

PERSONAL INFORMATION

Sebastian-Aurelian ȘTEFĂNIGĂ



WORK EXPERIENCE

April 2026 - present

Honorary Advisor to the President of the Romanian National Authority for Research

National Authority for Research, Ministry of Education and Research, Mendeleev, no. 21 - 25, Bucharest, Romania, <https://www.research.gov.ro>.

Appointed as Honorary Advisor to the President of the National Authority for Research, Romania, by Decision No. 20250/01.04.2026.

Business or sector Research

October 2025 - present

Vice Dean

West University of Timisoara, Faculty of Computer Science, Computational Sciences and Artificial Intelligence Department, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.info.uvt.ro

Management activity: International affairs, industry collaboration, alumni community and student affairs

Business or sector Higher Education & Research

March 2024 - September 2025

Vice Dean

West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Department, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.info.uvt.ro

Management activity: International affairs, industry collaboration and alumni community portfolio

Business or sector Higher Education & Research

February 2023 - present

Assistant Professor

Tenured position at West University of Timisoara, Faculty of Mathematics and Computer Science/ Faculty of Computer Science (since October 2025), Computer Science Department/ Computational Sciences and Artificial Intelligence (since October 2025), Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.info.uvt.ro

Teaching activity: Web Design, Web Technologies, Intelligent Systems & Neural Networks, Robotic Process Automation

Research activity: Machine Learning, Signal and Image Processing, HPC Computing, Parallel Computing, Medical Informatics

Business or sector Higher Education & Research

November 2022 - present

Delegate for Innovation & Technology Transfer

Assimilate through the job description of Tenured position at West University of Timisoara, Center of Innovation & Technology Transfer, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, <https://www.uvt.ro/cercetare/cercetare-si-inovare/inovare-si-transfer-tehnologic>

Accelerate projects with the aim of start-ups development, lab-in-labs co-creation with the aim of developing projects in partnership with industry, train entrepreneurs alongside researchers, applied research & technology advancement.

Business or sector Higher Education & Research

January 2022 - July 2023

Software Developer

Part-time position at E-Austria Institute, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.ieat.ro

Activity: Data science, Web development

Business or sector Technology Transfer

February 2018 - February 2023

Teaching Assistant

Tenured position at West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Department, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.info.uvt.ro

Teaching activity: Programming 1 (C language), Programming 2 (C++ language), Programming 3 (Java language), Web Design Basics, Web Technologies, Team Project, Security and Cryptography, Practice Stage

Research activity: HPC Computing, Image Processing, Machine Learning, Statistics, Parallel Computing

Business or sector Higher Education & Research

February 2023 - June 2023

Associate Teaching Assistant

January 2021 - January 2022
September 2019 - January 2020

Hourly paid position at "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Medicine, Functional Sciences Department, Discipline of Informatics and Medical Biostatistics, Sp. Tudor Vladimirescu no. 14, Timisoara, Timis, Romania, www.umft.ro

Teaching activity: Medical Informatics, Biostatistics

Business or sector Higher Education & Research

January 2020 - May 2020

Visiting Instructor

Non-tenure position at Computer Science, Sewanee, the University of the South, Mathematics and Computer Science Department, College of Art and Science, Sewanee's J Program: P-1-04651, 735 University Ave, Sewanee, TN 37383-1000, United States of America, <https://new.sewanee.edu>

Teaching activity: (CSCI 284) Database Design with Web Applications, (CSCI 415) Security and Cryptography

Business or sector Higher Education

October 2016 - February 2018

Associate Teaching Assistant

Hourly paid position at West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Department, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.info.uvt.ro

Teaching activity: Programming 1 (C language), Programming 2 (C++ language), Programming 3 (Java language), Web Design Basics

Business or sector Higher Education

August 2015 - October 2016

Consultant Specialist

Full-time position at Office of Innovation, Technology Transfer and Intellectual Property, West University of Timisoara, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.uvt.ro

Providing consultancy services for service contracts, collaboration, licensing or assignment and consortia agreements between partners or beneficiaries from the private sector or non-profit industry. Supporting for the national and international patent application, collaboration with external specialized consultants. Development of the potential international network of industrial partners for the purpose of research grant applications.

Business or sector Higher Education

February 2015 - July 2015

Consultant Specialist

Full-time position at Office of Scientific Research and Academic Creation, West University of Timisoara, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.uvt.ro

Designing reports on scientific research and university creation. Development and maintenance of CMS university modules. Providing support for research grant applications. Identifying and disseminating calls for scientific research and academic creation grants.

Business or sector Higher Education

February 2015 - December 2016

Lecturer

Contract paid position at R&B Consulting S.R.L., Independentei Str, no. 2B, Timisoara, Timis, Romania, www.cursuriadulti.ro

Information Technology Training Courses: Microsoft Office Fundamentals & Advanced, Photo Editing and Processing, Operating Systems
Management Training Courses: Assistant Manager

Business or sector Training Courses

October 2014 - December 2014

System Software Engineer

Full-time position at R&B Consulting S.R.L., Independentei Str, no. 2B, Timisoara, Timis, Romania, www.cursuriadulti.ro, detached at National College of Banat, Highschool, Timisoara, Timis, Romania, www.colegiulbanatean.ro for one month.

Business or sector Information and Communication Technology, High School

May 2013 - June 2023
March 2024 - present

Quality Assurance Assessor

Contract paid position at Romanian Agency for Quality Assurance in Higher Education, www.aracis.ro

External quality assurance of Higher Education Institutions, with the aim of certification, according to the Romanian Quality Standards in HEIs

Business or sector Quality Assurance in Higher Education

EDUCATION AND TRAINING

March - April 2023

Postgraduate Module 1: Implementing Regulatory Requirements for Medical Devices

George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Romania, within the NoBoCap (Notified Body Increased Capacity) Project, EU4Health Programme, Grant Agreement No. 101101269. Certificate ID: 5R2/3692/20.10.2025. <https://www.portal.nobocap.eu>

March - April 2023

Postgraduate Module 2: Generating Data for Technical Documentation (MDR)

George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Romania, within the NoBoCap (Notified Body Increased Capacity) Project, EU4Health Programme, Grant Agreement No. 101101269. Certificate ID: 5R2/295/21.01.2026. <https://www.portal.nobocap.eu>

March - April 2023

Postgraduate Module 3: Generating Data for Technical Documentation (IVDR)

Technological University Dublin, Ireland, within the NoBoCap (Notified Body Increased Capacity) Project, EU4Health Programme, Grant Agreement No. 101101269. Certificate Reference No.: 2026-030. <https://www.portal.nobocap.eu>

March - April 2023

Postgraduate Certificate - Personal development for inclusive education at the level of academic communities

Romanian Academy, Center for Professionalization of University Management, Psychology, Domain, Victoriei Avenue, no. 1, Sector 1, Bucharest, Romania, <https://acad.ro>

Certificate series CC No. 0016927

March - April 2023

Postgraduate Certificate - Personal development for inclusive education at the level of academic communities

Romanian Academy, Center for Professionalization of University Management, Psychology, Domain, Victoriei Avenue, no. 1, Sector 1, Bucharest, Romania, <https://acad.ro>

Certificate series CC No. 0016927

September 2022

Postgraduate Certificate - Counseling for guidance and professional development

Funded by the Romanian National Financing Council for Higher Education - Institutional Development - CNFIS-FDI-2022-0394

West University of Timisoara, Faculty of Sociology and Psychology, Department of Educational Sciences, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.fsp.uvt.ro

Certificate series CC Nr. 0013153

October 2021 - September 2023

Master Graduation - Global Security Studies

West University of Timisoara, Faculty of Political Sciences, Philosophy and Communication Sciences, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.pfc.uvt.ro

Master Thesis: "Perspectives on the integration of intelligent solutions in public health: a theoretical architectural model for morbidity control in an epidemic context", Scientific coordinator: Assist. Prof. Ph.D. Alexandru Jădăneanț, defend in September 2025,

Relevant courses: Analysis and Management of Information, Human security and sustainable development, Security, and intelligence studies: concepts, methods, thematic areas, Communication in the field of security, Constitutional Law applied in security studies, Transnational global governance, International Criminal Law, Cyber security.

Diploma series MA, no. 0536598

October 2020 - September 2021

Master Diploma - Counseling and Educational Integration

West University of Timisoara, Faculty of Sociology and Psychology, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.fsp.uvt.ro

Master Thesis: "Facilities and challenges of technological and digital Infrastructure at the beginning

pandemic period in Romania", scientific coordinator: Prof. Ph.D. Simona Sava

Relevant courses: Education for cultural diversity, Specific intervention in autism, Applied statistics in education, Counseling and personal development, Advice on optimizing the learning process, Career counseling and vocational guidance, Educational counseling methods and techniques

Diploma series MA, no. 0324099

June 2020 - January 2021

Postgraduate Certificate - Problem-based Learning in Higher Education

Funded by the Romanian Operational Program (OP) "Human Capital" - POCU/320/6/21/121030

West University of Timisoara, Academic Development Center, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.cda.uvt.ro

Certificate series CC 0000246

December 2019 - September 2020

Postgraduate Certificate - UVT, Teaching and Learning Brand

Funded by the CNFIS - Institutional Development Fund - CNFIS-FDI-2019-0408

West University of Timisoara, Department of Teacher Training, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.ddpd.uvt.ro

Certificate series CC 0000122

October 2018 - September 2020

Master Diploma - Educational Management and Curriculum Development

West University of Timisoara, Faculty of Sociology and Psychology, Vasile Parvan Blvd., no. 4, Timisoara, Timis, Romania, www.fsp.uvt.ro

Master Thesis: "Teaching & Learning Brand UVT - a new vision for teaching and learning Computer Science in Higher Education", Scientific coordinator: Assoc. Prof. Ph.D. Marian Ilie

Relevant courses: Organizational communication and leadership, Ethics and academic integrity, Management of the educational group, Management of educational organizations, Legislation and educational policies, Quality management in education, Curriculum management, Management of educational programs, Management of human resources and professional development

Diploma series MA, no. 0263926

October 2016 - December 2021

Ph.D. Diploma - Computer Science

West University of Timisoara, Faculty of Mathematics and Computer Science, Doctoral School of Computer Science, Vasile Parvan Blvd., no.4, Timisoara, Timis, Romania, www.doctorat.uvt.ro

Supervisor: Prof. Ph.D. Dana Petcu, West University of Timisoara, Romania

Co-supervisor: Prof. Ph.D. Debora Gil, Autonomous University of Barcelona, Spain

Courses: Cloud computing, Scientific writing and research project management, Special chapters of Artificial Intelligence

Dissertation Title: Contributions to the processing and analysis of biomedical images

Confirmation no. under Ministerial Order no. 3677 by 03.05.2022 with distinction Magna Cum Laude: https://rei.gov.ro/teza-doctorat-document/8381596274bbdc39989-Teza_Stefaniga.pdf , series J, no. 0055956

Diploma series J, no. 0055956

March 2015 - June 2015

Postgraduate Certificate - Teaching profession, Level II

Polytechnic University of Timisoara, Department of Teacher Training, Blvd. Vasile Parvan, no. 2

Timisoara, Timis, Romania (www.upt.ro)

Access for teaching at upper secondary, tertiary, and higher educational levels.

Certificate series D, no. 0015318

October 2014 - present

Master Diploma - Artificial Intelligence and Distributed Computing

West University of Timisoara, Faculty of Mathematics and Science, Vasile Parvan Blvd., no. 4 Timisoara, Timis, Romania (www.info.uvt.ro)

Master Thesis: "Methods of processing and morphological analysis of biomedical images in real time", scientific coordinator: Assist. Prof. Ph.D. Mihail Gaiianu

Relevant courses: Workflow Technologies, Multi-Agent Systems, Distributed Computing, Parallel Computing, Machine Learning, Systolic algorithms, Automated Proving of Theorems, Advanced Logic and Functional Programming

Diploma series MA, no. 0050631

October 2012 - July 2014

Postgraduate Certificate - Teaching profession, Level I

West University of Timisoara, Department of Teacher Training, Vasile Parvan, no. 4, Timisoara, Timis, Romania, www.ddpd.uvt.ro

Access for teaching at primary and lower secondary educational levels.

Certificate series X, no. 0024903

October 2011 - July 2014

Bachelor Diploma - Applied Computer Science

West University of Timisoara, Faculty of Mathematics and Computer Science, Vasile Parvan Blvd., no. 4 Timisoara, Timis, Romania (www.info.uvt.ro)

Bachelor Thesis: "Object-Relational Mapping in Java Hibernate - Application for the management of medical institutions", scientific coordinator: Assoc. Prof. Ph.D. Victoria Iordan

Relevant courses: Artificial Intelligence, Distributed Systems, Operating Systems, Security and Cryptography, Graphics and User Interfaces, Java Programming, Programming C/C ++, Databases, Algorithms, Data Structures, Advanced Data Structures, Web Technologies, Programming real-time systems, Computer Architecture, Software Engineering, Networking Environments Design and Programming, Projects Management in Computer Science

Diploma series LA, no. 0013605

September 2007 - July 2011

Baccalaureate Diploma

Banat High School, Republicii Str., no.10, Otelu Rosu, 325700, Caras-Severin, Romania

Mathematics and Computer Science Program

Grade point: 9.87/10

Diploma series Y, no. 0434325

PERSONAL SKILLS

Mother tongue

Romanian

Other languages

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

German	Proficient user				
	B2	B2	B1	B1	B2
French	Independent user				
	A2	B1	A2	A2	A2
	Basic user				

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills Excellent communication skills gained through my past voluntary service experience.

Organizational / managerial skills Excellent teamwork and leadership skills gained through my involvement in various international and national projects as a team member or leader, alongside serving as an affiliate member or board member for various NGOs.

Computer skills Programming languages & others: C/C ++, Java, JavaScript, HTML, CSS, PHP, Python, CUDAC/ C++, Oracle Database, MATLAB, SPSS, RPA-UIPATH
Operating Systems: Windows, GNU/Linux, MacOS
Graphics: Adobe Creative Collection, Corel Collection

Driving license European driving license, B category obtained in 2010

Firearm license Type C Firearm License, obtained in 2023

ADDITIONAL INFORMATION

Certifications / Qualifications:

1. Certificate of Participation in the University Leadership Program, Harvard Institutes for Higher Education, Harvard Graduate School of Education, Harvard University, Cambridge, MA, USA, April 2025.
2. Certificate on AI-supported Medical Devices, NoBoCap (Notified Body Increased Capacity), EU4Health Programme, Grant Agreement No. 101101269, January 2026. <https://www.portal.nobocap.eu>
3. Certificate of Participation in the Innovation Strategy Development Masterclass, STARRISE Project, Interregional Innovation Investments (I3) Instrument, European Union, Grant Agreement No. 101133220, December 2024. <https://starriseproject.eu>
4. Certificate of Participation in the Open Innovation Masterclass, STARRISE Project, Interregional Innovation Investments (I3) Instrument, European Union, Grant Agreement No. 101133220, February 2025. <https://starriseproject.eu>
5. Certificate of Participation in the Business Model Innovation Masterclass, STARRISE Project, Interregional Innovation Investments (I3) Instrument, European Union, Grant Agreement No. 101133220, February 2025. <https://starriseproject.eu>
6. Certificate of completion, Research Security and Due Diligence for Academia, SANIA US National Laboratories, March 2026;
7. Certificate of attendance, NATO Resilience Course for Civil Experts, Euro-Atlantic Resilience Centre, October 2025;
8. Certificate of Completion of University Leadership Program, Romanian - American Foundation, Romania, Babson College: Success in Entrepreneurship Ecosystem Development Program, September 2024;
9. Professional Certificate - Google Cybersecurity, Coursera, October 2023 - January 2024, Certificate link [here](#);
10. Certificate of Completion with Exam on Natural Language Processing, High Performance Computing Center in Stuttgart, Germany, May - June 2024;
11. Certificate of Participation of Informatics Europe Academic Leadership Development Course

- Academic Leadership Development Course, March - June 2024;
12. Certificate of Competence - Virtual Learning Lab 2.0, European Networks of Living Labs, April - June 2023, <https://openlivinglabdays.com/virtual-learning-lab>;
 13. Diploma of Completion/ Academic Partnership - UiPath RPA Developer Foundation, November - December 2022, Certificate link [here](#);
 14. Certificate of Completion - 6th Online e-learning seminar for university professors, Catholic University of "Santa Teresa de Jesus de Avila, Spain, June 2022, <https://www.ucavila.es>;
 15. Certificate of Attendance, Level I, II & III, ROSPIN Academy (Romanian Space Initiative), October 2021 - September 2022, <https://rospin.org/rospin-academy>;
 16. Practitioner Certificate, Coach Certification - Practitioner, Neuro Mindfulness Institute, 15 CCE Resource Development by the International Coach Federation, October 2021, Certificate link [here](#);
 17. Certificate, Coaching methods and techniques in academic tutoring activities, 8 hours Course Certification funded by West University of Timisoara, Romania, International Association of Cognitive Behavioral Coaching, 13-14 November 2020, <https://www.iacbc.org>;
 18. Certificate, Periodic QA assessor training, Romanian Agency for Quality Assurance in Higher Education, 2013, 2017, 2018, <http://aracis.ro>;
 19. Refresher course, Entrepreneurial skills, R&B Consulting S.R.L., July - August 2015, <https://cursuriadulti.ro>, series J, no. 00229051;
 20. Certificate, Technology Transfer and Intellectual Property Course, Technical University of Cluj Napoca, Romanian Institute of Science and Technology, Romania, May 2015, <https://research.utcluj.ro>;
 21. Specialization Certificate, Specialist in Occupational Safety and Health Administration, R&B Consulting S.R.L., December 2014 - March 2015, <https://cursuriadulti.ro>, series I, no. 00128246
 22. Specialization Certificate, Public Procurement Expert, R&B Consulting S.R.L., December 2014 - January 2015, series I, no. 00128108;
 23. Specialization Certificate, Trainer, R&B Consulting S.R.L., October 2014 - November 2014, <https://cursuriadulti.ro>, series I, no. 00116536;
 24. Refresher course, BLS (Basic Life Support) Certificate, Medical Students Organization Galati, Ambulance Service Support, Romania, August 2014, <http://ssmq.ro>;
 25. Refresher course, Project Manager, Core Fusion S.R.L., July - August 2014, <https://www.corefusion.ro>, series I, no. 00379665;
 26. Certificate, Management and Leadership, Regional Training Institute, Timisoara, Romania, May 2012;
 27. Certificate, Communication and Public Speaking, Regional Training Institute, Timisoara, Romania, May 2012;
 28. Proficiency Certificate of Professional Skills Certificate in Computer Science, Banat High School, Otelu Rosu, Caras-Severin, Romania, May 2011;

Professional Affiliation:

1. Working group of Digital Health coordinator, Health and Bioeconomy Cluster - ROHEALTH - January 2026 - present, <https://rohealth.ro>;
2. Affiliate Member of West University of Timisoara, Romanian Standards Association, CT319 - Medical Informatics Committee, November 2025 - present, <https://www.asro.ro>;
3. Affiliate Member, Council of Faculty of Computer Science, West University of Timisoara, Romania, October 2025 - present, <https://info.uvt.ro>;
4. Affiliate Member, Council of Computational Science and Artificial Intelligence, Faculty of Computer Science, West University of Timisoara, Romania, October 2025 - present, <https://info.uvt.ro>;
5. Affiliate Member, International Association for the Advancement of Artificial Intelligence, December 2024 - present, <https://aaai.org>;
6. Affiliate Member, International Association for the Advancement of Artificial Intelligence, December 2024 - present, <https://aaai.org>;
7. Affiliate Member, IEEE Computational Intelligence Society Membership, January 2024 - present, <https://cis.ieee.org>;
8. Affiliate Member, Association for Computing Machinery, December 2023 - present, <https://www.acm.org>;
9. Board member, Vice President, Romanian Society of Medical Informatics, September 2023 - present, <http://www.srimed.ro>;
10. Board member, Media and Communications Coordinator, Romanian Society of Medical Informatics, August 2022 - September 2023, <http://www.srimed.ro>;
11. Member, Romanian Association for the Promotion of the Advanced Computational Methods in Scientific Research (ARCAS), May 2020 - 2023, www.arcas.org.ro;

12. Affiliate Member, American Mathematical Society, September 2022 - present, <https://www.ams.org>
13. Affiliate Member, Council of Faculty of Mathematics and Computer Science, West University of Timisoara, Romania, November 2021 - September 2025, <https://info.uvt.ro>.
14. Affiliate Member, Council of Computer Science Department, Faculty of Mathematics and Computer Science, West University of Timisoara, Romania, November 2021 - September 2025, <https://info.uvt.ro>
15. Affiliate Member, Council of Doctoral School of Computer Science (student representative), West University of Timisoara, Romania, October 2020 - September 2021, <https://www.uvt.ro/cercetare/doctorat/studii-universitare-de-doctorat>;
16. Affiliate Member, IEEE Engineering in Medicine and Biology Society, November 2019 - present, <https://www.embs.org>;
17. Affiliate Member, IEEE Computer Society, November 2019 - present, <https://www.computer.org>
18. Affiliate member, Romanian Association for the Promotion of the Advanced Computational Methods in Scientific Research (ARCAS), April 2019 - present, www.arcas.org.ro;
19. Affiliate member, Romanian Association for Artificial Intelligence, October 2018 - present, <http://aria-romania.org>;
20. Affiliate member, Romanian Society of Medical Informatics, January 2018 - present, <http://www.srimed.ro>;
21. Member, Standing Committee of the Exact Sciences and Natural Sciences Specialty (C1), Romanian Agency for Quality Assurance in Higher Education (ARACIS), January 2017 - 2020, www.aracis.ro;
22. Affiliate Member, Council of Doctoral School of Mathematics, West University of Timisoara, Romania, October 2016 - October 2018, <https://www.uvt.ro/cercetare/doctorat/studii-universitare-de-doctorat>;

NGO Affiliation:

1. Vice-president, Rotary Club Timisoara, Romania, June 2026 - June 2027, <http://www.rotaractclubtimisoara.ro>
2. Affiliate Member, Rotary Club Timisoara, Romania, May 2023 - present, <http://www.rotaractclubtimisoara.ro>
3. Treasurer, Rotaract Club Timisoara, Romania, July 2022 - June 2023, <http://www.rotaractclubtimisoara.ro>
4. President, Rotaract Club Timisoara, Romania, July 2021 - June 2022, <http://www.rotaractclubtimisoara.ro>
5. Treasurer, Rotaract Club Timisoara, Romania, July 2020 - June 2021, <http://www.rotaractclubtimisoara.ro>
6. Affiliate Member, Rotaract Club Timisoara, Romania, July 2019 - 2023, <http://www.rotaractclubtimisoara.ro>
7. Honorary President, Exact Sciences Students Association of West University of Timisoara, Romania, March 2016 - present, <https://asseut.uvt.ro>
8. Vice-president, National Union of the Romanian Students, April 2014 - August 2016, www.unsr.ro
9. President, Exact Sciences Students Association of West University of Timisoara, Romania, May 2013 - March 2016, <https://asseut.uvt.ro>
10. Mentor, CoderDojo@UVT Initiative group, West University of Timisoara, Faculty of Mathematics and Computer Science, <https://www.coderdojo.ro/coderdojouvt>
11. Affiliate member, National Union of the Romanian Students, October 2011 - March 2016, www.unsr.ro
12. Affiliate member, Exact Sciences Students Association of West University of Timisoara, Romania, October 2011 - March 2016, <https://asseut.uvt.ro>

National/ International Conferences:

1. 25th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2023, <https://synasc.ro>
2. RoMedINF 2023 - Healthcare Green Digital Ecosystems: From Data Analysis to Digital Twin, 14-15 September 2023, <https://romedinf.srimed.ro>
3. 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2022, <https://synasc.ro>
4. 23rd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, December 2021, <https://synasc.ro>
5. Special Topic Conference - European Federation for Medical Informatics, November 2021, <https://stc2021.org>

6. RoMedINF 2021 - Digital Technology and Healthcare, 16-19 September 2021, <https://sites.google.com/view/romedinf-2021>
7. 22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2020, <https://synasc.ro>
8. 21st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2019, <https://synasc.ro>
9. 10th Conference on Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Napoli, Italy, 3-6 February 2019, <https://esmtb.org/event-3606337>
10. 20th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2018, <https://synasc.ro>
11. International Symposium Research and Education in an Innovation Era 7th Edition, 17-20 May 2018, <https://www.uav.ro/academic/cercetare-stiintifica/apeluri-conferinte/isreie>
12. 9th Conference on Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Torino, Italy, 7-9 February 2018, <http://dsabns2018.rd.ciencias.ulisboa.pt>
13. 19th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2017, <https://synasc.ro>

Summer Schools/ Workshops:

1. FUTURE - Educational program for teachers and students, Build with passion - Romanian Commercial Bank edition, November - December 2021, <https://www.madalinahodorog.ro/future-bcr>
2. Problem Based-Learning (PBL) International Training, Maastricht University, Centre for International Cooperation in Academic Development ('MUNDO'), The Netherlands, financed under „Together universities and employers. An integrated system of innovative educational programs” - POCU/320/6/21/121030, June 2021, supervisor: MSc, MHPE Annechien Deelma
3. IBM workshop about Containers (OpenShift), 21 - 23 December 2020, supervisor: Florin Anton <https://www.ibm.com/ro-en>
4. Romanian Artificial Intelligence Days 2020, 2 - 4 December 2020, <https://days.airomania.eu/home>
5. European Computer Science Summit, 26 - 28 October 2020, <https://www.informatics-europe.org/ecss/program/schedule.html>
6. Computing Systems Weeks - European Network on High Performance, Edge And Cloud computing, October 2020, <https://www.hipeac.net/csw/2020/autumn-virtual>
7. 16th International Summer School on Advanced Computer Architecture and Compilation for High-performance Embedded Systems (ACACES), 6 - 17 July 2020, <https://www.hipeac.net/acaces/2020>
8. 3rd SME/HPC Summer School, 29 June - 01 July 2020, <https://www.smeahpc.eu/summer-school>
9. Computing Systems Weeks - European Network on High Performance and Embedded Architecture and Compilation, Heraklion, Greece, October 2018, <https://www.hipeac.net/csw/2018/heraklion>
10. 2nd International Summer School on Deep Learning, 23 - 27 July 2018, Genova, Italy, <https://irdta.eu/deeplearn2018>
11. International Symposium Research and Education in an Innovation Era 7th Edition, 17 - 20 May 2018, <https://www.uav.ro/academic/cercetare-stiintifica/apeluri-conferinte/isreie/isreie-2020-1-1>
12. 4th International Winter School on Big Data, Timisoara, Romania, 22 - 26 January 2018, <https://irdta.eu/BigDat2018>
13. Summer School on Programming and Tuning Massively Parallel (PUMPS-PRACE) 2017, OpenCL and OpenACC programming, Polytechnic University of Catalunya, Spain, June 2017, <http://bcw.ac.upc.edu/PUMPS2017>
14. Summer School on Image Processing in Medical Applications, Polytechnic University of Bucharest, Romania, Cardiac Imaging, July 2016, <http://imag.pub.ro/ssima2016>
15. Summer School on Image Processing, University of Szeged, Informatics Institute, Hungary, with project “Bicycle detection at street crossings”, July 2015, <https://www.inf.u-szeged.hu/ssip/2015/projects.html>

Grants:

1. Computer science researcher, Romanian Artificial Intelligence HUB - HRIA code SMIS 351416, April 2025 - December 2026, Manager: Viorel Negru.
2. Team Member, Local Coordinator UNITA R&I Hub on Digital Transition, October 2024 - October 2026, Project 101124853 - UNITA, Grant agreement 101124853, Manager: Andra Dragotesc.
3. Team Member, Expert coordinator for practice stages, Training through relevant internships or practical, Project ID: 302424, March 2025 - April 2025, Manager: Adrian Isvoran.
4. Local Manager - Sustainable Alliance Manager: Learning Experience towards Collaborative Skills

with Green Consciousness, Erasmus + Programme 2021-2027, Key Action 2: Cooperation partnerships in higher education, no. 2023-1-ES01-KA220-HED-000157968, October 2023 - September 2026

5. Team Member, Professor Tutor - Advice, Tutoring and Specific Training for efficient university education in the field of Mathematics and Computer Science, ROSE AG 412/SGU/SS/2023, November 2023 - July 2024, Manager Sen. Lect. Ph.D. Claudia Zaharia
6. Team Member, Trainer, Tutor - Learning Center for Technology, Art, and Sport, ROSE AG 296/SGU/CI/III, November 2023 - August 2024, Manager: Nicoleta Stefu
7. Team Member - Building a Culture of Counseling and Career Guidance in Continuous Career Development at WUT, CNFIS-FDI-2023-F-0697, September 2023 - December 2023, Manager: Mugur Ciumageanu
8. Team Member - WUT - Counseling and career guidance for a professionally Informed Community, CNFIS-FDI-2022-0394, September 2022 - December 2022, Manager: George Bunesco
9. Research Team Member - Promoting equity and well-being in schools from disadvantaged backgrounds through action research - PESSCA, funded by the West University of Timisoara, Faculty of Sociology and Psychology, Manager: Ph.D. Leyla Safta-Zecheria, July - December 2021, <https://www.cercetare-actiune.org>
10. Team Member, Junior researcher - Modernization of the computing and storage infrastructure of the Computer Science Research Center of the West University of Timisoara for offering cloud services and high-performance computing services - MOISE", ID 124S62, funded under Competitiveness Operational Program, April 2021 - June 2022, Manager: Prof. Ph.D. Viorel Negru
11. Team Member, Junior Researcher - Transparent application deployment in a secure, accelerated and cognitive Cloud continuum (SERRANO), financed under Horizon 2020 no. 101017168/2020, April 2021 - December 2023, Local manager: Ph.D. Silviu Panica, Sen. Lect. Ph.D. Gabriel Iuhasz,
12. Team Member, Practice Stage Expert - Quality practice for a successful career, POCU/626/6/13, Manager: Prof. Ph.D. Flavia Bama, November 2020 - October 2022.
13. Team Member, Professor Tutor - Advice, Tutoring and Specific Training for efficient university education in the field of Mathematics and Computer Science, ROSE AG 389/SGU/SS/III, October 2020 - August 2021, Manager Sen. Lect. Ph.D. Claudia Zaharia
14. Team Member, Lecturer - Institutional Development through Internationalization for Everyone at the West University of Timisoara Project, CNFIS-FDI-2020-0498, August 2020 - November 2020, Manager: Sen. Lect. Ph.D. Oana Ivan, <https://ri.uvt.ro/west-university-of-timisoara-late-summer-school>
15. Team Leader - NVIDIA GPU Academic Grant, Jetson TX2, July 2017, <https://nvidia.my.site.com/HardwareGrant/s/Application>
16. Team member, Software Developer, Work Package 4 Leader - InnoHPC - High-performance Computing for Effective Innovation in the Danube Region - Interreg - Danube Transnational Program, DTP1-1-260-1.1, February 2017 - June 2019, Local Manager: Prof. Ph.D. Dana Petcu, Prof. Ph.D. Viorel Negru, <http://www.interreg-danube.eu/approved-projects/innohpc>
17. Team member - Management of Alumni Students Communication in Higher Education Institutions in Romania, POSDRU/86/1.2/S/56283, October 2013 - December 2013, Manager: National Union of the Romanian Students.

Mobilities:

1. Erasmus+, Tomori Pál Főiskola Budapest, Hungary, June 2025, Supervisor: Prof. Ph.D. Rédei Csaba, <https://tpfk.hu>
2. Erasmus+, Autonomous University of Barcelona, Spain, Computer Vision Center, May 2024, Supervisor: Prof. Ph.D. Resina Debora Gil, www.cvc.uab.es
3. Erasmus+, Autonomous University of Barcelona, Spain, Computer Vision Center, May 2023, Supervisor: Prof. Ph.D. Resina Debora Gil, www.cvc.uab.es
4. Erasmus+, Escola Superior de Artes e Design Porto, Portugal, April 2023, Supervisor: Antonino Jorge, <https://esad.pt>
5. E-Austria Institute Grant, Faculty of Engineering at Universidad Tecnologica de Bolivar, Cartagena, Colombia, May 2022, Supervisor: Assoc. Prof. Ph.D. Edwin Puertas, <https://www.utb.edu.co>
6. Erasmus+, Autonomous University of Barcelona, Spain, Computer Vision Center, April 2022, Supervisor: Prof. Ph.D. Resina Debora Gil, www.cvc.uab.es
7. UBB - Babes Bolyai University, Faculty of Mathematics and Computer Science, Department of Computer Science, Cluj Napoca, Romania, financed under „Together universities and employers. An integrated system of innovative educational programs” - POCU/320/6/21/121030, May 2021, Supervisor: Prof. Ph.D. Anca Andreica
8. University Sponsor Program- Sewanee's J Program: P-1-04651, Visiting Instructor in Computer

- Science, Sewanee the University of the South, College of Arts and Sciences, Mathematics and Computer Science Department, United States of America, January - May 2020, Supervisor: Prof. Ph.D. Matthew Rudd www.new.sewanee.edu
9. WUT International Research Visits, Grant CNFIS-FDI-2019-0108, Autonomous University of Barcelona, Spain, Computer Vision Center, 15 - 29 November 2019, Supervisor: Prof. Ph.D. Resina Debora Gil, www.cvc.uab.es
 10. Erasmus+, Autonomous University of Barcelona, Spain, Computer Vision Center, June - August 2019, Supervisor: Prof. Ph.D. Resina Debora Gil, www.cvc.uab.es
 11. Erasmus+, University of Genova, Department of Computer Science, Bioengineering, Robotics and System Engineering (DIBRIS), Italy, July 2018, Supervisor: Prof. Ph.D. Francesco Masulli, <https://dibris.unige.it>
 12. Erasmus+, Autonomous University of Barcelona, Spain, Computer Vision Center, June-August 2017, Supervisor: Prof. Ph.D. Resina Debora Gil, www.cvc.uab.es
 13. Erasmus+, University of Azores, Ponta Delgada, Portugal, Faculty of Science and Technology, Research in Artificial Intelligence and Parallel Computing, Supervisor: Prof. Ph.D. Jose Manuel Veiga Ribeiro Cascalho, September 2017, <https://international.uac.pt>
 14. Erasmus+, Las Palmas University, Gran Canarias, Spain, Faculty of Computer Science, Engineering, Scientific and Technological Center, January 2016, Supervisor: Prof. Ph.D. Jose Hernandez Daniel Sosa, www.ulpgc.es
 15. CEEPUS, University of Szeged, Institute of Informatics, Hungary, July 2015, Supervisor: Prof. Ph.D. Antal Nagy, <https://www.inf.u-szeged.hu/ssip/2015>

Invited speaker:

1. The Future of Business - organizations meet digital technologies Embracing high performance computing: Using new technologies to improve organizations' processes, procedures, practices and profitability, Panel discussion, 6th October 2020, <https://www.smeahpc.net>
2. Meet(up) HPC: powering business growth, HPC in practice Growing a successful research-industry collaboration: leAT Research Institute, 26th of May 2020, <https://www.smeahpc.eu>
3. StudIT - IT Scientific Student Session, Cryptocurrency and Blockchain Technology, 19th of May 2020, <https://asseut.uvt.ro>
4. Innovation Caffee, High Performance Computing use in Digital Health, Bucharest, Romania, December 2018, <http://ed9.cafeneauadeinovare.ro/speakers.html>

Organizing committee:

1. RoMedINF 2025 - Going Digital in Healthcare: Benefits & Challenges, 8-11 May 2025, <https://romedinf.srimed.ro>
2. 27th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2025, <https://synasc.ro>
3. RoMedINF 2024 - Healthcare Digital Ecosystems: Hypotheses, Methods and Applications, 13-14 May 2024, <https://romedinf.srimed.ro>
4. 26th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September 2024, <https://synasc.ro>
5. RoMedINF 2023 - Healthcare Green Digital Ecosystems: From Data Analysis to Digital Twin, 14-15 September 2023, <https://romedinf.srimed.ro>
6. 6th Workshop on Digital Image Processing for Medical and Automotive Industry in the framework of SYNASC, September 2022, <https://synasc.ro/2022/dipmai-2022>
7. 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2022, <https://synasc.ro/2022>
8. 5th Workshop on Digital Image Processing for Medical and Automotive Industry in the framework of SYNASC, September 2021, <https://synasc.ro/2021/dipmai-2021>
9. 23rd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2021, <https://synasc.ro/2021>
10. 22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2020, <https://synasc.ro/2020>
11. 4th Workshop on Digital Image Processing for Medical and Automotive Industry in the framework of SYNASC, September 2020, <https://synasc.ro/2020/dipmai-2020>
12. 21st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2019, <https://synasc.ro/2019>
13. 3rd Workshop on Digital Image Processing for Medical and Automotive Industry in the framework of SYNASC, September 2019, <https://synasc.ro/2019/dipmai-2019>
14. 27th Summer School on Image Processing, Timisoara, Romania, July 2019.

15. National Students Olympiad in Informatics, 12 - 14 April 2019, <https://info.uvt.ro/onis2019>
16. 20th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2018, <https://synasc.ro/2018>
17. 2nd Workshop on Digital Image Processing for Medical and Automotive Industry in the framework of SYNASC, September 2018, <https://synasc.ro/2018/dipmai-2018>
18. 3rd InnoHPC training: Capacity building for HPC providers and SMEs on High-performance Computing for Effective Innovation in the Danube Region, Timisoara, Romania, September 2018, <https://www.interreg-danube.eu/approved-projects/innohpc/news>
19. 2nd InnoHPC training: Capacity building for HPC providers and SMEs on High-performance Computing for Effective Innovation in the Danube Region, Podgorica, Montenegro, June 2018, <https://www.interreg-danube.eu/approved-projects/innohpc/news>
20. 4th International Winter School on Big Data, Timisoara, Romania, January 2018, <https://irdta.eu/BigDat2018>
21. 19th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2017, <https://synasc.ro/2017>
22. 1st Workshop on Digital Image Processing for Medical and Automotive Industry in the framework of SYNASC, September 2017, <https://synasc.ro/2017/dipmai-2017>
23. InnoHPC High-performance Computing for Effective Innovation in the Danube Region in Science and Technology, September 2018, <https://www.interreg-danube.eu/approved-projects/innohpc/news>

Editorial/ Reviewer activity:

1. Associate Editor, Journal of Applied Medical Informatics, 2022, <https://ami.info.umfcluj.ro>
2. Reviewer, International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, 2025, 2024, 2023, 2022, <https://synasc.ro>
3. Reviewer, IEEE International Symposium on Biomedical Imaging, 2025, 2024, <https://biomedicalimaging.org/2024>
4. Reviewer, Journal of BMC Medical Education, 2025, 2024, 2023, ISSN: 1472-6920, <https://bmcmmeduc.biomedcentral.com>
5. Reviewer, Journal of Applied Medical Informatics, 2025, 2024, 2023, 2022, <https://ami.info.umfcluj.ro>

ISI Journal Publications:

1. Muntean, V. Gaborean, R. C. Vonica, S. A. Ștefaniga, A. M. Faur, C. V. I. Feier, Machine Learning Models for Predicting Post-Hepatectomy Liver Failure: A Systematic Review, AI, ISSN 2673-2688, Volume 7 (2026), No. 5, Article 166, <https://doi.org/10.3390/ai7050166>
2. D. Danculescu, D. Piciu, C. Dinu, S. Ștefanigă, F. Boboc, A glimpse of some common concepts in algebras of logic and uncertain environments, Carpathian Journal of Mathematics, ISSN 1843-4401, Volume 41 (2025), No. 4, Pages 1061 - 1077, <https://doi.org/10.37193/CJM.2025.04.14>
3. Ștefanigă, S.A.; Cordoș, A.A.; Ivascu, T.; Feier, C.V.I.; Muntean, C.; Stupinean, C.V.; Călinici, T.; Aluaș, M.; Bolboacă, S.D. Advancing Precision Oncology with Digital and Virtual Twins: A Scoping Review. Cancers 2024, 16, 3817. <https://doi.org/10.3390/cancers16223817>
4. Ileașan, R.R.; Ștefanigă, S.-A.; Fleșar, R.; Beyer, M.; Ginghină, E.; Peștean, A.S.; Hirsch, M.C.; Perju-Dumbravă, L.; Faragó, P. In Silico Decoding of Parkinson's: Speech & Writing Analysis. J. Clin. Med. 2024, 13, 5573. <https://doi.org/10.3390/jcm13185573>
5. Farago, P.; Ștefaniga, S.-A.; Cordos, C.-G.; Mihaita, L.-I.; Hintea, S.; Peștean, A.-S.; Beyer, M.; Perju-Dumbrava, L.; Ilesan, R.R. CNN-Based Identification of Parkinson's Disease from Continuous Speech in Noisy Environments. Bioengineering 2023, 10, 531. <https://doi.org/10.3390/bioengineering10050531>
6. L.-R. Damian, R. Dumitrescu, V. T. Alexa, D. Focht, C. Schwartz, O. Balean, D. Jumanca, D. Obistoiu, D. Lalescu, S.-A. Ștefaniga, A. Berbecea, A. D. Fratila, A. D. Scurtu, A. Galuscan, Impact of Dentistry Materials on Chemical Remineralisation/Infiltration versus Salivary Remineralisation of Enamel-In Vitro Study. Journal of Materials, 2022, 15(20), 7258-7258, <https://www.mdpi.com/1996-1944/15/20/7258>
7. L. R. Damian, R. Dumitrescu, D. Jumanca, R. S. Rosianu, A. Matichescu, O. Balean, A. Podariu, S. A. Ștefaniga, A. Galuscan, Clinical Study Regarding the Property of Composite Resin, Sealants, using VISTACAM iX, Journal of Plastic Materials, Vol. 56, no. 1, p. 138-143, March 2019, ISSN 0025 - 5289, <http://www.revmaterialeplastice.ro/pdf/28%20DAMIAN%201%2018.pdf>
8. C. Dumitru, N. C. Mlandin, M. Craina, I. Petre, L. C. Moleriu, R. Bardan, D. C. Bonte, E. Ungureanu, S. A. Ștefaniga, R. Susan, E. Pop, N. Suciuc, Can be Considered the CA-125 and Neutrophil-to-

lymphocyte Ratio Values as a Diagnostic Value in Ovarian Endometriosis?, Journal of Chemistry, Vol. 69, no. 12, p. 3561-3565, December, 2018, ISSN 0034-7752, http://www.revistadechimie.ro/article_eng.asp?ID=6792.

Indexed Journal Publications:

1. CORDOȘ, Ariana-Anamaria, Sebastian-Aurelian Ștefanigă, and Călin Muntean. "Leveraging ChatGPT for digital healthcare speech writing." Applied Medical Informatics 46.1 (2024): 5-15.
2. Leyla Safta-Zecheria, Sebastian-Aurelian Ștefanigă, Ioana-Alexandra Negru, Francisca-Hortensia Virag, Challenges experienced by teachers regarding access to digital instruments, resources, and competences in adapting the educational process to physical distancing measures at the onset of the COVID-19 pandemic in Romania, Journal of Educational Sciences, vol. 21, no. 2, p. 69-86, December 2020, ISSN 2457 - 8673, DOI 10.35923/JES.2020.2.05
3. Leyla Safta-Zecheria, Sebastian-Aurelian Ștefanigă, Ioana-Alexandra Negru, Francisca-Hortensia Virag, Anca Margineanu, Collaborative learning in an action research project responding to challenges of online education during the covid-19 pandemic, Journal of pedagogy, no. 1, 2021, LXIX (1):7-29. DOI: 10.26755/RevPed/2021.1/7

ISI Conference Proceedings Publications:

1. M. Gherghinescu, T. Ivașcu, S. Ștefăniță, Mononucleosis Oral Disease Detection with the Help of GANs, Asian Conference on Intelligent Information and Database Systems (ACIIDS), Recent Challenges in Intelligent Information and Database Systems. ACIIDS 2025. Communications in Computer and Information Science, vol 2494, pp 190-204. Springer, Singapore, https://doi.org/10.1007/978-981-96-5884-8_14
2. Ș. Secieru, S.A. Ștefăniță, Bridging Content Management and Micro-frontends: A WordPress-Centric Approach to Modern Web Architecture, International Conference on Advanced Information Networking and Applications (AINA), Advanced Information Networking and Applications. AINA 2025. Lecture Notes on Data Engineering and Communications Technologies, vol 246, pp 61-72. Springer, Cham, https://doi.org/10.1007/978-3-031-87766-7_6
3. Ș. Secieru, S.A. Ștefăniță, Optimizing WordPress Architecture: A next-generation approach with Micro-Frontends, International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES), Procedia Computer Science, General Track - G2: Knowledge Based and Expert Systems, 2025, ISSN: 1877-0509, <https://doi.org/10.1016/j.procs.2025.09.326>
4. Ș. Secieru, S.A. Ștefăniță, Assessing the Performance Overhead of Firewall-based Intrusion Detection Systems on Home Computers, International Conference on Computational Collective Intelligence (ICCCI), https://doi.org/10.1007/978-3-032-10209-6_32
5. Gherghinescu, Mihai, Todor Ivașcu, and Sebastian Ștefăniță. "Adaptive Traffic Management System Based on Real-Time Traffic Conditions." Asian Conference on Intelligent Information and Database Systems. Singapore: Springer Nature Singapore, 2024.
6. Ionascu, A., Ștefanigă, S., Gaianu, M. (2023). Synthetic Football Sprite Animations Learned Across the Pitch. In: Nguyen, N.T., et al. Advances in Computational Collective Intelligence. ICCCI 2023. Communications in Computer and Information Science, vol 1864. Springer, Cham. https://doi.org/10.1007/978-3-031-41774-0_48
7. A. Ionascu and S. Ștefanigă, "Semi-Supervised Pipeline for Human Sprites Neural Rendering," 2022 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Hagenberg/Linz, Austria, 2022, pp. 264-267, doi: 10.1109/SYNASC57785.2022.00049.
8. B. Budihala, T. Ivașcu and S. Ștefanigă, "Motorage - Computer vision-based self-sufficient smart parking system," 2022 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Linz, Austria, 2022, pp. 250-257, doi: 10.1109/SYNASC57785.2022.00047
9. S. A. Ștefanigă, Methods of acceleration for feature extractions in medical imaging using GPU processing, 2021 23rd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2021, doi: 10.1109/SYNASC54541.2021.00047
10. I. A. Tarba, M. Gaianu, S. A. Ștefanigă, The Driver's Attention Level, 2020 22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2020, pp. 251-258, doi: 10.1109/SYNASC51798.2020.00048
11. A. Ionascu, S. A. Ștefanigă, DS Lab Notebook: A new tool for data science applications, 2020 22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2020, pp. 310-314, doi: 10.1109/SYNASC51798.2020.00056
12. S. Ștefanigă and M. Gaianu, An Approach of Segmentation Method Using Deep Learning for CT Medical Images, 2019 21st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2019, pp. 273-279, doi:

10.1109/SYNASC49474.2019.00045

13. Debora Gil, Antonio Esteban Lansaque, Sebastian Stefaniga, Mihail Gaiuanu, Carles Sanchez, Data Augmentation from Sketch, International Workshop CLIP 2019, held in conjunction with MICCAI 2019, Shenzhen, China, October 17, 2019 (Vol. 11840, pp. 155-162), DOI: 10.1007/978-3-030-32689-0_16
14. V. D. Chiriac, L. Stelea, M. Craina, C. Balasan, A. Fogarassy, S. A. Stefaniga, A. Furau, M. Salapa, Infectious Pathology in HSIL Lesions - Statistical Data, Proceedings of the 4th Congress of the Romanian Society for Minimal Invasive Surgery in Gynecology 2018, p.167-172, ISBN 978-88-85813-48-9
15. L. Stelea, M. Craina, C. Balasan, V. D. Chiriac, A. Fogarassy, S. A. Stefaniga, A. Furau, Genital Infection of Human Papillomavirus: Incidence and Risk Factors in a Cohort in the Western Part of Romania - Babes Papanicolaou Test, Proceedings of the 4th Congress of the Romanian Society for Minimal Invasive Surgery in Gynecology 2018, p.597-601, ISBN 978-88-85813-48-9
16. L. Stelea, M. Craina, C. Balasan, V. D. Chiriac, A. Fogarassy, S. A. Stefaniga, A. Furau, Can Inflammation Cause LSIL? Proceedings of the 4th Congress of the Romanian Society for Minimal Invasive Surgery in Gynecology 2018, p.602-607, 2018, ISBN 978-88-85813-48-9
17. L. Stelea, M. Craina, C. Balasan, V. D. Chiriac, A. Fogarassy, S. A. Stefaniga, A. Furau, Infectious Factors Involved in the Occurrence of LSIL Lesions, Proceedings of the 4th Congress of the Romanian Society for Minimal Invasive Surgery in Gynecology 2018, p.608-612, 2018, ISBN 978-88-85813-48-9
18. Sebastian-Aurelian Stefaniga, Mihail Gaiuanu, Face detection and recognition methods using deep learning in autonomous driving, Proceedings of 20th International Symposium on Symbolic and Numeric Algorithm for Scientific Computing, 2018, DOI: 10.1109/SYNASC.2018.00060
19. Sebastian-Aurelian Stefaniga, Mihail Gaiuanu, Performance analysis of morphological operation in CPU and GPU for medical images, Proceedings of 19th International Symposium on Symbolic and Numeric Algorithm for Scientific Computing, 2017, DOI: 10.1109/SYNASC.2017.00068

National/ International Conference Proceedings Publications:

1. Schuurman, D., Santonen, T., Habibipour, A., Vervoort, K., Stuckrath, C., McPhee, C., Konstantinidis, E., Piana, V., & Ștefăniță, S.-A. (2025). Towards a Living Labs Research Agenda. In *ISPIIM Innovation Conference Proceedings* (pp. 1-17). The International Society for Professional Innovation Management (ISPIIM). <https://urn.fi/URN:NBN:fi-fe2025063076306>
2. Faragó, P., Ileașan, R. R., Ștefăniță, S. A., & Hintea, S. (2025, July). Cardiorespiratory Correlation Coefficient Matrices for CNN-Based Sleep Apnea Detection. In *2025 47th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 1-6). IEEE, <https://doi.org/10.1109/EMBC58623.2025.11254655>
3. Cordoș, A. A., Ștefăniță, S. A., Muntean, C., Vernic, C. V., & Bolboacă, S. D. (2024). *ALSATION Study Protocol: Romanian Translation of Three Health Literacy Surveys*. In *Proceedings of the European Federation for Medical Informatics Special Topic Conference (STC 2024), Collaboration across Disciplines for the Health of People, Animals and Ecosystems (Studies in Health Technology and Informatics, Vol. 321, pp. 12-16)*. IOS Press. <https://doi.org/10.3233/SHTI241052>
4. A. Farcaș, A. Lobonț, D. Babuc, T. Ivașcu and S. -A. Ștefăniță, EI-ViT-Net: a Vision Transformer Approach for Diabetic Retinopathy's Decision Support Pipelin, 24th International Conference on Bioinformatics and Bioengineering (BIBE), Kragujevac, Serbia, 2024, pp. 1-6, <https://doi.org/10.1109/BIBE63649.2024.10820483>
5. I. Petre, F. Bama, M. Craina, L. Moleriou, S. Iurciuc, V. Turi, I. Petre, S. A. Stefaniga, Cost-Effectiveness Assessment of Surgical Treatment of Cervical Cancer, Proceedings of the Annual Days of the National Institute for Mother and Child Health "Alessandrescu-Rusescu", 21-23 November 2019, Bucharest, Romania, p.416-420, ISBN 978-88-85813-86-1
6. I. Petre, F. Bama, A.V. Popescu, L. Moleriou, M. Craina, S. A. Stefaniga, Cost-Effectiveness Assessment in the Early Detection of Risk for Preeclampsia, Proceedings of the Annual Days of the National Institute for Mother and Child Health "Alessandrescu-Rusescu", 21-23 November 2019, Bucharest, Romania, p.416-420, ISBN 978-88-85813-86-1
7. A.V. Popescu, M. Craina, M. Popescu, P. Stelian, S. A. Stefaniga, E. V. Lazureanu, A. C. Ilie, Correlations Between the Characteristics of the Menstrual Cycle and the Risk of Endometriosis, Proceedings of the XV Conference of The Romanian-German Society of Obstetrics and Gynecology and V National Congress of the Romanian Association of Menopause, 06-08 June 2019, Timisoara, Romania, p.416-420, ISBN 978-88-85813-76-2

Books/ Book Chapters:

1. Ștefăniță, S., Cernăianu, I., Ivașcu, T. (2024). Deep Learning-Based Multiple Skin Lesion

- Classification. In: Costin, HN., Magjarević, R., Petroiu, G.G. (eds) Advances in Digital Health and Medical Bioengineering. EHB 2023. IFMBE Proceedings, vol 109. Springer, Cham. https://doi.org/10.1007/978-3-031-62502-2_89
2. Zîmpău-Valah, B., Ștefăniță, S., Ivașcu, T., Dănciulescu, R. (2024). Machine Learning-Based X-ray Images Classification. In: Costin, HN., Magjarević, R., Petroiu, G.G. (eds) Advances in Digital Health and Medical Bioengineering. EHB 2023. IFMBE Proceedings, vol 111. Springer, Cham. https://doi.org/10.1007/978-3-031-62523-7_42
 3. Mugur D. Ciurageanu, Diana-Luisa Avram, Mihaela Mitescu-Manea, Ioana Alexandra Negru, Leyla Safta-Zecheria, Francisca Hortensia Virag, Sebastian Ștefaniga. Concept mapping and emic participatory community-based research with youth in the times of the Covid-19 pandemic, in Challenges and constraints in the knowledge society, Conference Proceedings Teachers for Knowledge Society, 24 - 25 September 2021 Ploiesti, Romania, European Institute, pp. 11 -16. <http://conference2021.masterprof.ro/index.php/en/conference-volume>
 4. Mihaela Mitescu-Manea, Diana-Luisa Avram, Mugur D. Ciurageanu, Ioana Alexandra Negru, Leyla Safta-Zecheria, Sebastian Ștefaniga, Francisca Hortensia Virag. Ethical implications of youth participation in educational action research in the context of the COVID-19 pandemic, in Challenges and constraints in the knowledge society, Conference Proceedings Teachers for Knowledge Society, 24 - 25 September, 2021 Ploiesti, Romania, European Institute, pp. 237 -242. <http://conference2021.masterprof.ro/index.php/en/conference-volume>
 5. Leyla Safta-Zecheria, Diana-Luisa Avram, Mugur D. Ciurageanu, Mihaela Mitescu-Manea, Ioana Alexandra Negru, Sebastian Ștefaniga, Francisca Hortensia Virag. Researching equity and wellbeing in schools in the time of COVID-19 through youth-led participatory action research. Some methodological observations on useful tools for the emotional development of school-age children, in Challenges and constraints in the knowledge society, Conference Proceedings Teachers for Knowledge Society, 24 - 25 September 2021 Ploiesti, Romania, European Institute. pp. 41 - 47; <http://conference2021.masterprof.ro/index.php/en/conference-volume>
 6. Sebastian-Aurelian Ștefaniga, Chapter Transnational HPC Infrastructure in the Danube Region, Go with the flow: High Performance Computing and Innovations in the Danube Region, p. 73-84, Vega Press Ltd., ISBN: 978-1-909736-11-5, Link [here](#)
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Abstracts Publications:

1. Farcaș, A. R., Fleșar, R. C., Ivașcu, T., & Ștefăniță, S. A. (2025). Efficient Storage Management of Optical Coherence Tomography Images using Zero-Shot Noise2Noise and a Custom Convolutional Neural Network. Applied Medical Informatics, 47.
2. Moldovan, Radu-Anton, and Sebastian-Aurelian Ștefăniță. "Predictive Analysis of Cardiovascular Disease Risk Factors in Romania using Machine Learning and Medical Statistics." Applied Medical Informatics 47 (2025).
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4. Babuc, D., Lobonț, A., Farcaș, A., Ivașcu, T., & Ștefăniță, S. A. (2025). Deep Learning-Based Denoising for Optical Coherence Tomography: Evaluating Self-Supervised and Generative Models Across Retinal Datasets. Applied Medical Informatics, 47.
5. Vernic, C., Ștefăniță, S. A., Apostol, A. S., & Muntean, C. (2024). The Impact of Digitization of Intensive Care Services on Patient Safety in the Pius Brânzeu Emergency County Hospital in Timișoara. Applied Medical Informatics, 46.
6. ROMAN, Iulian, Călin MUNTEAN, and Sebastian-Aurelian ȘTEFĂNIGĂ. "Creating Medical Datasets using Robot Process Automation." Applied Medical Informatics 46 (2024).
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9. Fleșar, R. C., Ștefaniga, S. A., Farago, P., & Ilesan, R. R. (2023). Artificial Intelligent Model for Parkinson's Disease Management. Applied Medical Informatics, 45, S12-S12.

10. S. A. Ștefaniga, A.R. Asofroniei, SmartRay-An AI-Based Module for Medical Images Processing, Applied Medical Informatics 43, 28-28, 2021
11. S. A. Ștefaniga, Fine-Tuned Medical Images Denoising using Median Filtering, Applied Medical Informatics 43, 27-27, 2021
12. S. A. Ștefaniga, T. Florea, VitaWise-AI-based Healthcare Application, Applied Medical Informatics 43, 29-29, 2021

Posters Presentation:

1. Radu Flesar, Sebastian-Aurelian Ștefaniga, Paul Farago and Robert Radu Ilesan, Poster Session. Artificial Intelligent Model for Parkinson's Disease Management. Romanian AI Days 2023, Brasov, September 2023 (<https://days.airomania.eu>)
2. Radu Flesar, Sebastian-Aurelian Ștefaniga, PhD. Poster Session. Patient gait monitoring classification for Parkinson's disease. Workshop Trust-AI, Diaspora 2023, April 2023 (<https://www.diaspora-stiintifica.ro>)
3. Sebastian-Aurelian Ștefaniga, Mihail Gaianu, Poster Sessions, Medical Image Processing using NVIDIA Deep Learning GPU Training System, 10th Conference on Dynamical Systems Applied to Biology and Natural Sciences, Napoli, Italy, 3-6 February 2019.

Awards/ Scholarships:

1. Bologna Professor Award in 2025, <https://anosr.ro/gala-profesorului-bologna>
2. Certificate of achievement - winning team of Level III - Mission Design of a Lunar Satellite Constellation for Communication and Navigation, ROSPIN Academy (Romanian Space Initiative) September 2022, <https://rospin.org/rospin-academy>
3. Ambassador of ROSPIN (Romanian Space Initiative), December 2021 - December 2023
4. Ambassador of IEEEExtreme 15.0 Competition, Romania Section Lead, Region 8, March-October 2021, <https://ieeextreme.org>
5. Teaching Grant, UVT teaching & learning brand, CNFIS-FDI-2020-0274, Manager Assoc. Prof. Ph.D. Marian Ilie, December 2020, <http://cda.uvt.ro>
6. Ambassador of IEEEExtreme 14.0 Competition, Romania Section Lead, Region 8, March-October 2020, <https://ieeextreme.org>
7. Research Ph.D. Grant, SC. Continental Automotive Romania SRL for the innovative proposal of the doctoral thesis and the research activity, October 2017-October 2019
8. Research Award of West University of Timisoara, Romanian Ministry of Education Funds, Project Manager Assoc. Prof. Ph.D. Madalin Bunoiu, October 2018.

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