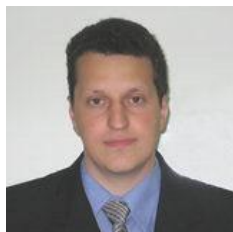


Curriculum vitae



Informații personale

Nume	Florin Leon
E-mail	florin.leon@academic.tuiasi.ro
Site web	http://florinleon.byethost24.com
Naționalitate	Română
Data nașterii	10 martie 1977
Stare civilă	Căsătorit, 2 copii

Experiența profesională

Perioada	Februarie 2015 - prezent
Funcția sau postul ocupat	Profesor
Discipline predate	Inteligență artificială, Învățare automată, Ingineria programării, Sisteme multi-agent
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Perioada	Octombrie 2012 - ianuarie 2015
Funcția sau postul ocupat	Conferențiar
Discipline predate	Inteligență artificială, Ingineria programării, Managementul proiectelor software, Modelarea și analiza sistemelor multi-agent
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Perioada	Martie 2006 – septembrie 2012
Funcția sau postul ocupat	Șef de lucrări
Discipline predate	Inteligență artificială, Ingineria programării, Managementul proiectelor software, Modelarea și analiza sistemelor multi-agent, Aplicații ale inteligenței artificiale, Rețele neuronale, Tehnici de descoperire automată a cunoștințelor pe Internet
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Perioada	Octombrie 2005 – februarie 2006
Funcția sau postul ocupat	Asistent
Discipline predate	Inteligență artificială, Ingineria programării, Rețele neuronale
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Perioada	Octombrie 2003 – februarie 2005
Funcția sau postul ocupat	Asistent asociat
Discipline predate	Inteligență artificială, Ingineria programării
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Perioada	Octombrie 2001 – iunie 2003
Funcția sau postul ocupat	Preparator asociat
Discipline predate	Inteligență artificială, Ingineria programării
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași

Educație și formare

Perioada	Octombrie 2001 – mai 2005
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Calificarea / diploma obținută	Diplomă de doctor, titlul tezei: „Noi clase de agenți inteligenți cu capacități cognitive”, conducător științific: prof. dr. ing. Dan Gâlea
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Perioada	Octombrie 1996 – iunie 2001
Calificarea / diploma obținută	Diplomă de inginer
Locul, instituția	Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași
Specializări și calificări	
Perioada	Ianuarie 2015
Calificarea	Abilitare
Informații	Titlul tezei: <i>Advanced Methods in Artificial Intelligence: Agents, Optimization and Machine Learning</i>
Perioada	Noiembrie 2005 – octombrie 2007
Funcția	Cercetător științific
Informații	Proiectul CEEEX nr. 3202/2005 tip PD, în sprijinul programelor postdoctorale, „Managementul vulnerabilității seismice a fondului urban construit utilizând Infrastructura de Informații Spațiale (IIS)”, director: prof. dr. ing. Gabriela M. Atanasiu, Facultatea de Construcții și Instalații, Universitatea Tehnică „Gheorghe Asachi” din Iași
Competențe lingvistice	
Limba maternă	Română
Limbi străine cunoscute	Engleză (avansat), franceză (mediu), norvegiană (începător)
Mobilități	
Lector invitat	Mai 2007, aprilie 2008, mai 2010, aprilie 2012, aprilie 2013, mai 2014: “Artificial Intelligence Methods”, Universitatea de Științe Aplicate, Konstanz, Germania
Stagii de cercetare-documentare	Mai 2006, mai 2011, Universitatea de Științe Aplicate, Konstanz, Germania
Plenary/Keynote Speaker	
<i>AI Applications in Healthcare and Possible Future Approaches to Enhance Decision Transparency</i> , UK – Romania Conference “Exploring our AI Potential”, 28 February 2024, Bucharest, Romania	
<i>Artificial Intelligence Applications: Machine Learning and Multi-Agent Systems</i> , Sibiu Innovation Days (SID 2023), 5 October 2023, Sibiu, Romania	
<i>Artificial Intelligence Applications: Machine Learning, Optimization Algorithms, Multi-Agent Systems and Autonomous Driving</i> , Trust-AI Workshop (Human-Centered Approaches for Trustworthy Artificial Intelligence), Smart Diaspora 2023, 11 April 2023, Timisoara, Romania	
<i>Advanced Artificial Intelligence Methods. Formulating Problems for Quantum Optimization</i> , Doctoral School Conference of the “Gheorghe Asachi” Technical University of Iasi, 22 May 2019, Iasi, Romania	
<i>Deep Reinforcement Learning</i> , “Artificial Intelligence towards Autonomous Driving” event organized by the Continental company, 12 June 2018, Iasi, Romania	
Management	
Director al centrului de cercetare „Echipamente și programe inteligente”, AC, TUIASI, 2017-prezent	
Coordonator al programului de licență „Tehnologia informației”, AC, TUIASI, 2012- 2020	
Coordonator al programului de masterat „Distributed Systems and Web Technologies study programme” în limba engleză, AC, TUIASI, 2012-prezent	
Membru în Consiliul Școlii Doctorale, TUIASI, 2020-prezent	
Membru în Consiliul Școlii Doctorale, AC, TUIASI, 2016-prezent	
Director adjunct al Departamentului de Calculatoare, AC, TUIASI, 2012-2015	

Informații suplimentare

Domenii de interes	Inteligență artificială, agenți inteligenți, proiectare software
Membru în comitete de organizare ale conferințelor	Special Session on "Intelligent Modeling and Simulation Approaches for Games and Real World Systems", within the 12th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2020, Da Nang, Vietnam Special Session on "Intelligent Modeling and Simulation Approaches for Games and Real World Systems", within the 12th Asian Conference on Intelligent Information and Database Systems, ACIIDS 2020, Phuket, Thailand Special Session on "Intelligent Modeling and Simulation Approaches for Real World Systems", IMSARWS 2019, within the International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2019, Hendaye, France Joint International Conference on System Theory, Control and Computing, ICSTCC 2011, ICSTCC 2014, ICSTCC 2017, Sinaia, Romania PC chair: Balkan Conference in Informatics, BCI 2015, Craiova, Romania 9th International Symposium on Automatic Control and Computer Science, SACCS 2007, Iasi, Romania
Session chairman	Joint International Conference on System Theory, Control and Computing, ICSTCC 2024, Sinaia, Romania Joint International Conference on System Theory, Control and Computing, ICSTCC 2020, Online 11th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2019, Hendaye, France Joint International Conference on System Theory, Control and Computing, ICSTCC 2019, Sinaia, Romania 9th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2017, Nicosia, Cyprus 14th International Conference on Artificial Intelligence Applications and Innovations, AIAI 2018, Rhodes, Greece First Conference of Doctoral Schools, Iasi, Romania, May 2017 7th International Conference on Exploring Service Science, IESS 2016, Bucharest, Romania International Symposium on INnovations in Intelligent SysTems and Applications, INISTA 2016, Sinaia, Romania 8th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2016, Halkidiki, Greece 7th Balkan Conference on Informatics, BCI 2015, Craiova, Romania 5th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2013, Craiova, Romania Third International Conference on Computational Collective Intelligence, ICCCI 2011, Gdynia, Poland Third International Conference on Advanced Cognitive Technologies and Applications, COGNITIVE 2011, Rome, Italy Joint International Conference on System Theory, Control and Computing, ICSTCC 2011, Sinaia, Romania The International Conference on Experimental Mechanics, ICEM 2006, Jeju, South Korea
Membru invitat în comitete editoriale	<i>Frontiers in Optical Communications and Networks</i>, Guest Associate Editor (2022-present) <i>Frontiers in Artificial Intelligence</i>, specialty section on Organoid Intelligence, Review Editor (2023-present) <i>Mathematics</i>, Mathematics and Computer Science section (2021-present) <i>Bulletin of the Polytechnic Institute of Iasi</i>, Electrical Engineering. Power Engineering. Electronics section (2023-present) <i>Mathematics</i>, Special issues: Advances in Artificial Intelligence: Models, Optimization, and Machine Learning (2021-2022), Advances in Artificial Intelligence: Models, Optimization, and Machine Learning 2 (2022-2024), Advances in Artificial Intelligence: Models, Optimization, and Machine Learning 3 (2024-present)

	<i>Applied Sciences</i>, Special issue: Research Progress on the Application of Multi-Agent Systems (2023-2024) <i>Computer Science and Information Systems</i> (ComSIS Journal): Special section "Papers selected from the 8th Balkan Conference in Informatics (BCI 2017)", guest editor, vol. 15, issue 3, 2018 <i>Journal of Intelligent & Fuzzy Systems</i>: Collective Intelligent Information and Database Systems (special issue), 2016 <i>Computing and Informatics</i>: Intelligent Distributed Computing (special issue), 2013
Alte activități	Expert evaluator pentru competiția de granturi interne a Universității Tehnice din Cluj-Napoca (2017) Expert evaluator pentru competiția de granturi interne a Universității Politehnica din Timișoara (2017) Membru în juriul concursului studențesc organizat de Facultatea de Automatică și Calculatoare, Universitatea Tehnică „Gheorghe Asachi” din Iași (2009, 2010, 2013) Coordonator al studenților Facultății de Automatică și Calculatoare participanți la concursul de programare ACM (2010)
Membru în asociații profesionale	IEEE Systems, Man and Cybernetics Society: Computational Collective Intelligence Technical Community The Romanian Association for Artificial Intelligence Bulgarian Association for Pattern Recognition (a member society of the International Association for Pattern Recognition) International Association for Life-Cycle Civil Engineering European Association for Earthquake Engineering
Brevete	<i>Lucrări înscrise în Registrul Național de Opere administrat de Oficiul Român pentru Drepturi de Autor (înregistrate personal):</i> 1. Silvia Curteanu, <u>Florin Leon</u>, Marius Gavrilescu, Nicoleta Anton, Catalin Lisa, Filip Tarcoveanu, <i>Neural Networks Designed in Pytorch for the Prediction of Glaucoma Evolution</i>, nr. 4867 / 29.11.2023 2. Silvia Curteanu, <u>Florin Leon</u>, Marius Gavrilescu, <i>Software Framework for Solving Regression Problems Using Individual Algorithms and Algorithms Combined in Ensembles</i>, nr. 4813 / 24.11.2023 3. Silvia Curteanu, Marius Gavrilescu, Catalin Lisa, <u>Florin Leon</u>, Costel Anton, Sabina-Adriana Floria, <i>Modeling the Brick Manufacturing Process Using Ensembles of Biologically and Socially Inspired Evolutionary Methods</i>, nr. 4805 / 23.11.2023 4. Silvia Curteanu, <u>Florin Leon</u>, Marius Gavrilescu, Costel Anton, Catalin Lisa, Sabina-Adriana Floria, <i>Using Biologically Inspired Algorithms to Minimize Emissions in the Bricks Obtaining Process</i>, nr. 4670 / 15.11.2023 5. <u>Florin Leon</u>, Silvia Curteanu, <i>Nearest Neighbor Regression Algorithm with Adaptive Distance Metrics Trained by Multiple Point Hill Climbing on Noisy Training Set</i>, nr. 6573 / 15.10.2018 6. Silvia Curteanu, <u>Florin Leon</u>, <i>Large Margin Nearest Neighbor Regression Algorithm (LMNNR)</i>, nr. 4951 / 23.08.2018 7. <u>Florin Leon</u>, Silvia Curteanu, <i>Algoritm adaptiv pentru regresie bazat pe paradigma celor mai apropiați vecini (AKNN)</i>, nr. 6232 / 24.07.2013 8. Silvia Curteanu, <u>Florin Leon</u>, <i>Artificial Intelligence Toolbox. Neural Network Topology</i>, nr. 14226 / 26.10.2010 9. <u>Florin Leon</u>, Silvia Curteanu, <i>Algoritmi genetici. Optimizare scalară multi-obiectiv</i>, nr. 14404 / 5.11.2010 10. <u>Florin Leon</u>, Silvia Curteanu, <i>Stacked Neural Networks</i>, nr. 14506 / 12.11.2010
Alte mențiuni	Membru al International High IQ Society Certificare Brainbench: Problem Solving - Qualitative (Metric)
Proiecte de cercetare	A se vedea Anexa 1
Lista de lucrări	A se vedea Anexa 2

Proiecte de cercetare / Research Projects

Director, responsabil de proiect / Director, scientific leader

Director: DigitAll: Innovation Center for Artificial Intelligence, contract no. GI-TD-DigitAll-03/2022, internal grant of TUIASI, period: 2022-2023

Director TUIASI: Proreta 5, contracts no. 10118 / 16.05.2019, 1721 / 23.01.2020, 12371/21.05.2021, 15290/11.05.2022 with Continental Automotive Romania, period: 2019-2022 (<https://www.proreta.tu-darmstadt.de/proreta/index.en.jsp>)

Director: Behavioural Patterns Library for Intelligent Agents Used in Engineering and Management, PNII, IDEI, code 316/2008, contract no. 671 / 19.01.2009, period: 2009-2011, budget: 402130.38 lei (http://florinleon.byethost24.com/bepalia/index_en.htm)

Scientific leader TUIASI: Road Networks for Earthquake Resilient Societies (ROADERS), ERA-NET CONCERT Japan project, contract no. 3003/2013 in the Partnership Module of UEFISCDI, period: 2013-2015 (<http://florinleon.byethost24.com/mcserm/en/roaders.htm>)

Proiecte internaționale (membru în echipă) / International projects (team member)

DocTalent4EU: Transforming Europe through Doctoral Talent and Skills Recognition, Horizon-Widera-2022, GA no. 10109592, period: 2023-2024, TUIASI coordinator: Alina-Adriana Minea (<https://cordis.europa.eu/project/id/101095292>)

VolEvol: Generation of Meaningful Representations of Volume Data Through Evolutionary Learning, Horizon 2020 Programme, EU.2.1.1, grant no. 951911, period: 2023-2024, TUIASI research group leader: Marius Gavrilescu (<https://www.ai4media.eu/winners2/volevol>)

FiDisD: Fighting Disinformation Using Decentralized Actors Featuring AI and Blockchain Technologies, grant no. 957228, Horizon 2020 Programme, TruBlo call - Trusted and Reliable Content for Future Blockchains, period: 2022-2023, TUIASI research group leader: Cristian-Nicolae Butincu (<https://www.trublo.eu/fidisd>)

REVERT: taRgeted thErapy for adVanced colorEctal canceR paTients, HORIZON 2020 project, code 848098, period: 2021-2023, TUIASI research group leader: Paul-Corneliu Herghelegiu (<https://www.revert-project.eu>)

Member in Romanian management committee: Multi-Paradigm Modelling for Cyber-Physical Systems (MPM4CPS), ICT COST Action IC1404, period 2014-2018 (http://florinleon.byethost24.com/cost_ic1404)

SERIES: Seismic Engineering Research Infrastructures for European Synergies, FP7 project no. 227887/2009, period: 2009-2012, TUIASI research group leader: Gabriela Maria Atanasiu (<https://cordis.europa.eu/project/id/227887>)

EFAST: Design Study of a European Facility for Advanced Seismic Testing, FP7 project no. 212109/2007, period: 2008-2011, TUIASI research group leader: Gabriela Maria Atanasiu (<https://cordis.europa.eu/project/id/212109>)

Assistant coordinator: European University Association (EUA) Quality Culture Project, Round III, Network 3, Implementing Bologna Reforms, DG EC AGR n. 2004-3922/001-001 S02-81AWB, period: 2005-2006, network coordinator: Gabriela Maria Atanasiu

Proiecte naționale (membru în echipă) / Romanian national projects (team member)

From human to virus. Optimization algorithms with applications in chemical engineering (HAVOC) / De la om la virus. Algoritmi de optimizare cu aplicatii in ingineria chimica (HAVOC), contract: PN III PCE nr. 91/2021, period 2021-2023, budget: 1,197,721 RON, director: Silvia Curteanu (http://pce-91-2021.info/index_en.html)

Mentor: NORAN: Increasing the fire resistance of buildings through the use of nanostructures and AI-based analysis of their impact in human evacuation / Cresterea rezilientei la incendiu a constructiilor prin utilizarea nanostructurilor si analiza bazata pe IA a impactului acestora in evacuarea umana, Postdoctoral project, period: 2022-2023, director/postdoctoral fellow: Georgiana Bunea

Biotrickling filtration upgrade in the context of atmospheric protection and climate change (BIO-UP) / Upgradarea filtrarii prin biotrickling in contextul protectiei atmosferei si a schimbarilor climatice (BIO-UP), contract: PN-III-P2-2.1-PED-2019-1165, period: 2020-2022, director: Gabriela Soreanu

Biologically-inspired algorithms developed for modeling and optimizing complex chemical processes (BIA-CHEM) / Algoritmi de inspiratie biologica dezvoltati pentru modelarea si optimizarea unor procese chimice complexe (BIA-CHEM), contract: PN-III-P4-ID-PCE-2016-0322, no. 51/2017, Exploratory reseach project, period 2017-2019, budget: 847,443 RON, director: Silvia Curteanu (http://www.ascchemis.ro/PN_III_51)

Mentor: Framework for testing biologically-inspired algorithms (BIO-FRAM-TEST) / Framework pentru testarea algoritmilor de inspiratie biologica (BIO-FRAM-TEST), contract: PN-III-P1-1.1-PD-2016-1399, Postdoctoral proiect, period 2017-2019, director/postdoctoral fellow: Elena-Niculina Dragoi

Scientific leader: Software products based on artificial intelligence algorithms with applications in modelling and optimization of chemical systems (AISoftChim) / Produse software bazate pe algoritmi de inteligenta artificiala cu aplicatii in modelarea si optimizarea sistemelor chimice (AISoftChim), contract: PN-II-PT-PCCA-2011-32-0732, no. 23/2012, Collaborative project for applied research, period 2012-2016, budget: 1,580,081 RON, director: Silvia Curteanu

Modelling and automated control using artificial intelligence tools for applications in chemistry and process engineering (INTELCHIM) / Modelare si conducere automata utilizand instrumente ale inteligentei artificiale pentru aplicatii in chimie si inginerie de proces (INTELCHIM), PN II, partnerships in priority areas, PC, contract no. 71006/18.09.2007, period: 2007-2010, budget: 1,650,000 RON, director: Silvia Curteanu

Soft computing hybrid configurations with chemistry applications / Configuratii hibride soft computing cu aplicatii in chimie, PNII, exploratory research project, IDEI, code ID-592, contract no. 59 / 1.10.2007, period: 2007-2010, budget: 900,000 RON, director: Silvia Curteanu

Diagnosis of urban infrastructure vulnerability to natural disasters and integrated risk management. Application for Iasi City (e-KnowRISKSAFE) / Diagnoza vulnerabilitatii infrastructurii urbane la dezastre naturale si k-managementul riscului integrat. Aplicatie pentru Municipiul Iasi (e-KnowRISKSAFE), PN II, partnerships in priority areas, PC, contract no. 31065/2007, period: 2007-2010, budget: 1,860,000 RON, director: Gabriela Maria Atanasiu

Research on seismic risk assessment and developing a conceptual and operational model for estimating losses using information systems (CERSIS) / Cercetari privind evaluarea riscului seismic si elaborarea unui model conceptual si functional pentru estimarea pierderilor utilizand sistemele informationale (CERSIS), PN II, partnerships in priority areas, PC, contract no. 31023/2007, period: 2007-2010, budget: 1,919,600 RON, director: Radu Vacareanu (Technical University of Civil Engineering Bucharest, Romania)

Artificial intelligence techniques applied to the processes of synthesis and complexation of functionalized polysiloxanes / Tehnici ale inteligentei artificiale aplicate proceselor de sinteza si complexare a polisiloxanilor functionalizati, CNCISIS contract no. 63 GR/2006, topic 10, code CNCISIS 225, period: 2006-2007, budget: 110,000 RON, director: Silvia Curteanu

Academic grid for complex applications / GRID Academic pentru aplicatii complexe, contract no. 74 - CEEX II03/31.07.2006, beneficiary MEC - INFOSOC, period: 2006-2008, budget: 1,500,000 RON, director: Mitica Craus

Multifunctional nanostructured silicon materials (NANOSIMAT) / Materiale siliconice nanostructurate multifunctionale (NANOSIMAT), CEEX contract no. 52/2006, MATNANTECH programme, subcontract 1, period: 2006-2008, budget: 1,250,000 RON, director: Maria Cazacu, TUIASI leader: Silvia Curteanu

Distributed dissemination system on a grid architecture, equipped with intelligent agents for automated construction and updating of the documentary fund and knowledge extraction tools / Sistem de informare distribuit pe o arhitectura grid, dotat cu agenti inteligenti pentru constructia si actualizarea automata a fondului documentar si cu instrumente de extragere de cunostinte, research contract CNCISIS code 575, topic 17, period: 2005-2006, budget: 126,000 RON, director: Mitica Craus

Prototype system for dynamic resource management in distributed mobile computing using intelligent agents / Prototip de sistem pentru gestiunea dinamica a resurselor distribuite in mobile computing folosind agenti inteligenti, CNCISIS AT project, topic 67, code 66/25.02.2005, period: 2005-2006, budget: 24,000 RON, director: Mihai Horia Zaharia

Management of Seismic Vulnerability of Built Urban Fund Using Spatial Information Infrastructure / Managementul vulnerabilitatii seismice a fondului urban construit utilizand Infrastructura de Informatii Spatiale (IIS), CEEX project no. 3202/2005, PD type, supporting postdoctoral programmes, UEFISCSU, period: 2005-2007, budget: 520,000 RON, director: Gabriela Maria Atanasiu, function in the project: postdoctoral research fellow

Nanostructured polymeric composite materials used in environmental monitoring (NANOPOL) / Materiale compozite nanostructurate polimerice cu utilizare in monitorizarea mediului (NANOPOL), subcontract: Modelling and optimization with neural networks and genetic algorithms / Modelare si optimizare cu retele neuronale si algoritmi genetici, CEEX contract 10/10.2005, MATNANTECH programme, subcontract 3, period: 2005-2008, budget: 1,000,000 RON, director: Gabriela Telipan, TUIASI leader: Silvia Curteanu

Viscometric behaviour modelling of binary liquid systems using neural networks / Modelarea comportarii viscozimetrice a sistemelor lichide binare cu ajutorul retelelor neuronale, beneficiary MEC, CNCISIS code 65, period: 2004, budget: 50,000,000 ROL, director: Gabriela Lisa

The prototype of an intelligent web GIS system for extracting knowledge from databases using intelligent agents / Prototipul unui sistem GIS web inteligent pentru extragerea cunostintelor din baze de date folosind agenti inteligenti, CNCISIS contract 66, topic 76, period: 2004, budget: 110,000,000 ROL, director: Mihai Horia Zaharia

Integrated software system for monitoring the legal regime of land – a tool for development decision making in agriculture, forestry, fisheries, hydrological and environmental areas / Sistem software integrat pentru monitorizarea regimului juridic al terenurilor - instrument pentru fundamentarea politicilor de dezvoltare in sectoarele agricol, silvic, piscicol, hidrologic si de protectia mediului, RELANSIN programme, priority projects PP6, partner P4 in contract no. 1933 / 15.09.2004, period: 2004, budget: subcontract 80,000,000 ROL, group leader: Mihai Horia Zaharia

Models of extracting knowledge from databases using grid technologies and intelligent agents / Modele de extragere de cunostinte in baze de date folosind tehnologii grid si agenti inteligenti, contract no. 139/07.09.2004, InfoSoc programme, sub-programme C6, category PF, period: 2004-2005, director: Mitica Craus

Using neural networks and genetic algorithms in polymerization reactions engineering. Applications to modelling and optimizing the synthesis of polysiloxanes / Utilizarea retelelor neuronale si a algoritmilor genetici in ingineria reactiilor de polimerizare. Aplicatii la modelarea si optimizarea

sintezei polisiloxanilor, CERES contract no. 4-22/2004, beneficiary: Institute of Atomic Physics, Bucharest, Romania, period: 2004-2006, budget: 672,470,000 ROL, director: Silvia Curteanu

Multiphase polymer materials - biodegradable, biocompatible, bioactive, artificial motile systems - with applications in medicine and environmental protection / Materiale polimere multifazice - biodegradabile, biocompatibile, biologic active, sisteme motile artificiale - cu aplicatii in medicina si pentru asigurarea protectiei mediului, CERES contract no. 3-51/2003, beneficiary: Institute of Atomic Physics, Bucharest, Romania, period: 2003-2005, budget: 450,000,000 ROL, director: Bogdan Simionescu

Multidisciplinary research in the field of information technologies based on genetic algorithms, neural networks and fuzzy systems with applications to engineering and management / Cercetari multidisciplinare in domeniul tehnologiilor informationale bazate pe algoritmi genetici, retele neuronale si sisteme fuzzy cu aplicatii pentru inginerie si management, CERES contract no. 29/12.11.2002, beneficiary: Institute of Atomic Physics, Bucharest, Romania, period: 2002-2004, budget: 1,064,320,000 ROL, director: Octav Brudaru

Contributions to the radical polymerization of styrene by modelling, computer simulation and optimization / Contributii la studiul polimerizarii radicalice a stirenului prin modelare, simulare pe calculator si optimizare, CERES contract no. 47/15.10.2001, beneficiary: Institute of Atomic Physics, Bucharest, Romania, period: 2001-2004, budget: 800,000,000 ROL, director: Victor Bulacovschi

Flea

Lista de lucrări / Publication List

Articole și capitole de carte (selecție) / Papers and Book Chapters (Selection)

2024

Florin Leon (2024). A Review of Findings from Neuroscience and Cognitive Psychology as Possible Inspiration for the Path to Artificial General Intelligence, Preprint, 143 pag., <https://doi.org/10.48550/arXiv.2401.10904>

Florin Leon (2024). A Neuro-Symbolic Classification Algorithm Using Neural Cell Assemblies, Proceedings of the 16th International Conference on Computational Collective Intelligence (ICCCI 2024), Leipzig, Germany, September 2024, Communications in Computer and Information Science, vol. 2166, pp. 247-259, Springer, Cham, Switzerland. https://doi.org/10.1007/978-3-031-70259-4_19

Filip Tarcoveanu, **Florin Leon**, Catalin Lisa, Silvia Curteanu, Andreea Feraru, Kashif Ali, Nicoleta Anton (2024). The Use of Artificial Neural Networks in Studying the Progression of Glaucoma, Scientific Reports, vol. 14, article number 19597, Nature Portfolio, <https://www.nature.com/articles/s41598-024-70748-1>, <https://doi.org/10.1038/s41598-024-70748-1>

Florin Leon, Marius Gavrilescu, Sabina-Adriana Floria, Alina-Adriana Minea (2024). Hierarchical Classification of Transversal Skills in Job Advertisements Based on Sentence Embeddings, Information, vol. 15, no. 3, article number 151, 18 pag., <https://doi.org/10.3390/info15030151>

Christoph Popp, Andreas Serov, Felix Glatzki, Christoph Ziegler, Andreea-Iulia Olaru, Jaime Maldonado, Joachim Clemens, Jurgen Adamy, Maxim Arbitmann, **Florin Leon**, Steven Peters, Kerstin Schill, Sighard Schrabler, Hermann Winner (2024). PRORETA 5 - Building Blocks for Automated Urban Driving Enhancing City Road Safety, at-Automatisierungstechnik, vol. 72, no. 4, pp. 293-307, <https://doi.org/10.1515/auto-2023-0092>

Alexandru Grigoras, **Florin Leon** (2024). Synthetic Time Series Generation for Decision Intelligence, Mathematics, vol. 12, no. 16, article number 2494, 17 pag., <https://doi.org/10.3390/math12162494>

2023

Andreea-Iulia Patachi, **Florin Leon** (2023). Multiagent Multimodal Trajectory Prediction in Urban Traffic Scenarios Using a Neural Network-Based Solution, Mathematics, vol. 11, no. 8, article number 1923, 25 pag., <https://doi.org/10.3390/math11081923>

Codrut-Georgian Artene, Ciprian Oprisa, Cristian Nicolae Butincu, **Florin Leon** (2023). Finding Patient Zero and Tracking Narrative Changes in the Context of Online Disinformation Using Semantic Similarity Analysis, Mathematics, vol. 11, no. 9, article number 2053, 26 pag., <https://doi.org/10.3390/math11092053>

Zofia Wrona, Wojciech Buchwald, Maria Ganzha, Marcin Paprzycki, **Florin Leon**, Noman Noor, Constantin-Valentin Pal (2023). Overview of Software Agent Platforms Available in 2023, Information, vol. 14, no. 6, article number 348, 47 pag., <https://doi.org/10.3390/info14060348>

Sheikh Sharfuddin Mim, Doina Logofatu, **Florin Leon** (2023). Efficient Analysis of Patient Length of Stay in Hospitals Using Classification and Clustering Approaches, Proceedings of the 15th International Conference on Computational Collective Intelligence (ICCCI 2023), Budapest, Hungary, September 2023, Communications in Computer and Information Science, vol. 1864. Springer, Cham, https://doi.org/10.1007/978-3-031-41774-0_53

Marius Gavrilescu, Sabina-Adriana Floria, **Florin Leon**, Silvia Curteanu, Costel Anton (2023). A Hybrid-Evolutionary Optimizer for Modelling the Process of Obtaining Bricks, Proceedings of the 17th International Conference on Machine Intelligence and Soft Computing Technologies (ICMISCT 2023), Stockholm, Sweden, July 2023

Sabina-Adriana Floria, Marius Gavrilescu, **Florin Leon**, Silvia Curteanu, Costel Anton (2023). Neuroevolution Based on Adaptive Ensembles of Biologically Inspired Optimization Algorithms Applied for Modeling a Chemical Engineering Process, Proceedings of the 17th International Conference on Computational Engineering and Applications (ICCEA 2023), Istanbul, Turkey, October 2023

Vlad Batalan, **Florin Leon** (2023). Learning the Dynamic Environment of an Original Game Using Hierarchical Reinforcement Learning Methods, Proceedings of the 27th International Conference on System Theory, Control and Computing (ICSTCC 2023), Timisoara, Romania, October 2023, pp. 422-427, <https://doi.org/10.1109/icstcc59206.2023.10308465>

Marius Gavrilescu, **Florin Leon**, Sabina-Adriana Floria (2023). Representation of Coherent Structures from Volume Data Using Quality-Oriented Features and Genetic Optimization, Proceedings of the 27th International Conference on System Theory, Control and Computing (ICSTCC 2023), Timisoara, Romania, October 2023, pp. 161-166, <https://doi.org/10.1109/icstcc59206.2023.10308486>

Alexandru Grigoras, **Florin Leon** (2023). Transformer-Based Model for Predicting Customers' Next Purchase Day in e-Commerce, Computation, vol. 11, no. 11, article number 210, 12 pag., <https://doi.org/10.3390/computation11110210>

2022

Florin Leon (2022). *ActressMAS, a .NET Multi-Agent Framework Inspired by the Actor Model*. Mathematics, vol. 10, no. 3, article number 382, 33 pag., ISSN 2227-7390, DOI 10.3390/math10030382, IF 2.258 (Q1)

Julia Garbaruk, Doina Logofatu, Costin Badica, **Florin Leon** (2022). *Digital Image Evolution of Artwork Without Human Evaluation Using the Example of the Evolving Mona Lisa Problem*. Vietnam Journal of Computer Science, online ready, ISSN 2196-8888, eISSN 2196-8896, DOI 10.1142/s2196888822500075

Dumitru-Daniel Vecliuc, **Florin Leon**, Costin Badica (2022). *The Effect of Collaborative Behaviors in Emergency Evacuation. Simulation Modelling Practice and Theory*, vol. 118, July 2022, article number 102554, ISSN 1569-190X, DOI 10.1016/j.simpat.2022.102554, IF 3.272

Costel Anton, **Florin Leon**, Marius Gavrilescu, Elena-Niculina Dragoi, Sabina-Adriana Floria, Silvia Curteanu, Catalin Lisa (2022). *Obtaining Bricks Using Silicon-Based Materials: Experiments, Modeling and Optimization with Artificial Intelligence Tools*. Mathematics, vol. 10, no. 11, article number 1891, 21 pag., ISSN 2227-7390, DOI 10.3390/math10111891, IF 2.258 (Q1)

Codrut-Georgian Artene, Dumitru-Daniel Vecliuc, Marius Nicolae Tibeica, **Florin Leon** (2022). *An Experimental Study of Convolutional Neural Networks for Functional and Subject Classification of Web Pages*. Vietnam Journal of Computer Science, online ready, ISSN 2196-8888, eISSN 2196-8896, DOI 10.1142/s2196888822500245

Victor Ianole, Mihai Danciu, Constantin Volovat, Cipriana Stefanescu, Paul-Corneliu Herghelegiu, **Florin Leon**, Adrian Iftene, Ciprian-Gabriel Cusmuluc, Bogdan Toma, Vasile Drug, Delia-Gabriela Ciobanu-Apostol (2022). *Is High Expression of Claudin-7 in Advanced Colorectal Carcinoma Associated with a Poor Survival Rate? A Comparative Statistical and Artificial Intelligence Study*. Cancers, vol. 14, no. 12, article number 2915, 16 pag., ISSN 2072-6694, DOI 10.3390/cancers14122915, IF 6.575 (Q1)

Iuliana Birgauanu, Maricel Danu, Catalin Lisa, **Florin Leon**, Silvia Curteanu, Constanta Ibanescu, Gabriela Lisa (2022). *Viscosity Deviation Modeling for Binary and Ternary Mixtures of Benzyl Alcohol-N-Hexanol-Water*. Materials, vol. 15, no. 16, article number 5699, 16 pag., ISSN 1996-1944, DOI 10.3390/ma15165699, IF 3.748 (Q1)

Florin Leon, Petru Cascaval (2022). *Search Algorithm for Optimal Synthesis of Decoder for RAMs with Error-Correcting Codes*. Proceedings of the 2022 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 2022, pp. 625-632, ISBN 978-1-6654-6746-9 (BDI)

Marius Gavrilescu, **Florin Leon** (2022). *Using Knowledge Transfer for Neural Network Architecture Optimization with Improved Training Efficiency*. Proceedings of the 2022 26th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 2022, pp. 271-276, ISBN 978-1-6654-6746-9 (BDI)

Filip Tarcoveanu, **Florin Leon**, Silvia Curteanu, Dorin Chiselita, Camelia-Margareta Bogdanici, Nicoleta Anton (2022). *Classification Algorithms Used in Predicting Glaucoma Progression*. Healthcare, vol. 10, no. 10, article number 1831, 20 pag., ISSN 2227-9032, DOI 10.3390/healthcare10101831, IF 3.160 (Q2)

Marius Gavrilescu, Sabina-Adriana Floria, **Florin Leon**, Silvia Curteanu (2022). *A Hybrid Competitive Evolutionary Neural Network Optimization Algorithm for a Regression Problem in Chemical Engineering*. Mathematics, vol. 10, no. 19, article number 3581, 31 pag., ISSN 2227-7390, DOI 10.3390/math10193581, IF 2.258 (Q1)

Sabina-Adriana Floria, Marius Gavrilescu, **Florin Leon**, Silvia Curteanu (2022). *Ensembles of Biologically Inspired Optimization Algorithms for Training Multilayer Perceptron Neural Networks*. Applied Sciences, vol. 12, no. 19, article number 9997, 22 pag., ISSN 2076-3417, DOI 10.3390/app12199997, IF 2.838 (Q2)

Simona-Ruxandra Volovat, Iolanda Augustin, Daniela Zob, Diana Boboc, Florin Amurariti, Constantin Volovat, Cipriana Stefanescu, Cati-Raluca Stolniceanu, Manuela Ciocoiu, Eduard-Alexandru Dumitras, Mihai Danciu, Delia-Gabriela Ciobanu-Apostol, Vasile Drug, Sinziana Al-Shurbaji, Lucia-Georgiana Coca, **Florin Leon**, Adrian Iftene, Paul-Corneliu Herghelegiu (2022). *Use of Personalized Biomarkers in Metastatic Colorectal Cancer and the Impact of AI*. Cancers, vol. 14, no. 19, article number 4834, 45 pag., ISSN 2072-6694, DOI 10.3390/cancers14194834, IF 6.575 (Q1)

Petru Cascaval, **Florin Leon** (2022). *Optimization Methods for Redundancy Allocation in Hybrid Structure Large Binary Systems*. Mathematics, vol. 10, no. 19, article number 3698, 31 pag., ISSN 2227-7390, DOI 10.3390/math10193698, IF 2.258 (Q1)

Julia Garbaruk, Doina Logofatu, **Florin Leon** (2022). *Comparative Study by Using a Greedy Approach and Advanced Bio-Inspired Strategies in the Context of the Traveling Thief Problem*. Proceedings of the Artificial Intelligence Applications and Innovations (AIAI 2022), Crete, Greece, 17-20 June 2022, IFIP Advances in Information and Communication Technology, vol. 646, pp. 383-393, Springer, Cham, ISBN 978-3-031-08332-7, eISBN 978-3-031-08333-4, DOI 10.1007/978-3-031-08333-4_31 (BDI)

2021

Florin Leon, Marius Gavrilescu (2021). *A Review of Tracking and Trajectory Prediction Methods for Autonomous Driving*, Mathematics, vol. 9, no. 6, article number 660, 37 pag., DOI: 10.3390/math9060660

Silvia Curteanu, **Florin Leon**, Andra-Maria Mircea-Vicoveanu, Doina Logofatu (2021). *Regression Methods Based on Nearest Neighbors with Adaptive Distance Metrics Applied to a Polymerization Process*, Mathematics, vol. 9, no. 5, article number 547, 20 pag., DOI: 10.3390/math9050547

Sabina-Adriana Floria, **Florin Leon** (2021). *A Novel Information Diffusion Model Based on Psychosocial Factors with Automatic Parameter Learning*, Computer Science and Information Systems, vol. 18, no. 3, pp. 703-728, DOI: 10.2298/csis200415050f

Costel Anton, Silvia Curteanu, Catalin Lisa, **Florin Leon** (2021). *Machine Learning Methods Applied for Modeling the Process of Obtaining Bricks Using Silicon-Based Materials*, Materials, vol. 14, no. 23, article number 7232, 14 pag., DOI: 10.3390/ma14237232

Andra-Maria Mircea-Vicoveanu, Elena Rezus, **Florin Leon**, Silvia Curteanu (2021). *Analyzing Tuberculosis Reactivation in Patients with Rheumatoid Arthritis and Ankylosing Spondylitis Treated with Biological Therapy Using Machine Learning Methods*, Applied Sciences, vol. 11, no. 23, article number 11400, 24 pag., DOI: 10.3390/app112311400

Carmen Zaharia, **Florin Leon**, Silvia Curteanu, Eugenia-Teodora Iacob-Tudose (2021). *Textile Wastewater Treatment in a Spinning Disc Reactor: Improved Performances—Experimental, Modeling and SVM Optimization*, Processes, vol. 9, no. 11, article number 2003, 23 pag., DOI: 10.3390/pr9112003

Codrut-Georgian Artene, Marius-Nicolae Tibeica, Dumitru-Daniel Vecliuc, **Florin Leon** (2021). *Convolutional Neural Networks for Web Documents Classification*, Proceedings of the 13th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2021), Phuket, Thailand, April 2021, Lecture Notes in Computer Science, vol. 12672, pp. 289-302, Springer Nature Switzerland, DOI: 10.1007/978-3-030-73280-6_23

Dumitru-Daniel Vecliuc, Codrut-Georgian Artene, Marius-Nicolae Tibeica, **Florin Leon** (2021). *An Experimental Study of Machine Learning for Phishing Detection*, Proceedings of the 13th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2021), Phuket, Thailand, April 2021, Lecture Notes in Computer Science, vol. 12672, pp. 427-439, Springer Nature Switzerland, DOI: 10.1007/978-3-030-73280-6_34

Florin Leon, Silvia Curteanu (2021). *The Architecture of a Software Framework for Biologically-Inspired Optimization Algorithms*, Proceedings of the 10th International Conference on Intelligent Systems and Applications (INTELLI 2021), Nice, France, July 2021, pp. 10-15

Dumitru-Daniel Vecliuc, **Florin Leon**, Emanuel Achirei, Stefan Muraru, Marius Gavrilescu (2021). *An Experimental Study of Collaborative Behaviors in Emergency Evacuation Scenarios*, Proceedings of the 25th International Conference on System Theory, Control and Computing (ICSTCC 2021), pp. 695-700, Iasi, Romania, October 2021, DOI: 10.1109/icstcc52150.2021.9607170

Codrut-Georgian Artene, Marius-Nicolae Tibeica, **Florin Leon** (2021). *Using BERT for Multi-Label Multi-Language Web Page Classification*, Proceedings of the 17th International Conference on Intelligent Computer Communication and Processing (ICCP 2021), Cluj-Napoca, Romania, October 2021

2020

Florin Leon, Petru Cascaval, Costin Badica (2020). *Optimization Methods for Redundancy Allocation in Large Systems*, Vietnam Journal of Computer Science, vol. 7, no. 3, pp. 281-299, DOI: 10.1142/S2196888820500165

Elena-Niculina Dragoi, Silvia Curteanu, **Florin Leon**, Ghasem Azarian, Kazem Godini, Lucian Eva, Vlad Dafinescu, Mihaela-Dana Turliuc (2020). *Optimization of Chlorophyll A Removal from Wastewaters Using Bio-inspired Algorithms*, Environmental Engineering and Management Journal, vol. 19, issue 2, pp. 311-323

Costin Badica, **Florin Leon**, Amelia Badica (2020). *Freight transportation broker agent based on constraint logic programming*, Evolving Systems, vol. 11, pp. 363-382, Springer Berlin Heidelberg, DOI: 10.1007/s12530-018-9230-3

Constantin-Valentin Pal, **Florin Leon** (2020). *A Modified I2A Agent for Learning in a Stochastic Environment*, Proceedings of the 12th International Conference on Computational Collective Intelligence (ICCCI 2020), Da Nang, Vietnam, December 2020, Lecture Notes in Computer Science, vol. 12496, pp. 388-399, Springer, Cham, Switzerland, DOI: 10.1007/978-3-030-63007-2_30

Constantin-Valentin Pal, **Florin Leon** (2020). *A Brief Survey of Model-Based Reinforcement Learning Techniques*, Proceedings of the 2020 24th International Conference on System Theory, Control and Computing (ICSTCC 2020), Craiova, Romania, October 2020, pp. 92-97, DOI: 10.1109/ICSTCC50638.2020.9259716

Julia Garbaruk, Doina Logofatu, Costin Badica, **Florin Leon** (2020). *Study on Digital Image Evolution of Artwork by Using Bio-Inspired Approaches*, Proceedings of the 12th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2020), Phuket, Thailand, March 2020, Lecture Notes in Computer Science, vol. 12033, pp. 261-270, Springer, Cham, Switzerland, DOI: 10.1007/978-3-030-41964-6_23

Constantin-Valentin Pal, **Florin Leon**, Marcin Paprzycki, Maria Ganzha (2020). *A Review of Platforms for the Development of Agent Systems*, <https://arxiv.org/abs/2007.08961> (preprint), 40 pag.

Florin Leon (2020). *A Solution for the Generalized Water Jugs Problem*, https://www.researchgate.net/publication/344340647_A_Solution_for_the_Generalized_Water_Jugs_Problem (preprint), 7 pag.

2019

Florin Leon, Costin Badica (2019). *Expressing Multiagent Coalition Structure Problems for Optimisation by Quantum Annealing*, Enterprise Information Systems, vol. 13, no. 7-8, pp. 959-978, Taylor & Francis, DOI: 10.1080/17517575.2018.1552993

Sabina-Adriana Floria, **Florin Leon**, Doina Logofatu (2019). *A Model of Information Diffusion in Dynamic Social Networks Based on Evidence Theory*, Journal of Intelligent and Fuzzy Systems, vol. 37, no. 6, pp. 7369-7381, IOS Press, DOI: 10.3233/JIFS-179346

Fitore Muharemi, Doina Logofatu, **Florin Leon** (2019). *Machine learning approaches for anomaly detection of water quality on a real-world data set*, Journal of Information and Telecommunication, vol. 3, no. 3, pp. 294-307, DOI: 10.1080/24751839.2019.1565653

Petru Cascaval, **Florin Leon** (2019). *Active Redundancy Allocation in Complex Systems by Using Different Optimization Methods*, Proceedings of the 11th International Conference on Computational Collective Intelligence (ICCCI 2019), Hendaye, France, September 2018, eds. N. Nguyen, R. Chbeir, E. Exposito, P. Anierte, B. Trawinski, Computational Collective Intelligence, Lecture Notes in Computer Science, vol. 11683, pp. 625-637, Springer, Cham, Switzerland, DOI: 10.1007/978-3-030-28377-3_52

Andreea-Iulia Patachi, **Florin Leon**, Doina Logofatu (2019). *A Deep Network System for Simulated Autonomous Driving Using Behavioral Cloning*, Proceedings of the Engineering Applications of Neural Networks (EANN 2019), Crete, Greece, May 2019, Communications in Computer and Information Science, vol. 1000, pp. 235-245, Springer International Publishing, Cham, DOI: 10.1007/978-3-030-20257-6_20

Sabina-Adriana Floria, **Florin Leon**, Petru Cascaval, Doina Logofatu (2019). *An Evaluation of Various Regression Models for the Prediction of Two-Terminal Network Reliability*, Proceedings of the 28th International Conference on Artificial Neural Networks (ICANN 2019), Munich, Germany, September 2019, eds. I. Tetko, V. Kurkova, P. Karpov, F. Theis, Theoretical Neural Computation, Lecture Notes in Computer Science, vol. 11727, pp. 267-280, Springer, Cham, Switzerland, DOI: 10.1007/978-3-030-30487-4_21

Florin Leon, Petru Cascaval (2019). *01IP and QUBO: Optimization Methods for Redundancy Allocation in Complex Systems*, Proceedings of the 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC 2019), Sinaia, Romania, October 2019, pp. 877-882, DOI: 10.1109/ICSTCC.2019.8885826

Andreea-Iulia Patachi, **Florin Leon** (2019). *A Comparative Performance Study of Reinforcement Learning Algorithms for a Continuous Space Problem*, Proceedings of the 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC 2019), Sinaia, Romania, October 2019, pp. 860-865, DOI: 10.1109/ICSTCC.2019.8885715

Doina Logofatu, **Florin Leon**, Fitore Muharemi (2019). *General Video Game AI Controller - Integrating Three Algorithms to Bring a New Solution*, Proceedings of the 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC 2019), Sinaia, Romania, October 2019, pp. 856-859, DOI: 10.1109/ICSTCC.2019.8885545

George-Cosmin Porusniuc, **Florin Leon**, Radu Timofte, Casian Miron (2019). *Convolutional Neural Networks Architectures for Facial Expression Recognition*, Proceedings of the 7th IEEE International Conference on e-Health and Bioengineering (EHB 2019), Iasi, Romania, November 2019, 6 pages, DOI: 10.1109/EHB47216.2019.8969930

2018

Florin Leon (2018). *Analyzing the Effects of Alternative Decisions in a Multiagent System with Stigmergy-Based Interactions*, chapter in N. T. Nguyen, R. Kowalczyk (eds.), *Transactions on Computational Collective Intelligence XXX, Lecture Notes in Computer Science*, vol. 11120, pp. 1-24, Springer Nature Basel Switzerland, DOI: 10.1007/978-3-319-99810-7_1

Florin Leon, Costin Badica (2018). *Expressing Multiagent Coalition Structure Problems for Optimisation by Quantum Annealing*, *Enterprise Information Systems*, 20 pages, DOI: 10.1080/17517575.2018.1552993

Elvira Popescu, **Florin Leon** (2018). *Predicting Academic Performance Based on Learner Traces in a Social Learning Environment*, *IEEE Access*, vol. 6, pp. 72774-72785, IEEE, DOI 10.1109/ACCESS.2018.2882297

Costin Badica, **Florin Leon**, Amelia Badica (2018). *Freight transportation broker agent based on constraint logic programming*, *Evolving Systems*, 20 pages, Springer Berlin Heidelberg, DOI: 10.1007/s12530-018-9230-3

Amelia Badica, Costin Badica, **Florin Leon** (2018). *Modeling and Optimization of Pickup and Delivery Problem Using Constraint Logic Programming*, *Proceedings of the 11th International Conference on Large Scale Scientific Computations (LSSC 2017)*, Sozopol, Bulgaria, June 2017, eds. I. Lirkov, S. Margenov, *Lecture Notes in Computer Science*, vol. 10665, pp. 324-332, Springer, DOI: 10.1007/978-3-319-73441-5_34

Fitore Muharemi, Doina Logofatu, Christina Andersson, **Florin Leon** (2018). *Approaches to Building a Detection Model for Water Quality: A Case Study*, *Proceedings of the 10th Asian Conference on Intelligent Information and Database Systems (ACIIDS 2018)*, Dong Hoi City, Vietnam, March 2018, *Modern Approaches for Intelligent Information and Database Systems, Studies in Computational Intelligence*, vol. 769, pp. 173-183, Springer International, DOI: 10.1007/978-3-319-76081-0_15

Kristiyan Balabanov, Doina Logofatu, Costin Badica, **Florin Leon** (2018). *A Simulation-Based Analysis of Interdependent Populations in a Dynamic Ecological Environment*, *Proceedings of the 14th International Conference on Artificial Intelligence Applications and Innovations (AIAI 2018)*, Rhodes, Greece, May 2018, eds. L. Iliadis et al., *IFIP Advances in Information and Communication Technology*, vol. 519, pp. 437-448, Springer Cham, DOI: 10.1007/978-3-319-92007-8_37

Silvia Curteanu, **Florin Leon**, Andrei-Stefan Lupu, Sabina-Adriana Floria, Doina Logofatu (2018). *An Evaluation of Regression Algorithms Performance for the Chemical Process of Naphthalene Sublimation*, *Proceedings of the 14th International Conference on Artificial Intelligence Applications and Innovations (AIAI 2018)*, Rhodes, Greece, May 2018, eds. L. Iliadis et al., *IFIP Advances in Information and Communication Technology*, vol. 519, pp. 219-230, Springer Cham Switzerland, DOI: 10.1007/978-3-319-92007-8_19

Georgiana Bunea, **Florin Leon**, Gabriela Maria Atanasiu (2018). *Influence of Seismic Hazard on RC Buildings' Resilience based on ANN*, *Proceedings of the 6th International Symposium on Life-Cycle Civil Engineering (IALCCE 2018)*, Ghent, Belgium, October 2018, eds. R. Caspeele, L. Taerwe, D.M. Frangopol, *Life Cycle Analysis and Assessment in Civil Engineering: Towards an Integrated Vision*, pp. 1099-1106, CRC Press, Taylor and Francis Group

Sabina-Adriana Floria, **Florin Leon**, Doina Logofatu (2018). *A Credibility-Based Analysis of Information Diffusion in Social Networks*, *Proceedings of the 27th International Conference on Artificial Neural Networks (ICANN 2018)*, Rhodes, Greece, October 2018, eds. V. Kurkova, Y. Manolopoulos, B. Hammer, L. Iliadis, I. Maglogiannis, *Artificial Neural Networks and Machine Learning, Lecture Notes in Computer Science*, vol. 11141, Springer Cham Switzerland, DOI: 10.1007/978-3-030-01424-7_80

Fitore Muharemi, Doina Logofatu, **Florin Leon** (2018). *Review on General Techniques and Packages for Data Imputation in R on a Real World Dataset*, *Proceedings of the 10th International Conference on Computational Collective Intelligence (ICCCI 2018)*, Bristol United Kingdom, September 2018, eds. N. Nguyen, E. Pimenidis Z. Khan, B. Trawinski, *Computational Collective Intelligence, Lecture Notes in Computer Science*, vol. 11056, pp. 386-395, Springer Cham Switzerland, DOI: 10.1007/978-3-319-98446-9_36

2017

Florin Leon, Silvia Curteanu (2017). *Large Margin Nearest Neighbour Regression Using Different Optimization Techniques*, *Journal of Intelligent & Fuzzy Systems*, vol. 32, issue 2, pp. 1321-1332, IOS Press, ISSN 1064-1246, DOI: 10.3233/JIFS-169130

Roxana-Elena Ghitescu, Silvia Curteanu, Camelia Mihailescu, Irina Volf, **Florin Leon**, Andrei I. Gilca, Valentin I. Popa (2017). *Support Vector Machine Combined with Genetic Algorithm for Optimization of Microwave-assisted Extraction of Polyphenols From Spruce Wood Bark*, *Cellulose Chemistry And Technology*, vol. 51, issue 3-4, pp. 203-213, ISSN 0576-9787

Amelia Badica, Costin Badica, Catalina Sitnikov, **Florin Leon** (2017). *A Formal Model of Patrolling Game and Its Agent-Based Simulation Using Jason*, *Proceedings of the 25th Euromicro International Conference on Parallel, Distributed and Network-Based Processing, PDP 2017*, St. Petersburg, Russia, March 2017, *2017 25th Euromicro International Conference on Parallel, Distributed and Network-Based Processing, PDP 2017, Book Series: Euromicro Conference on Parallel Distributed and Network-Based Processing*, eds. I. Kottenko, Y. Cotronis, M. Daneshmand, pp. 376-380, DOI: 10.1109/PDP.2017.95

Florin Leon, Elvira Popescu (2017). *Using Large Margin Nearest Neighbor Regression Algorithm to Predict Student Grades Based on Social Media*

Traces, in P. Vittorini et al. (eds.), *Methodologies and Intelligent Systems for Technology Enhanced Learning*. MIS4TEL 2017, Porto, Portugal, June 2017. Book Series: *Advances in Intelligent Systems and Computing*, vol. 617, Springer, Cham, Switzerland, DOI: 10.1007/978-3-319-60819-8_2

Amelia Badica, Costin Badica, **Florin Leon**, Lucian Luncean (2017). *Declarative Representation and Solution of Vehicle Routing with Pickup and Delivery Problem*, Proceedings of the International Conference On Computational Science, ICCS 2017, Zurich, Switzerland, June 2017, International Conference on Computational Science, ICCS 2017, Book Series: *Procedia Computer Science*, eds. P. Koumoutsakos, M. Lees, V. Krzhizhanovskaya, J. Dongarra, P. Sloot, vol. 108, pp. 958-967, DOI: 10.1016/j.procs.2017.05.261

Florin Leon, Sabina-Adriana Floria, Costin Badica (2017). *Evaluating the Effect of Voting Methods on Ensemble-Based Classification*, Proceedings of the 2017 IEEE International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2017, Gdynia, Poland, July 2017, DOI: 10.1109/INISTA.2017.8001122

Oksana Nikiforova, Nisrine El Marzouki, Konstantins Gusarovs, Hans Vangheluwe, Tomas Bures, Rima Al-Ali, Mauro Iacono, Priscill Orue Esquivel, **Florin Leon** (2017). *The Two-Hemisphere Modelling Approach to the Composition of Cyber-Physical Systems*, Proceedings of the 12th International Conference on Software Technologies, ICSOFT 2017, Madrid, Spain, July 2017, pp. 286-293, DOI: 10.5220/0006424902860293

Amelia Badica, Costin Badica, **Florin Leon**, Daniela Danciulescu (2017). *Optimization of Freight Transportation Brokerage Using Agents and Constraints*, Proceedings of the 18th International Conference on Engineering Applications of Neural Networks, EANN 2017, Athens, Greece, August 2017, eds. G. Boracchi et al., EANN 2017, Book Series: *Communications in Computer and Information Science*, vol. 744, pp. 1-14, Springer International, DOI: 10.1007/978-3-319-65172-9_38

Ciprian Talmacel, **Florin Leon** (2017). *Predicting Political Opinions in Social Networks with User Embeddings*. Proceedings of the 2017 13th IEEE International Conference on Intelligent Computer Communication and Processing, ICCP, eds. R. Potolea, R.R. Slavescu, Cluj Napoca, Romania, September 2017, pp. 213-219

Florin Leon, Andrei-Stefan Lupu, Costin Badica (2017). *Multiagent Coalition Structure Optimization by Quantum Annealing*, Proceedings of the 9th International Conference on Computational Collective Intelligence, ICCCI 2017, Nicosia, Cyprus, September 2017, eds. N. Nguyen, G. Papadopoulos, P. Jedrzejowicz, B. Trawinski, G. Vossen, Computational Collective Intelligence. ICCCI 2017. Lecture Notes in Computer Science, vol. 10448, pp. 331-341, Springer, Cham, Switzerland, DOI: 10.1007/978-3-319-67074-4_32

Sabina-Adriana Floria, **Florin Leon**, Petru Cascaval (2017). *Analyzing the Effects of Virality and Topology for Information Diffusion in Social Networks*, Proceedings of the 2017 21st International Conference on System Theory, Control and Computing, ICSTCC, pp. 866-871, DOI: 10.1109/ICSTCC.2017.8107146

Florin Leon, Costin Badica (2017). *An Optimization Web Service for a Freight Brokering System*, *Service Science*, vol. 9, no. 4, pp. 324-337, ISSN 2164-3962, DOI: 10.1287/serv.2017.0191

2016

Florin Leon (2016). *Analysis of Behavior Stability in a Multiagent System*, *New Research on Collective Behavior*, Till Daniel Frank (ed.), Chapter 5, pp. 51-61, Series: *Psychology research progress*, Nova Publishers, New York, USA, ISBN 978-1-63483-962-4

Georgiana Bunea, **Florin Leon**, Gabriela Maria Atanasiu (2016). *Postdisaster Evacuation Scenarios Using Multiagent System*, *Journal of Computing in Civil Engineering*, vol. 30, issue 6, pp. 05016002-1 - 05016002-10, ISSN 0887-3801, DOI: 10.1061/(ASCE)CP.1943-5487.0000575

Amelia Badica, Costin Badica, **Florin Leon**, Ionut Buligiu (2016). *Modeling and Enactment of Business Agents Using Jason*, Proceedings of the 9th Hellenic Conference on Artificial Intelligence, SETN 2016, Article no. 10, ACM, New York, USA, ISBN 978-1-4503-3734-2, DOI: 10.1145/2903220.2903253

Florin Leon, Costin Badica (2016). *A Freight Brokering System Architecture Based on Web Services and Agents*, Proceedings of the 7th International Conference on Exploring Service Science, IESS 2016, Bucharest, Romania, Lecture Notes in Business Information Processing, vol. 247, pp. 537-546, Springer International Publishing Switzerland, DOI: 10.1007/978-3-319-32689-4_41

Florin Leon, Costin Badica (2016). *A Comparison Between Jason and F# Programming Languages for the Enactment of Business Agents*, Proceedings of the International Symposium on INnovations in Intelligent SysTems and Applications, INISTA 2016, Sinaia, Romania, ISBN 978-1-4673-9910-4, DOI: 10.1109/INISTA.2016.7571841

Georgiana Bunea, Gabriela Maria Atanasiu, **Florin Leon** (2016). *The Effect of Information on the Performance of a Multiagent System for Post-Disaster Evacuation*, Proceedings of the Fifth International Symposium on Life-Cycle Civil Engineering, Delft, The Netherlands, Life-Cycle of Engineering Systems: Emphasis on Sustainable Civil Infrastructure IALCCE 2016, pp. 2053-2059, ISBN 978-1-138-02847-0, Taylor and Francis Group, London, UK, CRC Press

Florin Leon (2016). *A Novel Interaction Protocol of a Multiagent System for the Study of Alternative Decisions*, Proceedings of the 8th International

Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2016, Part I, Halkidiki, Greece; Lecture Notes in Artificial Intelligence, LNAI 9875, pp. 3-12, Springer International Publishing Switzerland, ISBN 978-3-319-45242-5, DOI: 10.1007/978-3-319-45243-2_1

Mohsen Pirdashti, Kamyar Movagharnejad, Poorya Mobalegholeslam, Silvia Curteanu, **Florin Leon** (2016). *Phase Equilibrium and Physical Properties of Aqueous Mixtures of Poly (vinyl pyrrolidone) with Trisodium Citrate, Obtained Experimentally and by Simulation*, Journal of Molecular Liquids, vol. 223, pp. 903-920, Elsevier, ISSN 0167-7322, DOI: 10.1016/j.molliq.2016.07.118

Florin Leon, Silvia Curteanu (2016). *Performance Comparison of Different Regression Methods for a Polymerization Process with Adaptive Sampling*, Proceedings of the 18th International Conference on Computational Intelligence and Systems Sciences, ICCISS 2016, Prague, The Czech Republic; International Journal of Computer, Electrical, Automation, Control and Information Engineering, vol. 10, no. 10, pp. 1515-1519, ISSN 1307-6892

Mohsen Pirdashti, Kamyar Movagharnejad, Silvia Curteanu, **Florin Leon**, Farshad Rahimpour (2016). *Liquid-Liquid Equilibrium Data Prediction using Large Margin Nearest Neighbor*, Iranian Journal of Chemical Engineering, vol. 13, no. 4, pp. 14-32, ISSN 1735-5397

Oksana Nikiforova, Nisrine El Marzouki, Nadezda Kunicina, Hans Vangheluwe, **Florin Leon**, Mauro Iacono, Rima Al-Ali, Priscill Orue (2016). *Several Issues on Composition of Cyber-Physical Systems Based on Principles of the Two-Hemisphere Modelling*, Proceedings of the 4th Workshop of the MPM4CPS COST Action, Gdansk, Poland, Technical Report IT16/01, pp. 44-55

Ionut-Alexandru Avram, **Florin Leon** (2016). *Analysing .NET Executable Files*, Bulletin of the Polytechnic Institute of Iasi, section Automatic Control and Computer Science, vol. 62(66), no. 4, pp. 33-50, ISSN 1220-2169

Sabina-Adriana Floria, **Florin Leon** (2016). *Analysing the Efficiency of Information Transmission in Social Networks*, Bulletin of the Polytechnic Institute of Iasi, section Automatic Control and Computer Science, vol. 62(66), no. 4, pp. 65-76, ISSN 1220-2169

2015

Florin Leon, *Stabilization Methods for a Multiagent System with Complex Behaviours*, Computational Intelligence and Neuroscience, Article Number 236285, 20 pages, ISSN 1687-5265, 2015, DOI: 10.1155/2015/236285

Joel S.E. Teo, Jan-Dirk Schmöcker, **Florin Leon**, Joe Y-T Li, Jun Ji, Gabriela Maria Atanasiu, Eiichi Taniguchi, *An Agent-based Evacuation Model Considering Field Effects and Government Advice*, Transportation Research Record, issue 2532, pp. 129-140, DOI: 10.3141/2532-15, ISSN 0361-1981, 2015

Raluca Maria Hlihor, Mariana Diaconu, **Florin Leon**, Silvia Curteanu, Teresa Tavares, Maria Gavrilescu, *Experimental analysis and mathematical prediction of Cd(II) removal by biosorption using support vector machines and genetic algorithms*, New Biotechnology, Elsevier, vol. 32, issue 3, pp. 358-368, 2015, DOI: 10.1016/j.nbt.2014.08.003

Romeu Chelariu, Gabriel Dan Suditu, Daniel Mareci, Georgiana Bolat, Nicanor Cimpoesu, **Florin Leon**, Silvia Curteanu, *Prediction of Corrosion Resistance of Some Dental Metallic Materials with an Adaptive Regression Model*, The Journal of The Minerals, Metals & Materials Society (JOM), vol. 67, no. 4, pp. 767-774, Springer US, ISSN 1047-4838, 2015, DOI: 10.1007/s11837-015-1362-3

Florin Leon, Silvia Curteanu, *Evolutionary Algorithm for Large Margin Nearest Neighbour Regression*, Proceedings of the 7th International Conference on Computational Collective Intelligence Technologies and Applications, ICCCI 2015, Madrid, Spain, Part I, Lecture Notes in Artificial Intelligence, LNAI 9329, pp. 286-296, Springer International Publishing Switzerland, 2015, DOI: 10.1007/978-3-319-24069-5_29

Florin Leon, Gabriela Maria Atanasiu, Georgiana Bunea, *Critical Assessment of Road Network Resilience Using an Agent-Based Evacuation Model*, in Costin Badica, Yannis Manolopoulos, Mirel Cosulschi, George Eleftherakis, Florin Leon (eds.), Proceedings of the 7th Balkan Conference on Informatics Conference, BCI '15, Craiova, Romania, September 2015, ACM 2015, New York, USA, ISBN 978-1-4503-3335-1, 2015, DOI: 10.1145/2801081.2801107

Joel S.E. Teo, Jan-Dirk Schmocker, **Florin Leon**, Joe Y-T. Li, H. Yamazaki, A.G. Qureshi, Gabriela Maria Atanasiu, Eiichi Taniguchi, *Evaluating Disaster Network Resilience with an Agent-based Evacuation Model*, Proceedings of the 6th International Symposium on Transportation Network Reliability - The Value of Reliability, Robustness and Resilience (INSTR2015), Nara, Japan, August 2015

2014

Florin Leon, *Design and evaluation of a multiagent interaction protocol generating behaviours with different levels of complexity*, Neurocomputing, vol. 146, pp. 173-186, ISSN 0925-2312, 2014, DOI: 10.1016/j.neucom.2014.04.058

Silvia Curteanu, Mirela Smarandoiu, Doina Horoba, **Florin Leon**, *Naphthalene sublimation. Experiment and optimisation based on a neuro-evolutionary methodology*, Journal of Industrial and Engineering Chemistry, vol. 20, issue 4, pp. 1608-1611, Elsevier, ISSN 1226-086X, 2014, DOI: 10.1016/j.jiec.2013.08.007

Florin Leon, Gabriela Maria Atanasiu, *Probabilistic Path Finding Method for Post-Disaster Risk Estimation*, in: Alper Ilki, Michael N. Fardis (eds.), *Seismic Evaluation and Rehabilitation of Structures, Geotechnical, Geological and Earthquake Engineering*, vol. 26, pp. 61-76, Springer International Publishing Switzerland, ISBN 978-3-319-00457-0, ISSN 1573-6059, 2014, DOI: 10.1007/978-3-319-00458-7_5

Elvira Popescu, **Florin Leon**, *Analyzing the Influence of Learning Styles on Students' Behavior in a Social Learning Environment*, *Annals of the University of Craiova, Series: Automation, Computers, Electronics and Mechatronics*, vol. 11 (38), no. 1, pp. 29-38, ISSN 1841-0626, 2014

Silvia Curteanu, Elena-Niculina Dragoi, **Florin Leon**, Cristina Butnariu, *Artificial Intelligence Modelling Methodologies Applied to a Polymerization Process*, *Proceedings of the 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH-2014)*, Vienna, Austria, August 2014, pp. 43-49, SCITEPRESS (Science and Technology Publications, Lda.), ISBN 978-989-758-038-3, 2014

Florin Leon, *Optimizing Neural Network Topology Using Shapley Value*, *Proceedings of the 18th International Conference on System Theory, Control and Computing (ICSTCC 2014)*, pp. 868-873, Sinaia, Romania, October 17-19, ISBN 978-1-4799-4601-3, 2014, DOI: 10.1109/ICSTCC.2014.6982527

2013

Daniel Mareci, Daniel Sutiman, Romeo Chelariu, **Florin Leon**, Silvia Curteanu, *Evaluation of the corrosion resistance of new TiZr binary alloys by experiment and simulation based on regression model with incomplete data*, *Corrosion Science*, Elsevier, vol. 73, pp. 106-122, ISSN 0010-938X, 2013, DOI: 10.1016/j.corsci.2013.03.030

Cristina Butnariu, Catalin Lisa, **Florin Leon**, Silvia Curteanu, *Prediction of liquid - crystalline property using support vector machine classification*, *Journal of Chemometrics*, vol. 27, issue 7-8, pp. 179-188, John Wiley & Sons, ISSN 1099-128X, 2013, DOI: 10.1002/cem.2508

Florin Leon, *A Multiagent System Generating Complex Behaviours*, Costin Badica, Ngoc Thanh Nguyen, Marius Brezovan (eds.), *Computational Collective Intelligence. Technologies and Applications, Lecture Notes in Artificial Intelligence, LNAI 8083*, 5th International Conference, ICCCI 2013, Craiova, Romania, September 2013, *Proceedings*, Springer-Verlag Berlin Heidelberg, pp. 154-164, ISBN 978-3-642-40494-8, ISSN 0302-9743, 5th International Conference on Computational Collective Intelligence - Technologies and Applications, ICCCI 2013, Craiova, Romania, September, 2013

Florin Leon, Elvira Popescu, *Exploring the Relationships between Students' Learning Styles and Social Media Use in Educational Settings*, *Proceedings of 2013 17th International Conference on System Theory, Control and Computing (ICSTCC 2013)*, 6th International Workshop on Social and Personal Computing for Web-Supported Learning Communities, SPeL 2013, Sinaia, Romania, October 11-13, pp. 657-662, ISBN 978-1-4799-2228-4, 2013 17th International Conference on System Theory, Control and Computing (ICSTCC 2013), 6th International Workshop on Social and Personal Computing for Web-Supported Learning Communities, SPeL 2013, Sinaia, Romania, October, 2013

Florin Leon, Andrei Marius Burlacu, *Neural Network Approximations of Solution Concepts for Multiagent Coalitions*, *Proceedings of the IEEE 12th International Symposium on Parallel and Distributed Computing, ISPDC 2013*, 27-30 June 2013, Bucharest, Romania, pp. 216-223, ISBN 978-1-4799-2967-2, DOI: 10.1109/ISPDC.2013.36, 2013

2012

Renata Furtuna, Silvia Curteanu, **Florin Leon**, *Multi-Objective Optimization of a Stacked Neural Network Using an Evolutionary Hyper-Heuristic*, *Applied Soft Computing*, Elsevier, vol. 12, pp. 133-144, ISSN 1568-4946, 2012, DOI: 10.1016/j.asoc.2011.09.001

Florin Leon, Ciprian George Piuleac, Silvia Curteanu, Ioannis Poullos, *Instance-based regression with missing data applied to a photocatalytic oxidation process*, *Central European Journal of Chemistry*, vol. 10, issue 4, pp. 1149-1156, ISSN 1895-1066, 2012, DOI: 10.2478/s11532-012-0038-x

Florin Leon, *Emergent Behaviors in Social Networks of Adaptive Agents*, *Mathematical Problems in Engineering*, vol. 2012, Article ID 857512, 19 pages, ISSN: 1024-123X, 2012, DOI: 10.1155/2012/857512

Eugen Dumitru Tautu, **Florin Leon**, *Optical Character Recognition System Using Support Vector Machines*, *Bulletin of the Polytechnic Institute of Iasi*, tome LVIII (LXII), section Automatic Control and Computer Science, fasc. 2, pp. 31-43, ISSN 1220-2169, 2012

Alexandra Constandache, **Florin Leon**, *A .NET Reinforcement Learning Platform for Multiagent Systems*, *Bulletin of the Polytechnic Institute of Iasi*, tome LVIII (LXII), section Automatic Control and Computer Science, fasc. 1, pp. 93-112, ISSN 1220-2169, 2012

Florin Leon, *Real-Valued Quantum-Inspired Evolutionary Algorithm for Multi-Issue Multi-Lateral Negotiation*, *Proceedings of 2012 IEEE 8th International Conference on Intelligent Computer Communication and Processing (ICCP 2012)*, pp. 41-48, Cluj-Napoca, Romania, August 30 - September 1, 2012, ISBN 978-1-4673-2951-4, IEEE 8th International Conference on Intelligent Computer Communication and Processing, ICCP 2012, Cluj-Napoca, Romania, August 30 - September 1, 2012

Florin Leon, *A Quantum-Inspired Evolutionary Algorithm for Multi-Attribute Combinatorial Auctions*, Proceedings of 2012 16th International Conference on System Theory, Control and Computing (ICSTCC 2012), Sinaia, Romania, October 12-14, ISBN 978-606-834-848-3, 2012 16th International Conference on System Theory, Control and Computing (ICSTCC 2012), Sinaia, Romania, October, 2012

2007-2011

Elena-Niculina Dragoi, Silvia Curteanu, **Florin Leon**, Anca-Irina Galaction, Dan Cascaval, *Modeling of oxygen mass transfer in the presence of oxygen-vectors using neural networks developed by differential evolution algorithm*, Engineering Applications of Artificial Intelligence, Elsevier, vol. 24, issue 7, Oct. 2011, pp. 1214-1226, Infrastructures and Tools for Multiagent Systems, ISSN 0952-1976, 2011, DOI: 10.1016/j.engappai.2011.06.004

Renata Furtuna, Silvia Curteanu, **Florin Leon**, *An Elitist Non-Dominated Sorting Genetic Algorithm Enhanced with a Neural Network Applied to the Multi-Objective Optimization of a Polysiloxane Synthesis Process*, Engineering Applications of Artificial Intelligence, Elsevier, vol. 24, pp. 772-785, ISSN 0952-1976, 2011, DOI: 10.1016/j.engappai.2011.02.004

Florin Leon, Ciprian George Piuleac, Silvia Curteanu, *Stacked Neural Network Modeling Applied to the Synthesis of Polyacrylamide Based Multicomponent Hydrogels*, Macromolecular Reaction Engineering, vol. 4, pp. 591-598, WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany, ISSN 1862-8338, 2010, DOI:10.1002/mren.201000016

Florin Leon, Mihai Horia Zaharia, *Stacked Heterogeneous Neural Networks for Time Series Forecasting*, Mathematical Problems in Engineering, vol. 2010, Article ID 373648, 20 pages, ISSN 1024-123X, 2010, DOI: 10.1155/2010/373648

Ciprian George Piuleac, Ioannis Poullos, **Florin Leon**, Silvia Curteanu, A. Kouras, *Modeling Methodology Based on Stacked Neural Networks Applied to the Photocatalytic Degradation of Triclopyr*, Separation Science and Technology, Taylor & Francis, USA, vol. 45, pp. 1644-1650, ISSN 0149-6395 (print), ISSN 1520-5754 (online), 2010, DOI: 10.1080/01496395.2010.487736

Florin Leon, Catalin Lisa, Silvia Curteanu, *Prediction of the Liquid Crystalline Property Using Different Classification Methods*, Molecular Crystals and Liquid Crystals, vol. 518, pp. 129-148, ISSN 1542-1406 (print), ISSN 1563-5287 (online), 2010, DOI: 10.1080/15421400903574391

Silvia Curteanu, **Florin Leon**, *Optimization Strategy Based on Genetic Algorithms and Neural Networks Applied to a Polymerization Process*, International Journal of Quantum Chemistry, vol. 108, pp. 617-630, Wiley Periodicals, USA, ISSN 0020-7608, 2008, DOI: 10.1002/qua.21376

Florin Leon, Silvia Curteanu, Catalin Lisa, Nicolae Hurdud, *Machine Learning Methods Used to Predict the Liquid-Crystalline Behavior of Some Copolyethers*, Molecular Crystals & Liquid Crystals, vol. 469, pp. 1-22, Taylor & Francis Group, USA, ISSN 1542-1406, 2007

Mihai Horia Zaharia, **Florin Leon**, *Speech Therapy Based on Expert System*, Advances in Electrical and Computer Engineering, Suceava, Romania, no. 1/2009, pp 74-77, ISSN 1582-7445, 2009

Florin Leon, Mihai Horia Zaharia, Dan Galea, *Emergent Dynamic Routing Using Intelligent Agents in Mobile Computing*, Studies in Informatics and Control, vol. 17, nr. 2, June 2008, pp. 215-224, Informatics and Control Publications, ISSN 1220-1766, 2008

Florin Leon, *Multiagent Role Allocation Based on Cognitive Dissonance Theory*, International Review on Computers and Software, vol. 6, no. 5, pp. 715-724, 2011, ISSN 1828-6003, 2011

Irina Diaconita, **Florin Leon**, *A Learning Model for Intelligent Agents Using Radial Basis Function Neural Networks with Adaptive Training Methods*, Bulletin of the Polytechnic Institute of Iasi, tome LVII (LXI), section Automatic Control and Computer Science, fasc. 2, pp. 9-20, ISSN 1220-2169, 2011

Alin-Ionut Pandichi, **Florin Leon**, *Design and Implementation of a Multiagent System for Auctioning and Voting*, Bulletin of the Polytechnic Institute of Iasi, tome LVII (LXI), section Automatic Control and Computer Science, fasc. 1, pp. 87-101, ISSN 1220-2169, 2011

Florin Leon, Andrei Dan Leca, Gabriela Maria Atanasiu, *Strategy Management in a Multiagent System Using Neural Networks for Inductive and Experience-based Learning*, C. Bratianu, N. A. Pop (eds.) - Management & Marketing, Challenges for Knowledge Society, vol. 5, no. 4, pp. 3-28, Editura Economica, Bucuresti, Romania, ISSN 1842-0206, 2010

Florin Leon, *Design of a Multiagent System for Solving Search Problems*, Journal of Engineering Studies and Research, volume 16, no. 3, pp. 51-64, Bacau, Romania, ISSN 2068-7559, 2010

Constantin Lazurca, **Florin Leon**, *An E-mail Filtering Agent Based on Support Vector Machines*, Bulletin of the Polytechnic Institute of Iasi, tome LVI (LX), section Automatic Control and Computer Science, fasc. 3, pp. 43-56, ISSN 1220-2169, 2010

Florin Leon, *Intelligent Agent Planning with Quasi-Determined States Using Inductive Learning*, Bulletin of the Polytechnic Institute of Iasi, tome LVI (LX), section Automatic Control and Computer Science, fasc. 3, pp. 27-42, ISSN 1220-2169, 2010

Mihaela Simona Circiu, **Florin Leon**, *Comparative Study of Multiobjective Genetic Algorithms*, Bulletin of the Polytechnic Institute of Iasi, tome LVI (LX), section Automatic Control and Computer Science, fasc. 1, pp. 35-47, ISSN 1220-2169, 2010

Constantina Raluca Mihalache, **Florin Leon**, *Functional Approximation Using Neuro-Genetic Hybrid Systems*, Bulletin of the Polytechnic Institute of Iasi, tome LV (LIX), section Automatic Control and Computer Science, fasc. 4, pp. 97-102, ISSN 1220-2169, 2009

Violeta Sandu, **Florin Leon**, *Recognition of Handwritten Digits Using Multilayer Perceptrons*, Bulletin of the Polytechnic Institute of Iasi, tome LV (LIX), section Automatic Control and Computer Science, fasc. 4, pp. 103-114, ISSN 1220-2169, 2009

Stefan Boronea, **Florin Leon**, Mihai Horia Zaharia, Gabriela Maria Atanasiu, *Design Patterns for Multi-Agent Simulations*, C. Bratianu, N. A. Pop (eds.) - Management & Marketing, vol. 4, no. 4/2009, pp. 15-26, Editura Economica, Bucuresti, ISSN 1842-0206, 2009

Florin Leon, Andrei Dan Leca, *Dual Manner of Using Neural Networks in a Multiagent System to Solve Inductive Learning Problems and to Learn from Experience*, F. M. T. Brazier, Kees Nieuwenhuis, Gregor Pavlin, Martijn Warnier, Costin Badica (eds.), Intelligent Distributed Computing V, Studies in Computational Intelligence, vol. 382, Proceedings of the 5th International Symposium on Intelligent Distributed Computing - IDC 2011, Delft, The Netherlands - October 2011, Springer-Verlag Berlin Heidelberg 2011, pp. 81-91, ISBN 978-3-642-24012-6, ISSN 1860-949X, 5th International Symposium on Intelligent Distributed Computing, IDC 2011, Delft, Netherlands, October, 2011

Florin Leon, *Self-Organization of Roles Based on Multilateral Negotiation for Task Allocation*, Franziska Klugl, Sascha Ossowski (eds.), Multiagent System Technologies, Lecture Notes in Artificial Intelligence, LNAI 6973, 9th German Conference, MATES 2011, Berlin, Germany, Proceedings, Springer-Verlag Berlin Heidelberg 2011, pp. 173-180, ISBN 978-3-642-24602-9, ISSN 0302-9743, Ninth German Conference on Multi-Agent System Technologies, MATES 2011, Berlin, Germany, October, 2011

Florin Leon, *Evolving Equilibrium Policies for a Multiagent Reinforcement Learning Problem with State Attractors*, Piotr Jedrzejowicz, Ngoc Thanh Nguyen, Kiem Hoang (eds.), Computational Collective Intelligence. Technologies and Applications, Part II, Lecture Notes in Artificial Intelligence, LNAI 6923, Third International Conference on Computational Collective Intelligence, ICCCI 2011 Gdynia, Poland, Proceedings, Springer-Verlag Berlin Heidelberg 2011, pp. 201-210, ISBN 978-3-642-23937-3, ISSN 0302-9743, 3rd International Conference on Computational Collective Intelligence - Technologies and Applications, ICCCI 2011, Gdynia, Poland, September, 2011

Florin Leon, Gabriela Maria Atanasiu, *Simulating Knowledge Dynamics in Earthquake Risk Estimation*, Proceedings of the 2nd European Conference on Intellectual Capital, ECIC10, pp. 362-373, Lisbon, Portugal, ISBN 978-1-906638-59-7 (cd), 2nd European Conference on Intellectual Capital, ECIC10, Lisbon, Portugal, March, 2010

Silvia Curteanu, **Florin Leon**, Renata Furtuna, Elena Niculina Dragoi, Neculai Curteanu, *Comparison between Different Methods for Developing Neural Network Topology Applied to a Complex Polymerization Process*, Proceedings of the International Joint Conference on Neural Networks, IEEE World Congress on Computational Intelligence, pp. 1293-1300, Barcelona, Spain, ISBN 978-1-4244-8126-2 (print), ISBN 978-1-4244-6917-8 (dvd), International Joint Conference on Neural Networks, IEEE World Congress on Computational Intelligence, Barcelona, Spain, July, 2010

Florin Leon, Bogdan Ioan Aignatoaiei, Mihai Horia Zaharia, *Performance Analysis of Algorithms for Protein Structure Classification*, Proceedings of the 20th International Workshop on Database and Expert Systems Applications, DEXA 2009, eds. A. M. Tjoa, R. R. Wagner, IEEE Computer Society, Conference Publishing Services, pp. 203-207, ISBN 978-0-7695-3763-4, ISSN 1529-4188, 20th International Conference on Database and Expert Systems Applications, DEXA'09, 1st International Workshop on Biological Knowledge Discovery and Data mining, BLOKDD '09, Linz, Austria, August-September, 2009

Florin Leon, Mihai Horia Zaharia, Cristea Pal, Stefan Adrian Boronea, Tudor Didilescu, *Distributed Application for Traffic Control Using Intelligent Agents*, Proceedings of the 9th WSEAS International Conference on Applied Informatics And Communications (AIC '09), WSEAS Press, pp. 357-362, ISSN 1790-5109, ISBN 978-960-474-107-6, 9th WSEAS International Conference on Applied Informatics And Communications, AIC'09, Moscow, Russia, August, 2009

Mihai Horia Zaharia, **Florin Leon**, Gabriela Maria Atanasiu, *Increasing Awareness to Disasters by Knowledge Management with Intelligent Agents*, Proceedings of the 10th European Conference on Knowledge Management, Volume One, eds. Ettore Bolisani, Enrico Scarso, Academic Publishing Limited, Reading, UK, pp. 906-914, ISBN 978-1-906638-40-5, 10th European Conference on Knowledge Management, ECKM 2009, Vicenza, Italy, September, 2009

Mihai Horia Zaharia, **Florin Leon**, Cristea Pal, Gabriel Pagu, *Agent-Based Simulation of Crowd Evacuation Behavior*, Control, Modelling and Simulation. Proceedings of the 11th WSEAS International Conference on Automatic Control, Modelling and Simulation (ACMOS '09), WSEAS Press, pp. 529-533, ISSN 1790-5117, ISBN 978-960-474-082-6, 11th WSEAS International Conference on Automatic Control, Modelling and Simulation, ACMOS '09, Istanbul, Turkey, May-June, 2009

Gabriela Maria Atanasiu, **Florin Leon**, Mihai Horia Zaharia, *Intelligent Agents for Life Cycle Management of Structures and Infrastructures in Seismic Areas*, F. Biondini, D. M. Frangopol (eds.) - Life-Cycle Civil Engineering, pp. 921-928, CRC Press, Taylor & Francis Group, ISBN 978-0-415-46857-2, First International Symposium on Life-Cycle Civil Engineering, Varenna, Lake Como, Italy, June, 2008

Irina Diaconita, **Florin Leon**, Andrei Dan Leca, *A Holonic Approach for Providing Composite Services*, Proceedings of the Third International Conference on Advanced Cognitive Technologies and Applications, COGNITIVE 2011, Rome, Italy, pp. 93-98, ISBN 978-1-61208-155-7, The Third International Conference on Advanced Cognitive Technologies and Applications, COGNITIVE 2011, Rome, Italy, September, 2011

Florin Leon, Bogdan Ioan Aignatoaiei, Andrei Dan Leca, *An Evolutionary Optimization Framework for Intelligent Agents*, Proceedings of the 15th International Conference on System Theory, Control and Computing (Joint Conference SINTES 15, SACCs 11, SIMSIS 15), pp. 306-311, ISBN 978-973-621-323-6, 15th International Conference on System Theory, Control and Computing, Sinaia Romania, October, 2011

Mitica Craus, **Florin Leon**, Dragos Arotaritei, *A New Hybrid Genetic Algorithm For The District Heating Network Problem*, Proceedings of the 10th International Conference on Development and Application Systems, Suceava, Romania, pp. 322-326, ISSN 1844-5039, 10th International Conference on Development and Application Systems, Suceava, Romania, May, 2010

Florin Leon, Dan Galea, *Rules, Prototypes and Exemplars - A Survey on Categorization Techniques*, Proceedings of the 9th International Symposium on Automatic Control and Computer Science, Tehnopress, Iasi, ISSN 1843-665-X, 9th International Symposium on Automatic Control and Computer Science, Iasi, Romania, November, 2007

Florin Leon, Gabriela Maria Atanasiu, *Estimating Fragility Curves of Buildings using Genetic Algorithms*, Proceedings of the Ninth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering, Civil-Comp Press, Stirlingshire, Scotland, UK, ISBN 978-1-905088-19-5, The Ninth International Conference on the Application of Artificial Intelligence to Civil, Structural and Environmental Engineering, St. Julians, Malta, September, 2007

2002-2006

Silvia Curteanu, **Florin Leon**, *Hybrid Neural Network Models Applied to a Free Radical Polymerization Process*, Polymer-Plastics Technology and Engineering, vol. 45, no. 9, pp. 1013-1023, Marcel Dekker, USA, ISSN 0360-2559, 2006, DOI: 10.1080/03602550600726285

Silvia Curteanu, **Florin Leon**, Dan Galea, *Alternatives for Multiobjective Optimization of a Polymerization Process*, Journal of Applied Polymer Science, vol. 100, issue 5, pp. 3680-3695, Wiley Periodicals, USA, ISSN 0021-8995, 2006, DOI: 10.1002/app.23205

Florin Leon, Mihai Horia Zaharia, Dan Galea, *A Heuristic for Solving the Generalized Water Jugs Problem*, Bulletin of the Polytechnic Institute of Iasi, tome LI (LV), section Automatic Control and Computer Science, fasc. 1-4, pp. 95-102, ISSN 1220-2169, 2005

Mihai Horia Zaharia, **Florin Leon**, Dan Galea, *Symbolic Deductive Reasoning Using Connectionist Models*, Computer Science Journal of Moldova, volume 12, number 1 (34), pp. 127-145, Chisinau, ISSN 1561-4042, 2004

Florin Leon, Mihai Horia Zaharia, Dan Galea, *A New Approach in Agent Path-Finding Using State Mark Gradients*, Computer Science Journal of Moldova, volume 12, number 3, pp. 406-423, Chisinau, ISSN 1561-4042, 2004

Silvia Curteanu, Corneliu Petrila, Stefan Ungureanu, **Florin Leon**, *Genetic Algorithms and Neural Networks Used in Optimization of a Radical Polymerization Process*, Bulletin of Petrol-Gaze University of Ploiesti, vol. LV, technical series, no. 2, pp. 85-93, ISSN 1224-6077, 2003

Silvia Curteanu, **Florin Leon**, Dan Galea, *Neural Network Models for Free Radical Polymerization of Methyl Methacrylate*, Eurasian Chemico-Technological Journal, vol. 5, no. 3, pp. 225-231, ISSN 1562-3920, 2003

Mihai Horia Zaharia, **Florin Leon**, Dan Galea, *On Finding an Optimized Categorization in Conceptual Spaces Using Genetic Algorithms*, Bulletin of the Polytechnic Institute of Iasi, tome XLIX (LIII), section Automatic Control and Computer Science, fasc. 1-4, pp. 111-120, ISSN 1220-2169, 2003

Florin Leon, Mihai Horia Zaharia, Dan Galea, *Cooperative Multiagent Framework for Knowledge Retrieval*, Bulletin of the Polytechnic Institute of Iasi, tome XLIX (LIII), section Automatic Control and Computer Science, fasc. 1-4, pp. 95-102, ISSN 1220-2169, 2003

Florin Leon, Mihai Horia Zaharia, Dan Galea, *Agent-Based Framework with Optimized Knowledge Queries*, Bulletin of the Polytechnic Institute of Iasi, tome XLIX (LIII), section Automatic Control and Computer Science, fasc. 1-4, pp. 103-110, ISSN 1220-2169, 2003

Florin Leon, Gabriela Maria Atanasiu, *Data Mining Methods for GIS Analysis of Seismic Vulnerability*, Proceedings of the First International Conference on Software and Data Technologies, ICSOFT 2006, vol. 2, pp. 153-156, INSTICC Press, Portugal, ISBN 972-8865-69-4, First International Conference on Software and Data Technologies, ICSOFT 2006, Setubal, Portugal, September, 2006

Florin Leon, *Noise Tolerant Categorization Based on the Generalized Nearest Neighbor Paradigm*, Proceedings of the 4th European Conference on Intelligent Systems and Technologies, ECIT2006, Iasi, ISBN 973-730-246-X, 4th European Conference on Intelligent Systems and Technologies, ECIT2006, Iasi, Romania, September, 2006

Florin Leon, *Generalized Nearest Neighbor Method for the Classification of Composite Concepts*, Proceedings of the IEEE 2nd International Conference on Intelligent Computer Communication and Processing, ICCP, pp. 23-28, U.T. Pres, Cluj-Napoca, ISBN 973-662-234-7, IEEE 2nd International Conference on Intelligent Computer Communication and Processing, ICCP 2006, Cluj-Napoca, Romania, September, 2006

Florin Leon, Mihai Horia Zaharia, Dan Galea, *Performance Analysis of Categorization Algorithms*, Proceedings of the 8th International Symposium on Automatic Control and Computer Science, Iasi, ISBN 973-621-086-3, 8th International Symposium on Automatic Control and Computer Science, Iasi, Romania, October, 2004

Florin Leon, Dan Galea, Marius Zbancioc, *Knowledge Representation Through Interactive Networks*, Proceedings of the 2nd European Conference on Intelligent Systems & Technologies ECIT 2002, Performantica Press, Iasi, ISBN 973-8075-20-3, 2nd European Conference on Intelligent Systems & Technologies ECIT 2002, Iasi, Romania, July, 2002

Mihai Horia Zaharia, **Florin Leon**, Dan Galea, *A Simulator for Load Balancing Analysis in Distributed Systems*, in: A. Valachi, D. Galea, A. M. Florea, M. Craus (eds.), Tehnologii informationale (Information Technologies), pp. 53-59, Editura Universitatii Suceava, ISBN 973-666-059-1, 2003

Mihai Horia Zaharia, **Florin Leon**, Dan Galea, *A Framework for Distributed Computing using Mobile Intelligent Agents*, in: M. Craus, D. Galea, A. Valachi (eds.), New Trends in Computer Science and Engineering, Anniversary Volume, Department of Computer Engineering, Faculty of Automatic Control and Computer Engineering, Technical University Gheorghe Asachi of Iasi, pp. 219-223, Polirom Press, Iasi, ISBN 973-9476-40-6, 2003

Dan Galea, **Florin Leon**, Mihai Horia Zaharia, *E-learning Distributed Framework using Intelligent Agents*, in: M. Craus, D. Galea, A. Valachi (eds.), *New Trends in Computer Science and Engineering, Anniversary Volume*, Department of Computer Engineering, Faculty of Automatic Control and Computer Engineering, Technical University Gheorghe Asachi of Iasi, pp. 159-163, Polirom Press, Iasi, ISBN 973-9476-40-6, 2003

Cărți / Books

Florin Leon (2020). *Syntheses of Artificial Intelligence / Sinteze de inteligența artificială*, Tehnopress, Iasi, 205 pag.

Florin Leon (2020). *Artificial Intelligence Applications in C# / Aplicații de inteligența artificială în C#*, Tehnopress, Iasi, 240 pag.

Florin Leon (2016). *Software Project Management - Course Support / Managementul proiectelor software - Suport de curs*, Tehnopress, Iasi, 194 pag.

Florin Leon (2014). *Artificial Intelligence: Support Vector Machines / Inteligența artificială: mașini cu vectori suport*, Tehnopress, Iasi, 184 pag.

Florin Leon (2012). *Artificial Intelligence: Probabilistic Reasoning, Classification Techniques / Inteligența artificială: raționament probabilistic, tehnici de clasificare*, Tehnopress, Iasi, 193 pag.

Florin Leon (2012). *Software Engineering Applications in C# / Aplicații de ingineria programării în C#*, Tehnopress, Iasi, 264 pag.

Florin Leon (2008). *Web Mining. Applications / Explorarea datelor web. Aplicații*, Tehnopress, Iasi, 149 pag.

Florin Leon (2007). *Artificial Intelligence - From Search to Knowledge*, Tehnopress, Iasi, 244 pag.

Gabriela Maria Atanasiu, **Florin Leon** (2007). *Structural Dynamics Applications Using Matlab*, Tehnopress, Iasi, 242 pag.

Florin Leon (2006). *Intelligent Agents with Cognitive Capabilities / Agenți inteligenți cu capacități cognitive*, Tehnopress, Iasi, 271 pag.

Cristian Aflori, Mitica Craus, Ioan Sova, **Florin Leon**, Cristian Butincu, Cristian-Mihai Amarandei (2005). *GRID - Technologies and Applications / GRID - Tehnologii și aplicații*, Politehnicum, Iasi, 198 pag.

Mitica Craus, Cristian Butincu, Cristian Aflori, Ioan Sova, **Florin Leon**, Augustin-Ionut Gavrila (2005). *Information Retrieval on the Web / Regăsirea informațiilor pe web*, Politehnicum, Iasi, 200 pag.

Florin Leon, Mihai Horia Zaharia (2005). *Software Engineering / Ingineria programării*, Politehnicum, Iasi, 192 pag.

Mihai Horia Zaharia, **Florin Leon** (2004). *C Language from Zero to Student / Limbajul C de la zero la student*, Politehnicum, Iasi, 321 pag.

Florin Leon (2014). *Advanced Methods in Artificial Intelligence: Agents, Optimization and Machine Learning* (habilitation thesis), 190 pag.

Florin Leon, Mircea Hulea, Marius Gavrilă (eds.) (2022). *Advances in Artificial Intelligence Models, Optimization, and Machine Learning*, MDPI, Basel, Switzerland, 364 pag.

Costin Badica, Yannis Manolopoulos, Mirel Cosulschi, George Eleftherakis, **Florin Leon** (eds.) (2015). *Proceedings of the 7th Balkan Conference on Informatics Conference, BCI '15*, Craiova, Romania, September 2015, ACM 2015, New York, USA

Florin Leon (ed.) (2006). *Artificial Intelligence - Principles, Techniques, Applications / Inteligența artificială - principii, tehnici, aplicații*, Tehnopress, Iasi, 702 pag.