience in analyzing, implementing, and simulating complex processes.

Computer skills

- *Matlab/Simulink, Corel Draw 12*

Driving license

- B

ADDITIONAL INFORMATION

- Publications
- Zolya, M.A., Popa, E.L., Baltag, C., Bratu, D.V., Coman, S., Moraru, S.A., AI-Enhanced Detection of Heart Murmurs: Advancing Non-Invasive Cardiovascular Diagnostics, Sensors, March 2025, Vol. 25, Issue 6, ISSN: 1424-8220, DOI: 10.3390/s25061682 (ISI Journal, WOS:001453831000001, FI: 3.4 (2025), SRI: 0.87, Journal Rank: Q2 Engineering, Electrical & Electronic in SCIE edition)
 - Zolya, M.A., Baltag, C., Bratu, D.V., Coman, S., Moraru, S.A., COVID-19 Detection and Diagnosis Model on CT Scans Based on AI Techniques, Bioengineering-Basel, January 2024, Vol. 11, Issue 1, ISSN: 2306-5354, DOI: 10.3390/bioengineering11010079 (ISI Journal, WOS:001149243000001, FI: 3.8 (2023), SRI: 0.8, Journal Rank: Q2 Engineering, Biomedical in SCIE edition)
 - OGREZEANU, I., VIZITIU, A., CIUSDEL, C., PUUI, A., COMAN, S., BOLDISOR, CR., ITU, A., DEMETER, R., MOLDOVEANU, FI., SUCIU, C-TIN and ITU, L., Privacy-Preserving and Explainable AI in Industrial Applications, June 2022, Vol. 12, pp. 1-14, ISSN 2076-3417, DOI: 10.3390/app12136395 (ISI Journal, WOS: 000824322700001 FI: 2.838, Journal Rank: Q2)
 - Tsopra, R., Fernandez, X., Luchinat, C., Alberghina, L., Lehrach, H., Vanoni, M., Dreher, F., Sezerman, O., Cuggia, M., Tayrac, M., Miklasevics, E., Itu, L.M., Geanta, M., Ogilvie, L., Godey, F., Boldisor, C.N., Campillo-Gimenez, B., Cioroboiu, C., Ciusdel, C.F., Coman, S. et al, A framework for validating AI in precision medicine: considerations from the European ITFoC consortium, BMC Medical Informatics and Decision Making, October 2021, Vol. 21, Issue: 1, pp. 1-14, ISSN 1472-6947, DOI: 10.1186/s12911-021-01634-3 (ISI Journal, WOS 000702775200001, FI: 3.298 (2022), Journal Rank Q3)
 - Coman, S., Iosif, D., AnesthesiaGUIDE: A MATLAB Tool to Control the Anesthesia, SN Applied Sciences, Vol. 4, Issue: 1, January 2022, pp.1-10 , ISSN 2523-3971, DOI: 10.1007/s42452-021-04885-x (ISI Journal, WOS 000726283100003, FI: 0)
 - Ciusdel, C., Coman, S., Boldisor, Cr. et al, Effect of Linearization in a WNT Signaling Model, Computational and Mathematical Methods in Medicine, Vol. 2019, June 2019, pp. 1-9, ISSN: 1748-6718, DOI: 10.1155/2019/8461820 (ISI Journal, WOS:000472845300001, FI: 2.809, Journal Rank

Q2)

Projects

Contr.nr. 141/2020-2023, ERA -PerMeD JTC2019 - PeCaN - *Parameterisation of Large Scale Cancer Models for Personalised Therapy of Triple Negative Breast Cancer*, finanțat de EU Commission/UEFISCDI, Beneficiar: Universitatea Transilvania din Brașov, 2020-2023 (responsabil de proiect)

Contr. nr. 732907/2016-2019, program: Horizon 2020 (H2020) – MHMD – *My Health My Data*, finanțat de EU Commission. Beneficiar: Universitatea Transilvania din Brașov, 2016-2019 (membru în echipă).

Contr. nr. 600932/2013-2017, program: EU's Seventh Framework Programme for Research (FP7) – MD PAEDIGREE – *Model-Driven European Paediatric Digital Repository*, finanțat de EU Commission, Beneficiar: Universitatea Transilvania din Brașov, 2013-2017 (membru în echipă)..

Contr. nr. 6/2017, FLAG – ERA JTC 2016, CR – RoboCom – *Rethinking Robotics for the Robot Companion of the Future*, finanțat de EU Commission, Universitatea Transilvania din Brașov, 2017-2020 (membru în echipă).

Contr. Nr. 11/2017, FLAG – ERA JTC 2016, ICTSS – FuturICT 2.0 – *Large Scale Experiments and Simulations for the Second Generation of FuturICT*, finanțat de EU Commission, Universitatea Transilvania din Brașov, 2017-2020 (membru în echipă).

Contr. nr. 732907/2021, EU's Horizon H 2020 – SC1-DTH-06-2020, SIMCor – *In-Silico testing and Validation of Cardiovascular Implantable Devices*, finanțat de EU Commission, Universitatea Transilvania din Brașov, 2021-2023 (membru în echipă).

Contr.nr. 197/2021-2024, ERA -PerMeD JTC2020 – PROGRESS - *PRecisiOn Medicine in CAD Patients: Artificial IntelliGence for IntegRated gEnomic, Functional and Anatomical aSSessment of the Coronary Collateral Circulation*, finanțat de EU Commission, Beneficiar: Universitatea Transilvania din Brașov, 2021-2023 (membru în echipă).

Afiliation

SRAIT member (Romanian Society of Automation and Technical Informatics)