

Curriculum vitae Europass

Personal Information

Name/ Adrian Sergiu DARABANT

Current Position(s) /Area of PhD Habil Assoc. Professor Bolyai University- Dept of Computer Science Expertise and Head of Tvarita Research - Computer Vision and Machine Learning

Experiența profesională

Period 1998 -> 2004

Position Teaching Assistant

Main activities and responsibilities Teaching Assistant and Researcher - Computer Science Dept Faculty of Mathematics and Computer

Science, Babes Bolyai University

Name and address of employer Babes Bolyai University, Faculty of Mathematics and Computer Science, 1 Kogalniceanu, Cluj Napoca,

Romania

Activity/Sector Education and Research

Period 2004-2017

Position Phd Lecturer

Main activities and responsibilities Lecturer and Researcher - Computer Science Dept Faculty of Mathematics and Computer Science,

Babes Bolyai University

Name and address of employer Babes Bolyai University, Faculty of Mathematics and Computer Science, 1 Kogalniceanu, Cluj Napoca,

Romania

Activity/Sector Education and Research

Period Feb 2018-prezent

Position PhD Assoc Prof

Main activities and responsibilities PhD Assoc Professor and Researcher - Computer Science Dept Faculty of Mathematics and Computer

Science, Babes Bolyai University

Name and address of employer Babes Bolyai University, Faculty of Mathematics and Computer Science, 1 Kogalniceanu, Cluj Napoca,

Romania

Activity/Sector Education and Research

Period March 2022-present

Position PhD Habil Assoc Professor

Main activities and responsibilities PhD Assoc Professor and Researcher - Computer Science Dept Faculty of Mathematics and Computer

Science, Babes Bolyai University

Name and address of employer Babes Bolyai University, Faculty of Mathematics and Computer Science, 1 Kogalniceanu, Cluj Napoca,

Romania

Activity/Sector Research

Period 2001 -> present

Position Manager/Research & Development Manager at TVARITA Research

Main activities and responsibilities Technical consultant on IT technologies, research and development team manager, project coordinator

Name and address of employer TVARITA Research

Activity/Sector Research/Development, management - Machine Learning and image processing, computer vision,

distributed systems, measurement applications in ophthalmology and medical optics.

Period 2000 – 2002

Position Technical Manager & CEO at Drimex Sarl - France

Main activities and responsibilities Technical Consultant on IT technologies, research and development team manager, project coordinator

Name and address of employer DRIMEX France, Paris, Franta

Activity/Sector IIT Industry, Research/Development, management - image processing, computer vision, network security

and cybersecurity, distributed systems..

Education

Period 2022

Qualification Habilitation in Computer Science

Competences/Topics Thesis: Mathematical and Machine Learning Models and Techniques for Solving Complex Problems

Name and type of educational institution Babes Bolyai University, Faculty of Mathematics and Computer Science

/ training provider

Level in national or international ISCED 6

classification

Period 2001 - 2004

Qualification PhD in Computer Science

Competences/Topics Thesis: Object design and modeling in distributed database systems

Name and type of educational institution Babes Bolyai University, Faculty of Mathematics and Computer Science / training provider

Level in national or international ISCED 6 classification

Period 1996 -1997

Qualification Master in Distributed Systems

Competences/Topics Distributed Systems and Technologies

Name and type of educational institution Babes Bolyai University, Faculty of Mathematics and Computer Science

/ training provider

Level in national or international ISCED 6

classification

Personal skills and competences

Native Language) Romanian

Foreign Languages

Autoevaluation		Understanding			Spoken				Written	
European Level(*)		Listening		Reading		Conversation		Oral speech		Writing
Engligsh	C2	Proficient User	C2	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient User
French	C2	Proficient User	C2	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient User
Itaian	C1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User
(*) The level of the Common European Framework of Reference for Foreign Languages										

Social skills and competences The ability to work in a team and lead teams

The ability to interact with people in a multicultural environment

Communication skills

Organisational skills and competences Management and leadership/organization – leading a team of 10 people Experience in coordinating projects and teams

Technical skills and competences

- Machine and Deep Learning;
- Computer Vision;
- computer technologies and networks;
- Cloud and distributed computing;
- Databases
- Network Security intrusion detection, firewalls, email security, etc
- -- Voice over IP technologies;
- VPNs and communication infrastructures;
- advanced programming;

Driver's license B

Additional Information

Annexes

Patents, inventions, software applications

- 1. SmartMirror software package for augmented reality and measurements in medical optics.
- 2. Smart PDMeasurement Software package for measuring the sizes needed to implement the prescription in medical optics using 2D images and stereoscopy
- 3. Mobile PDMeasurement Software package for mobile devices measuring opto-facial features for prescriptions in medical optics using 2D images and stereoscopy participation in the standardization of digital measurement tools in the field in the European area (cf AFNOR meeting June 9, 2013) Paris, France

Co-author in the development of the patented methods:

- 4. METHOD AND SYSTEM FOR THE ON-LINE SELECTION OF A VIRTUAL EYEGLASS FRAME (app no 20100283844)
- 5. METHOD AND DEVICE FOR MEASURING THE CURVE OF A SPECTACLE FRAME (app No 20100231710)
- 6. DEVICE FOR MEASURING THE ANGLE BETWEEN FAR SIGHT AND NEAR SIGHT ON A PATIENT WEARING SPECTACLES (app No 20100149486)

Didactic activity

7 courses, 9 seminars and 7 lab activities taught during the teaching activity

Scientific and didactic coordination activities

- coordination of bachelor's and dissertation theses (over 100)
- co-coordination of 3 defended Phd theses
- coordination of 1 enrolled PhD student

Member of the editorial board or referent to BDI journals

- 1. Darabant Sergiu Adrian, Referent in the international editorial team, in magazines recognized by ISI, Magazine: INFORMATION AND SOFTWARE TECHNOLOGY, 2009-present
- 2. Darabant Sergiu Adrian, Member of the editorial committee, Electronics.
- 3. Darabant Sergiu Adrian, Member of the editorial committee, Mathematics Special Issue: Artificial Intelligence and Machine Learning Based Methods and Applications.

Books published in accredited national publishing houses

- 1. Darabant Sergiu Adrian, carte, book, Designing Distributed Databases, CASA CARTII DE SIINTA, 2009, 240 pag
- 2. Andreica Anca-Mirela, Navroschi Andreea, Bufnea Darius-Vasile, Sterca Adrian-Ioan,

Darabant Sergiu Adrian, Vancea Alexandru-Ioan, book, 80x86 Assembly Language Programming. Examples and applications., RISOPRINT, 2005, Pages. 400

3. Boian Florian-Mircea, Vancea Alexandru-Ioan, Bufnea Darius-Vasile, Andreica Anca-Mirela, Darabant Sergiu Adrian, Navroschi Andreea, book, *Computer Architecture. Assembly language* 80x86, RISOPRINT, 2005, P. 392

Academic, Administrative, Research and Community Contributions

- 1. Coordinator and Organizer of SCSS Students Conference in Computer Science (2015-2023) with participants for multiple Romanian universities- with peer review.
- 2. Coordinator PNRR Funding *UBB AI Transversal Research Center* design, project, acquisition management and implementation resulted in a AI lab with 10 smart robotic equipments, industrial 3D printers, a quantum processor unit, 3D Scanner and AI training infrastructure 1 x server 2TB RAM, 160 CPU cores, 14TB storage, 2xGPU A100, and 7x small scale training machines 64GB RAM, 4TB storage, 4090 GPU, Budget 400,000 EUR;(2022-2024)
- 3. Coordinator PNRR Funding Faculty of Mathematics and Computer Science 2 x laboratory upgrading for AI, Computer Networks labs and Mobile Devices and Programming Labs design , project, acquisition management and implementation resulted in a 2 new improved labs: network simulators and equipments (switches, routers) + 1x server 2TB RAM, 160 CPU cores, 14TB storage, 4xGPU A100 <u>Budget</u> 275,000 EUR. (2022-2024)
- 4. Program Coordinator Faculty of Mathematics and Computer Science HPC, network and infrastructure management over Vmware Vsphere 4 nodes, 5 TB cumulated RAM, 512 cores, 60 TB storage; (2015-to date)
- 5. Coordinator Project ACHIEVE Advanced Cloud and High-performance computing Education for a Valiant Europe creation and coordination of a joint master program with 9 European Universities starting with 2024. <u>Budget:</u>249845 EUR. (2024-to date)
- 6. Coordinator of international faculty relations and student mobilities and ERASMUS+ with University of Orleans France, University ESIEA Paris France and University Group DaVinci Paris area, France (2014-to date)

Participation in programs financed from national research funds

- Member- Collaborative Decision Support Systems in Academic Environments Case Study UBB (>200 000 EUR)
- 2. Member Robust data processing methods and models with applications in the natural sciences CNCSIS (PNCDI II IDEI program) approx. 234266 EUR.

Coordination of programs financed from international sources

- 1. Coordinator-2000-2001 *Digital 3D Mapping (TopStereo)* project financed by the Institut Geographique Nationale (France) budget approx. 352000 EUR. Results the TopStereo product software for creating digital maps in stereoscopy by analyzing satellite images;
- 2. Coordinator *Methods (Techniques) for Efficiently Searching in Spatial Data* budget 22000 EUR (2010-2011).

- 3. Coordinator Development of high precision measurement tools in optical medicine (2006-2009) budget 251000 EUR, financing ANEVAR and private financing bodies in the field of medical optics France. Result the SMART2 software product.
- 4. Coordinator Development of high precision sterescopic measurement tools in optical medicine(2009-2011) buget 242000 EUR, ANEVAR funding and private funding bodies in the field of medical optics France. The result is the PDMeasurement product and 2 BDI indexed articles and 3 patents filed by the financier:
 - a. METHOD AND SYSTEM FOR THE ON-LINE SELECTION OF A VIRTUAL EYEGLASS FRAME (app no 20100283844)
 - b. METHOD AND DEVICE FOR MEASURING THE CURVE OF A SPECTACLE FRAME (app No 20100231710)
 - c. DEVICE FOR MEASURING THE ANGLE BETWEEN FAR SIGHT AND NEAR SIGHT ON A PATIENT WEARING SPECTACLES (app No 20100149486)
- 5. Coordinator Development of high precision, fixed and mobile sterescopic high resolution measurement tools in optical medicine(2012-2013)- buget 260900 EUR. Private financing bodies in the field of medical optics France. Results: Mobile PDMeasurement software package, 1 ISI article, and 1 BDI article.
- 6. Project director (5 members): *Intelligent facial and eye features extraction and analysis with applications in Medical Optics* (2014-2017) <u>budget</u> 800,000 EUR,. Funding by a private body in the field of medical optics in France. Results: 2 red zone articles, 3 category B conference articles and 2 category C conference articles.
- 7. Coordinator SmartFace- Intelligent 2D and 3D cranio-facial feature extraction and analysis methods (2018-2020), research grant under Ministere de Finances (France), partener ACEP France, coordonator TVARITA SRL (Adrian DARABANT)(budget 1,000,000 EUR).
- 8. Coordinator SmartFace2- Intelligent 2D and 3D cranio-facial feature extraction, analysis and 3D reconstruction methods (2021-2024), research contract supervised by Ministere de Finances (France) and Ministère de l'Enseignement Supérieur et de la Recherche France through the program Research Tax Credit program, partener ACEP France, coordonator TVARITA SRL(Adrian DARABANT) (budget 1,900,000 EUR)

Research projects with national funding

- 1. Director *VinEye: multi-scale early-stage vine disease detection with autonomous robots* UEFISCDI, PN-III-P2-2.1-PED2021-3120, (budget ~120,000 EUR)
- 2. Project director (3 members): Research on the modeling and construction of a distributed information system with mobile points in wireless environments with intermittent communication (2006-2007) (budget-170000 RON)
- 3. Member: COLLABORATIVE DECISION ASSISTANCE SYSTEMS IN ACADEMIC ENVIRONMENTS CASE STUDY UBB, UBB Internal Excellence Consortium Grant, 2005-2008, budget 150000 RON..
- 4. Member: *Robust data processing methods and models with applications in natural sciences,* PNCDI II/IDEI grant code 550, <u>budget</u> 187902 RON..
- 5. Member: *Improving scientific evaluation through analysis of scientific networks*, CNDI UEFISCDI, PN-II-PT-PCCA-2011-3.2-0895, budget 2988000 RON..

- Member: Intelligent space of heterogeneous and context-sensitive agents SmartHouse AT CNCSIS 2007-2008 theme A5 no. 24 / 2007, director of CRET Octavian, financing 50,000 RON.
- 7. Member: *Multi-agent hardware system*, AT CNCSIS, 2006, topic AT 178, director CRET Octavian, budget 15000 RON.

Scientific conferences:

- 1. IEEE Transaction on Magnetics 2009
- 2. IEEE International Conference on Computational Cybernetics, 2004
- 3. International Conference on COMMUNICATIONS and COMPUTERS 2006
- 4. International Conference on Databases And Applications DBA, 2005
- 5. International Conference on Theory and Applications of Mathematics and Informatics ICTAMI 2004
- 6. IEEE International Conference on Intelligent Engineering Systems, 2004
- 7. International Conference of Computers, Communications and Control, CCC, 2006
- 8. Intternational Conf. Parallel and Distrib. Comput. Systems (PDCS), 2004
- 9. International Conference on Applied Mathematics ICAM4. 2004
- 10. European Symposium on Biomedical Engineering, 2006
- 11. IEEE International Conference on Intelligent Engineering Systems, 2004
- 12. Int. Conf. on Computers and Communications, 2006
- 13. Symposium "Colocviul Academic Clujean de Informatică, 2005
- 14. International Conference on Control Systems and Computer Science, 2005
- 15. International Conference on Control Systems and Computer Science, 2003
- 16. IEEE International Conference on Intelligent Computer Communication and Processing (ICCP), 2015
- 17. International Conference on Computer Vision Theory and Applications VISAPP, 2017
- 18. International Conference on Database and Expert Systems Applications DEXA 2017
- 19. International Conference on Image Analysis and Processing ICIAP, 2017
- 20. IEEE International Conference on Intelligent Computer Communication and Processing, ICCP, 2017
- 21. International Conference on Software, Telecommunications and Computer Networks SOFTCOM, 2017
- 22. International Conference on Computer Vision Theory and Applications, VISAPP 2018,
- 23. International Conference on Software, Telecommunications and Computer Networks SOFTCOM, 2018
- 24. International Conference on Advanced Concepts for Intelligent Vision Systems. ACIVS 2018
- 25. International Conference on Computer Vision Theory and Applications, VISAPP 2019
- 26. International Conference on Software, Telecommunications and Computer Networks SOFTCOM. 2019
- 27. International Conference on Software, Telecommunications and Computer Networks SOFTCOM. 2020
- 28. International Joint Conference on Artificial Intelligence, IJCAI 2021
- 29. International Conference on Learning Representation Workshop- ICLR 2023

Date:	Signature:
04/03/2024	

Publications

- Darabant Sergiu Adrian, DARABANT Laura, Clustering methods in data fragmentation , Science_Citation_Expanded, INFORMATION AND SOFTWARE TECHNOLOGY, 14, No 1, 2011, P.81 - 97
- Darabant, L. and Plesa, M. and Micu, D.D. and Stet, D. and Ciupa, R. and Darabant, A,Energy Efficient Coils for Magnetic Stimulation of Peripheral Nerves, Science_Citation_Expanded, IEEE TRANSACTIONS ON MAGNETICS, 45, 2009, P.35 - 38
- 3. DARABANT Laura, Cretu, M., Darabant Sergiu Adrian, Magnetic Stimulation of the Spinal Cord: Experimental Results and Simulations, Science_Citation_Expanded, IEEE TRANSACTIONS ON MAGNETICS, 49, 2013, P.1845 1848
- BORZA Diana Laura, Darabant Sergiu Adrian, DaNESCU Radu, Eyeglasses Lens Contour Extraction from Facial Images Using an Efficient Shape Description, Science Citation Expanded, SENSORS, 13, 2013, P.13638 - 13658
- CRET Octavian, Darabant Sergiu Adrian, Zsolt Mathe, CIOBANU Paul, MARGINEAN Sonia, A Hardware Algorithm for The Exact Subsequence Matching Problem in DNA Strings, Science_Citation_Expanded, INFORMATION AND SOFTWARE TECHNOLOGY, 12, 1, 2009, P.35 - 38
- BOLOGA Bogdana, Darabant Sergiu Adrian, Computer Vision Aided Measurement of Morphological Features in Medical Optics, MathSciNet; Zentralblatt fur Mathematik; CiteSeer; EBSCO, STUDIA UNIVERSITATIS BABEŞ-BOLYAI INFORMATICA, 2010, P.110-120
- MEZEI Sergiu, Darabant Sergiu Adrian, A Computer Vision Approach to Object Tracking and Counting, MathSciNet; Zentralblatt fur Mathematik; CiteSeer; EBSCO, STUDIA UNIVERSITATIS BABEŞ-BOLYAI INFORMATICA, 2010, P.121-130
- 8. CRET Octavian, Zsolt Mathe, Grama Cristina, Vacariu Lucia, Roman Flaviu, Darabant Sergiu Adrian, Solving the Maximum Subsequence Problem with a Hardware Agents-based System, ISI, IEE-INSPEC, Transactions on Circuits and Systems, Issue 9, Volume 5, , 2006, P.1470-1478
- 9. Darabant Sergiu Adrian, Campan Alina, Navroschi Andreea, Optimal Class Fragmentation Ordering in Object Oriented Databases, Mathematical Reviews, Studia Universitatis "Babes-Bolyai", Informatica, XLIX(1), 2004, P.45-54
- Darabant Sergiu Adrian, Clustering Algorithms in OODB Fragmentation A comparative evaluation, MathSciNet, ZBL, Studia Universitatis Babes-Bolyai, Series Informatica, Special Issue 2009 (Knowledge Engineering Principles and Techniques 2009), 2009, P.315-319
- 11. Darabant Sergiu Adrian, Andreica Anca-Mirela, Hierarchical Clustering in Large Object Datasets A Study on Complexity, Quality and Scalability, ZentralBlaat, Studia Universitatis Babes-Bolyai, Series Informatica, 2009, P.37-46
- 12. Bufnea Darius-Vasile, Campan Alina, Darabant Sergiu Adrian, Fine-Grained Macroflow Granularity in Congestion Control Management, BDI, Studia Universitatis Babes-Bolyai, Informatica, Vol. L(1), 2005, P.79-88

- Varga Viorica, Darabant Sergiu Adrian, Tambulea Leon, Parv Bazil, Storing Location-Based Services' Data in Key-Value Store, Zentralblatt, STUDIA UNIVERSITATIS BABES-BOLYAI INFORMATICA, 2011, P.51-62
- Darabant Sergiu Adrian, Todoran Horea Silviu, Efficient Data Synchronization for Mobile Wireless Medical Users, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, Categ CNCSIS B+, LII, No1, 2007, P.67 - 77
- 15. Darabant Sergiu Adrian, A new approach in fragmentation of distributed object oriented databases using clustering techniques, STUDIA UNIVERSITATIS BABES-BOLYAI. INFORMATICA, Categ CNCSIS B+, Vol L, Number 2, 2005, P.91 106
- 16. Darabant Sergiu Adrian, Campan Alina, O. Cret, Using Fuzzy Clustering For Advanced OODB Horizontal Fragmentation With Fine-Grained Replication, IASTED International Conference on Databases And Applications DBA 2005, part of the 23rd Multi-Conference on Applied Informatics, Austria, IASTED/ACTA Press 2005, Editor: M. H. Hamza, 0-88986-462-4, DBLP, 2005, P. 116-121
- 17. Darabant Sergiu Adrian, Campan Alina, Moldovan Grigor, Grebla Horea-Adrian, AI Clustering Techniques: A New Approach in Horizontal Fragmentation of Classes with Complex Attributes and Methods in Object Oriented Databases, International Conference on Theory and Applications of Mathematics and Informatics ICTAMI 2004, Thessaloniki, Grecia, -, 2004, P. 109-128
- 18. A.S. Darabant, M.C. Ispas, D. Borza, OptiMeasure: A Mobile Improvement Alternative to Classic Optical Measurement, STUDIA UNIV. BABES,—BOLYAI, INFORMATICA, Volume LVIII, Number 4, 201, pp102-120
- Tambulea Leon, Darabant Sergiu Adrian, Navroschi Andreea, REDUNDANT SPATIAL INDEX FOR SOLVING RANGE QUERIES, Mathematica Reviews, STUDIA UNIV. BABES, Volume LVII, Number 4, 2012, P.75-84
- 20. Campan Alina, Darabant Sergiu Adrian, Czibula Gabriela, Clustering Techniques for Adaptive Horizontal Fragmentation in Object Oriented Databases, ICTAMI'05, Acta Universitatis Apulensis,0, Mathematical Reviews, 2005, P. 263-274
- 21. L Tambulea, Darabant Sergiu Adrian, VARGA Viorica, Data Transfer Optimization in Distributed Database Query Processing, in Studia Universitatis Babes-Bolyai Series Informatica, P 71-82, 2014, MathSciNet, ZentralBlaat
- 22. Horea Grebla, Grigor Moldovan, Sergiu Adrian Darabant, Alina Câmpan, DATA ALLOCATION IN DISTRIBUTED DATABASE SYSTEMS PERFORMED BY MOBILE INTELLIGENT AGENTS, Proceedings of the International Conference on Theory and Applications of Mathematics and Informatics - ICTAMI 2004, Thessaloniki, Greece, pp164-173
- 23. Adrian DARABANT, Alina CAMPAN, Hierarchical clustering in object oriented data models with complex class relationships. În: Proceedings of the 8th IEEE International Conference on Intelligent Engineering Systems, INES2004., 2004, p. 307-312
- 24. Darabant, A.S., Campan, A., Hierarchical AI Clustering for Horizontal Object Fragmentation, in Proceedings of the Int. Conf. on Computers and Communications, Oradea, Romania, pp 105-109, 2004.
- 25. Andreea SABAU, Adrian DARABANT, Alina CAMPAN, The SKDBKD-tree: an optimization of SKD-tree. În: Proceedings of the Fourth International Conference on Applied Mathematic. [s. l.]: [s. n.], 2004, p. 23-26.

- Adrian Sergiu Darabant, Alina Campan, Semi-supervised learning techniques: k-means clustering in OODB Fragmentation, IEEE International Conference on Computational Cybernetics, pag 333-338, 2004, Viena.
- 27. O Cret, S Mathe, B Szente, Z Mathe, C Vancea, F Rusu, A Darabant, Fpga-based scalable implementation of the general smith-waterman algorithm, Iasted Int'l Conf. Parallel and Distrib. Comput. Systems (PDCS), 2004, p. 410-415
- 28. Diana Laura Borza, Radu Gabriel Danescu, Adrian Sergiu Darabant, Eyeglasses contour extraction using genetic algorithm, 2015 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP), 2015, Cluj Napoca, Romania, p 327-333.
- 29. Mihaela Cretu, Adrian Darabant, Radu V Ciupa, Magnetic Stimulation of the Spinal Cord: Evaluating the Characteristics of an Appropriate Stimulator, Artificial Organs, Vol 39, Issue 10, p 841-848, 2015.
- 30. Diana Laura Borza, Adrian Sergiu Darabant, Radu Gabriel Danescu, Real-Time Detection and Measurement of Eye Features from Color Image, Sensors MDPI, Vol 16,pp: 24, 2016.
- 31. R Danescu, Diana Borza, Adrian Sergiu DARABANT, Fast Eye Tracking and Feature Measurement Using a Multi-Stage Particle Filter, in International Conference on Computer Vision Theory and Applications, pp:258-265, doi: 10.5220/0006130202580265, ISBN: 978-989-758-226-4, VISAPP 2017
- 32. Adrian Sergiu Darabant, Leon Tambulea, Viorica Varga, Access Patterns Optimization in Distributed Databases Using Data Reallocation, 28th International Conference on Database and Expert Systems Applications DEXA 2017, Part I, LNCS 10438, pp. 178–186, DOI: 10.1007/978-3-319-64468-4 14, ISBN: 978-3-319-64467-7, 2017
- 33. "Diana Borza, Sergiu Cosmin Nistor, Adrian Sergiu Darabant,
 Towards automatic skin tone classification in facial images, 19th International
 Conference on Image Analysis and Processing, Part II, LNCS 10485, pp:299-309,
 https://doi.org/10.1007/978-3-319-68548-9 28, ICIAP 2017"
- 34. Sergiu Cosmin Nistor, Alexandra-Cristina Marina, Adrian Sergiu Darabant, Diana Borza, Automatic gender recognition for "in the wild" facial images using convolutional neural networks, 13th IEEE International Conference on Intelligent Computer Communication and Processing, ICCP2017, DOI:10.1109/ICCP.2017.8117018, Cluj Napoca, Romania
- 35. "Adrian Sergiu Darabant, Viorica Varga and Leon Tambulea, A Linear Approach to Distributed Database Optimization Using Data Reallocation, 25th International Conference on Software, Telecommunications and Computer Networks (SOFTCOM2017), DOI: 10.23919/SOFTCOM.2017.8115503, ISBN: 978-953-290-078-1, Split, Croatia, pag 20-28"
- 36. Diana Borza, Adrian Darabant and Radu Danescu, AUTOMATIC SKIN TONE EXTRACTION FOR VISAGISM APPLICATIONS, 13th International Conference on Computer Vision Theory and Applications, VISAPP 2018, ISBN: 978-989-758-290-5, pp:466-473, DOI: 10.5220/0006711104660473, 2018
- 37. Diana Borza, Radu Danescu, Razvan Itu, Adrian Sergiu Darabant, High-speed video system for micro-expression detection and recognition, Sensors MDPI, pp:19, 17(12), 2913, doi:10.3390/s17122913, 2017

- Sergiu Cosmin Nistor, Adrian Sergiu Darabant, Diana Borza, Micro-Expressions
 Detection Based on Micro-Motions Dense Optical Flows, 26th International Conference
 on Software, Telecommunications and Computer Networks (SOFTCOM2018),
 DOI:10.23919/SOFTCOM.2018.8555833 , Split, Croatia
- 39. Diana Borza, Tudor Ileni, and Adrian Darabant, A deep learning approach to hair segmentation and color extraction from facial images, Advanced Concepts for Intelligent Vision Systems. ACIVS 2018, DOI: 10.1007/978-3-030-01449-0_37, ISBN:978-3-030-01449-0, pp 438-449.
- 40. Tudor Ileni, Diana Borza, Adrian Sergiu DARABANT, Fast In-the-Wild Hair Segmentation and Color Classification, 14th International Conference on Computer Vision Theory and Applications, VISAPP 2019, ISSN: 2184-4321, ISBN: 978-989-758-354-4, DOI: 10.5220/0007250500590066
- 41. Alexandru I. Marinescu, Tudor Alexandru Ileni, Adrian Sergiu Darabant, A Versatile 3D Face Reconstruction from Multiple Images for Face Shape Classification, 27th International Conference on Software, Telecommunications and Computer Networks (SOFTCOM2019), pp. 1-6, DOI: 10.23919/SOFTCOM.2019.8903745, ISSN: 1847-358X
- 42. A. I. Marinescu, A. S. Darabant and T. A. Ileni, "A Fast and Robust, Forehead-Augmented 3D Face Reconstruction from Multiple Images using Geometrical Methods," 2020 International Conference on Software, Telecommunications and Computer Networks (SoftCOM), Split, Croatia, 2020, pp. 1-6, doi: https://doi.org/10.23919/SoftCOM50211.2020.9238250.
- 43. Nistor, S.C.; Ileni, T.A.; Dărăbant, A.S. Automatic Development of Deep Learning Architectures for Image Segmentation. Sustainability 2020, 12, 9707, ISSN: 2071-1050, https://doi.org/10.3390/su12229707
- 44. Darabant AS, Borza D, Danescu R. Recognizing Human Races through Machine Learning—A Multi-Network, Multi-Features Study. Mathematics. 2021; 9(2):195, https://doi.org/10.3390/math9020195
- 45. Alexandru Marinescu, Adrian-Sergiu Dărăbant, Tudor-Alexandru Ileni, Optimal Stereo Camera Calibration via Genetic Algorithms, International Joint Conference on Artificial Intelligence, IJCAI 2021, Artificial Intelligence for Autonomous Driving AI4AD Workshop, 2021, Montreal
- 46. Ileni, T.A., Darabant, A.S., Borza, D.L. et al. DynK-hydra: improved dynamic architecture ensembling for efficient inference. Complex Intelligent Systems. ISSN: 2198-6053, 2022, https://doi.org/10.1007/s40747-022-00897-1
- 47. Borza, Diana-Laura, Adrian Sergiu Darabant, Tudor Alexandru Ileni, and Alexandru-Ion Marinescu. 2022. "Effective Online Knowledge Distillation via Attention-Based Model Ensembling" Mathematics 10, no. 22: 4285. https://doi.org/10.3390/math10224285
- 48. Diana Laura Borza, Tudor Alexandru Ileni, Alexandru Ion Marinescu, Sergiu Adrian Darabant, Teacher or supervisor? Effective online knowledge distillation via guided collaborative learning, Computer Vision and Image Understanding, ISSN 1077-3142, https://doi.org/10.1016/j.cviu.2023.103632, Volume 228, February 2023, 103632.
- 49. Andrei Florin Pamint, , and Sergiu Adrian Darabant. "Using vision transformer-based GANs against Vision Transformers". International Conference on Learning Representations (ICLR), Tiny Papers (2023).

50. Székely, D. E., Dobra, D., Dobre, A. E., Domşa, V., Drăghici, B. G., Ileni, T. A., Darabant & Tamás, L. (2024). Bacterial-fungicidal vine disease detection with proximal aerial images. Heliyon, 10(14).