

Curriculum vitae

Name and surname: Stoean Cătălin-Liviu

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Date of birth: August 31, 1979

Education:

- July 2021, Habilitation in Computer Science, West University of Timisoara
- October 2004 – February 2008 - PhD, Department of Computer Science, Faculty of Mathematics and Computer Science, Babeş-Bolyai University of Cluj-Napoca.
- 2002 - 2003 – MSc, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Craiova.
- 1998 – 2002 – BSc, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Craiova.

Professional experience and workplaces:

- 2014 – Present – Associate Professor, Department of Computer Science, Faculty of Mathematics and Natural Sciences, University of Craiova.
- 2012 – 2014 – Lecturer, Department of Computer Science, Faculty of Mathematics and Natural Sciences, University of Craiova.
- 2006 – 2012 – Assistant Professor, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Craiova.
- 2003 – 2006 – Assistant Lecturer, Department of Computer Science, Faculty of Mathematics and Computer Science, University of Craiova.

Teaching activities: Artificial intelligence, Research Methodology in Computer Science, Computer vision

Expertise domains: artificial intelligence, machine learning, evolutionary computation, multimodal optimization, optimization algorithms

h-index: Thomson Web of Science – 14, Scopus – 17, Google Scholar – 20

Grants (as a director):

- PED, Contract No. 411PED/2020, code PN-III-P2-2.1-PED-2019-2271, INvestigating the influence of optimistic/pessimistic sentiment from TExt in press REleases on Stock market Trend (INTEREST), 01.11.2020-31.10.2022 (approx. 125 000 euro).
- Fulbright Senior Award, Automated Learning Models for Cancerous Tissue Detection: from Traditional Classifiers to Deep Architectures, University of Illinois at Urbana–Champaign, 01.08.2018-31.10.2018, USA, \$12155.

- UEFISCDI PNCDI Grant of the type Partnerships, Contract No. 26/2014, code PN-II-PT-PCCA-2013-4-1153, Intelligent Medical Information System for the Diagnosis and Monitoring of the Treatment of Patients with Colorectal Neoplasm, 2014 – 2017, Partners: University of Craiova, University of Medicine and Pharmacy of Craiova, Blue Logic, Director, 1.424.891 RON (approx. 317 000 euro).
- DAAD (Deutscher Akademischer Austausch Dienst) Research Stays and Study Visits for University Academics and Scientists, No. A/09/02567, International competition, An Evolutionary Approach for Estimating the Number and Sizes of Attraction Basins for Optimization Problems with Static and Dynamic Landscapes, TU Dortmund University (2 months) and Cologne University of Applied Sciences (1 month), 01.06-31.08.2009, Germany, http://www.f10.fh-koeln.de/Nachrichten/2009/09/f10_msg_04600.html, Director, 5520 euro.
- DAAD (Deutscher Akademischer Austausch Dienst) Research Grant for Doctoral Students, Young Academics and Researchers, A/06/90461, International competition, Novel Evolutionary Algorithms for Classification. Application to e-Health, Chair of Algorithm Engineering, Faculty of Computer Science, Tehnical University of Dortmund, Germany, 01.06-30.09.2007, Director, 4000 euro.

Grants (as a member):

- Grant No. 42C/2014 of the University of Craiova, Evolution of prototypes for classification by means of support vector machines and neural networks, 2014, Member.
- UEFISCDI PNCDI Grant of the type Partnerships, CNMP PC - 2076, Contract Nr. 41071, Algorithm for the diagnosis and prediction of the hepatic fibrosis evolution through noninvasive ultrasonographic means, optimized by stochastic analysis of images, 2007 - 2010, Romania, Member.
- UEFISCDI PNCDI Grant of the type Partnerships, CNMP PC - 2120, Contract Nr. 11028, New models of natural computation in the study of complexity and in solving complex problems, 2007 - 2010, Romania, Member.
- CNCSIS Grant of the type A, CNCSIS A-322, Evolutionary computation: new paradigms, techniques and classes. Applications in optimization, 2007 - 2009, Romania, Member.
- CNCSIS Grant of the type IDEAS - 508, New computational paradigms in the approach of complex problems, 2007 - 2009, Romania, Member.
- CNCSIS Grant of the type A, CNCSIS A - 1477, Computational models inspired from nature. New paradigms and metaheuristics. Real applications, 2004 - 2006, Romania, Member.

Awards and distinctions:

- Included in "One Hundred Romanian Authors in Theoretical Computer Science", The Publishing House of the Romanian Academy, 2018.
- Honorary diploma, first place within the Department of Computer Science, Faculty of Sciences, Excellence Research Gala, University of Craiova, 2016.
- Expert evaluator of Horizon 2020, 2021
- Expert for PNCDI III – Projects EUREKA, Executive Agency for Higher Education, Research, Development and Innovation Funding, 2016, 2017.
- Expert for PNCDI III - European and International Cooperation, Executive Agency for Higher Education, Research, Development and Innovation Funding, 2016, 2017.
- Expert for PNCDI II – Young Research Teams, Executive Agency for Higher Education, Research, Development and Innovation Funding, 2015.
- The “Grigore Moisil” award of the Romanian Academy in 2008 for a collection of publications from 2006.

Membership:

- Nosokinetics Health and Social Care Modeling Group, Westminster University, London, UK
- Center for Advanced Research in Applied Computer Science, University of Craiova, Romania
- Society for Computing Technologies (Director for research since 2009)

Alumni:

- Fulbright
- DAAD (Deutscher Akademischer Austausch Dienst)
- TU Dortmund, Chair of Algorithm Engineering LS11, <http://ls11-www.cs.uni-dortmund.de/staff/alumni>

Reviewing activities (journals):

- IEEE Transactions on Evolutionary Computation
- IEEE Transactions on Knowledge and Data Engineering
- Computers in Biology and Medicine
- Artificial Intelligence in Medicine
- Journal of Computational Science
- Journal of Computer Science and Technology
- Acta Biotheoretica
- Applied Computational Intelligence and Soft Computing
- Swarm and Evolutionary Computation
- MDPI Sensors

- PLOS One
- Memetic Computing
- Soft Computing
- Entropy
- Electrophoresis
- Computational and Structural Biotechnology Journal

Reviewing activities (books and articles):

- Zentralblatt MATH

Conference chair:

- International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2014-2022), Workshop on Natural Computing and Applications, Co-Chair.
- Invited Session on Knowledge and Data Engineering in Medicine and Health Care at International Conference on Knowledge-Based and Intelligent Information & Engineering Systems, 2018 - 2023.
- Federated Conference on Computer Science and Information Systems FedCSIS 2019, 9th International Workshop on Artificial Intelligence in Medical Applications (AIMA'19), Leipzig University, Leipzig, Germany, 1-4 September, 2019, <https://www.fedcsis.org/2019/aima/committee>
- Federated Conference on Computer Science and Information Systems FedCSIS 2018, 8th International Workshop on Artificial Intelligence in Medical Applications (AIMA'18), Poznan, Poland, 9 - 12 September, 2018, <http://fedcsis.org/2018/aima/committee>.

Membership in program committees for conferences:

- Conference on Parallel Problem Solving From Nature 2010, 2012, 2014, 2016, 2018, 2020, 2022.
- The ACM Genetic and Evolutionary Computation Conference (GECCO 2018, 2019, 2020), <http://gecco-2018.sigevo.org/index.html/GECCO2018-program-compressed.pdf>, <https://gecco-2019.sigevo.org/index.html/dl1477>.
- International Conference on Machine Learning, Optimization, and Data Science, LOD 2018, 2019, 2020, <https://lod2018.icas.xyz/program-committee/>, <https://lod2019.icas.xyz/program-committee/>, <https://lod2020.icas.xyz/program-committee/>.
- International KES Conference on Intelligent Decision Technologies, <http://idt-15.kesinternational.org/cmsIPCdisplay.php>, <http://idt-16.kesinternational.org/cmsIPCdisplay.php>, <http://idt-17.kesinternational.org/cmsIPCdisplay.php>

- International KES Conference Innovation in Medicine & Healthcare, KES InMed 2017, 2018, 2019, 2020, <http://inmed-17.kesinternational.org/cmsIPCdisplay.php>, <http://inmed-18.kesinternational.org/cmsIPCdisplay.php>, <http://inmed-19.kesinternational.org/cmsIPCdisplay.php>, <http://inmed-20.kesinternational.org/cmsIPCdisplay.php>
- International KES Conference Smart Digital Futures, KES SEEL 2017, <http://seel-17.kesinternational.org/cmsIPCdisplay.php>
- The 7th Balkan Conference in Informatics (BCI 2015) <http://bci2015.bci-conferences.org/>
- International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2016, 2017, 2018, 2019), <http://inista.org/inista16/pc.html>, <http://inista.org/inista17/program-committee.php>, <http://inista.org/inista18/committees.html>, <http://inista.org/inista19/committees.html>.
- The Second International Workshop on Machine Learning, Optimization and Big Data (MOD 2016, 2017), <http://www.taosciences.it/mod/program-committee/>, <http://mod2017.taosciences.org/>.
- Nature Inspired Cooperative Strategies for Optimization (NICSO), http://www.econ.ubbcluj.ro/~rodica.lung/nicso2011/?page_id=23
- International Conference on Soft Computing (MENDEL), <http://www.mendel-conference.org/index.php?link=ipc>.
- International Conference on Advances Science and Contemporary Engineering (ICASCE), <http://web.binus.ac.id/icasce2012/komite.asp>.
- International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Workshop on Natural Computing and Applications, <http://synasc12.info.uvt.ro/workshops/nca-2012>, <http://synasc.ro/synasc2013/workshops/nca-2013/>.

Invited talks:

- Catalin Stoean, "Deep learning for the classification and segmentation of heart structures in first and second trimester fetal echocardiography", July 13, 2022, Universidad de Malaga, Spain.
- Huawei Technologies Co., Ltd., Saint-Petersburg Huawei Research Center, November 2020.
- University of Malaga, Department of Electronic Technology, "On classifying images using Keras and Tensorflow in Python", June 2019.
- University of Bucharest, Faculty of Mathematics and Computer Science, Solomon Marcus seminar in Computational Linguistics 2019, "Machine learning for classification: from medical applications to text processing", April 2019.

- Wolfram Technology Conference 2018, "On Boosting the Accuracy for the Classification of Histopathological Slides", September 2018.
- University of Illinois at Urbana-Champaign, "On Diagnosing Cancer Grade Based on Histopathological Slides", August 2018.
- University of Ulster, Campus Coleraine, "Combination of Classifiers for Improving the Accuracy for the Diagnosis of Histopathological Slides", August 2017.
- University of Malaga, Department of Electronic Technology, "On Boosting the Accuracy of Medical Image Diagnosis through Cooperation between Classifiers", July 2017.
- University of Malaga, Department of Electronic Technology, "Automatic Diagnosis of Colorectal Neoplasm Based on Histological Images", May 2016.
- Faculty of Computer Science and Engineering Science, Technology Arts Sciences TH Koeln, University of Sciences, "Computational Support for Pathologists in the Diagnosis of Colorectal Neoplasm Based on Histological Images", May 2016.
- Workshop Young Researchers in Artificial Intelligence, (Tineri Cercetători în Inteligența Artificială - TiCIA), Technical University of Cluj-Napoca, 5-8 September 2015, "Research Methodology in Computer Science".
- TU Dortmund, Faculty of Computer Science, Chair of Algorithm Engineering, "Computational Intelligence for Histopathological Image Processing", August 2015.
- Cologne University of Applied Sciences, Germany, "Semi-Automatic Parameter Setting when Processing Medical Images", 2015.
- Romanian Association for Artificial Intelligence (ARIA), ARIA Caravan, "Research Directions in Artificial Intelligence", November 2014.
- Cologne University of Applied Sciences, Germany, Computational Services in Automation (COSA) Kolloquium, "Multimodal Real-Valued Optimization Based on Topological Information", 2009.
- Harrow School of Computer Science, London, UK, "Evolving Cooperative Rules for Medical Data Classification", November 2008.
- "Alexandru Ioan Cuza" University of Iasi, Faculty of Computer Science, Doctoral Intensive Summer School on Meta-Heuristics in Optimization and in Intelligent Data Analysis, "On Approximating the Multimodality Degree of a Function by Exploiting Landscape Topology", 2008.
- TU Dortmund, Faculty of Computer Science, Chair of Algorithm Engineering, The Computational Intelligence Colloquium, "Multimodal Optimization, radii and search space topology", July 2007.

Knowledge of languages: English (very well), Spanish (well), French (well), German (conversational)