Lista de lucrări – S.L. dr. ing. Bogdan Popa

Teza de doctorat

„***Algoritmi performanți pentru prelucrarea imaginilor și a semnalelor***”, Universitatea din Craiova, școala doctorală „Constantin Belea”, domeniul: Ingineria sistemelor, conducător ştiinţific: Prof.univ.dr.ing. Popescu Dan, susţinere publică în 05.10.2019, Diplomă de doctor: Seria J, Nr. 0045974/ Nr 24 din 16.02.2021, Ordinul M.I. nr. 5748/13.10.2020.

Studii publicate în reviste de specialitate

1. **Popa, Bogdan**, Dan Selișteanu, and Alexandra Elisabeta Lorincz. "*Possibilities of Use for Fractal Techniques as Parameters of Graphic Analysis*." Fractal and Fractional 6.11 (2022): 686. – Q1, WOS:000894706300001

Articole prezentate la conferinţe internaţionale indexate ISI (ISI Proc.)

1. **Popa B.**, „*Iterative Function Systems for Natural Image Processing*”, Proc. of 2015, 16th Int. Carpathian Control Conf. (ICCC’2015), 27 May - 30 May 2015, Szilvásvárad, Hungary, pp. 46 - 49, DOI: 10.1109/CarpathianCC.2015.7145043, Publisher: IEEE, Electronic ISBN 978-1-4799-7369-9. WOS:000380488000009
2. **Popa B.**, „*Dijkstra algorithm in parallel- Case study*”, Proc. of 2015, 16th Int. Carpathian Control Conf. (ICCC’2015), 27 May - 30 May 2015, Szilvásvárad, Hungary, pp. 50 - 53, DOI: 10.1109/CarpathianCC.2015.7145044, Publisher: IEEE, Electronic ISBN 978-1-4799-7369-9. WOS:000380488000010
3. **Popa B.**, Popescu D., „*Analysis of Algorithms for Shortest Path Problem in Parallel*”, Proc. of 2016 17th Int. Carpathian Control Conf. (ICCC’2016), May 29 – June 1, 2016, Tatranská Lomnica, Slovakia, DOI: 10.1109/CarpathianCC.2016.7501169, Publisher: IEEE, Electronic ISBN: 978-1-4673-8606-7, ISBN: 978-1-4673-8605-0. WOS:000389829000114
4. **Popa B.**, Popescu M., „*The analysis parameters for the AC engine for actuating of a grinding wheat system*”, 2017, 18TH INTERNATIONAL CARPATHIAN CONTROL CONFERENCE (ICCC), p. 400-405, DOI: 10.1109/CarpathianCC.2017.7970433, Publisher: IEEE, ISBN:978-1-5090-4862-5, WOS:000426954400074

5. **Popa B.**, „*Study about the edge detection algorithm and its applications*”, 2017, 18th International Carpathian Control Conference (ICCC),p. 417-422, DOI: 10.1109/CarpathianCC.2017.7970436, Publisher: IEEE, ISBN:978-1-5090-4862-5. WOS:000426954400077
6. **Popa B**., Popescu I.M., Popescu D., Bobasu. E., „*Real-time monitoring system of a closed oven*”, 2018, 19th International Carpathian Control Conference (ICCC), p. 27-32, DOI: 10.1109/CarpathianCC.2018.8399597, Publisher: IEEE, ISBN:978-1-5386-4762-2. WOS:000439260500010
7. Selişteanu D., Roman M., Şendrescu D., Petre E., **Popa B**. „*A Distributed Control System for Processes in Food Industry: Architecture and Implementation*”, 2018, 19th International Carpathian Control Conference (ICCC),p. 128-133, DOI: 10.1109/CarpathianCC.2018.8399615, Publisher: IEEE, ISBN:978-1-5386-4762-2. WOS:000439260500028
8. Popescu I.M., **Popa B.**, Prejbeanu R., Ionete C., „*Evaluation of Parallel and Real-Time Processing Performance for Some Vibration Signals Using FPGA Technology*”, 2018, 19th International Carpathian Control Conference (ICCC),p. 365-370, DOI: 10.1109/CarpathianCC.2018.8399657, Publisher: IEEE, ISBN:978-1-5386-4762-2. WOS:000439260500069
9. Constantinov C., Mocanu M., Poteraş C., **Popa B.**, „*Using a Graph Database for Evaluating and Enhancing a Social Reputation Engine*”, 2018, 19th International Carpathian Control Conference (ICCC),p. 518-523, DOI: 10.1109/CarpathianCC.2018.8399685, Publisher: IEEE, ISBN:978-1-5386-4762-2. WOS:000439260500096
10. **Popa B.,** Roman M., Constantinescu R.L. „*Fast Fourier processing and real-time transformation system for a dynamic vibration signal*”, 2019, 20th International Carpathian Control Conference (ICCC), Kraków - Wieliczka, Poland, May 26-29, 2019, DOI: 10.1109/CarpathianCC.2019.8766039, ISBN: 978-1-7281-0703-5, Publisher: IEEE. WOS:000490570500112
11. **Popa B.,** Popescu D., Roman M., Constantinescu R.L. „*Optimizing algorithms for low CPU usage in different scenarios*”, 2019, 20th International Carpathian Control Conference (ICCC), Kraków - Wieliczka, Poland, May 26-29, 2019, DOI: 10.1109/CarpathianCC.2019.8765938, ISBN: 978-1-7281-0703-5, Publisher: IEEE. WOS:000490570500113

12. Constantinescu R.L., Roman M., **Popa B.,** Selișteanu D. „*An Improved Numerical Method for the Simulation of Nonlinear Systems*”, 2019, 20th International Carpathian Control Conference (ICCC), Kraków - Wieliczka, Poland, May 26-29, 2019, DOI: 10.1109/CarpathianCC.2019.8765939, ISBN: 978-1-7281-0703-5, Publisher: IEEE. WOS:000490570500149
13. I. M. Popescu, D. Popescu, I. Voinea, **B. Popa** and R. Prejbeanu, "*A DFT Computation Method for the Real-Time Processing of Vibration Signals at FPGA Circuit Level*" 2020 21th International Carpathian Control Conference (ICCC), 2020, pp. 1-6, doi: 10.1109/ICCC49264.2020.9257281.
14. **B. Popa**, M. Roman, E. Petre, S. Cosmulescu and A. -M. Stoenescu, "*Software Tools to Manage and Simulate Information from the Natural Environment*," 2020 21th International Carpathian Control Conference (ICCC), 2020, pp. 1-6, doi: 10.1109/ICCC49264.2020.9257299.
15. Lörincz, A. E., Selişteanu, D., **Popa, B.,** & Şerban, T. T. (2022, May). Implementation of the CommA_v. 3.0 system on AUTOSAR architecture using V2X communication. In 2022 8th International Conference on Control, Decision and Information Technologies (CoDIT) (Vol. 1, pp. 367-372). IEEE. WOS:000846862800061
16. **Popa, Bogdan,** et al. "*Optimization possibilities for the shortest-path algorithms in the context of large volumes of information*." 2022 8th International Conference on Control, Decision and Information Technologies (CoDIT). Vol. 1. IEEE, 2022. WOS:000846862800060
17. **Popa, Bogdan,** et al. "*Real-time Processing of Signals using Parallel Development Technology.*" 2022 23rd International Carpathian Control Conference (ICCC). IEEE, 2022. WOS:000925203600014
18. **Popa, Bogdan,** et al. "*Possibilities for fast Generation of Fractal Images and Various Fields of Applicability*." 2022 23rd International Carpathian Control Conference (ICCC). IEEE, 2022. WOS:000894706300001
19. Constantinescu, Radu-Lucian, **Bogdan Popa**, and Ion-Marian Popescu. "Current State and Development Context for a Product Model Based on Digitization and Document Management at Enterprise Level." 2023 24th International Carpathian Control Conference (ICCC). IEEE, 2023.
20. Popescu, I. M., **Popa, B.,** Constantinescu, R. L., & Ionică, D. V. (2023, June). Information management, from Client applications, through TCP/IP Communication

on interrupts, in a Multiclient-Server application. In 2023 24th International Carpathian Control Conference (ICCC) (pp. 347-352). IEEE.

Articole prezentate la conferinţe internaţionale indexate

1. **Popa B.**, "*Algorithms for Lossless Compression in Image Processing Systems*", 2016, 20th Panhellenic Conference on Informatics (PCI). Patra, Greece, ACM Digital Library, Conference Proceedings Series (ICPS), ISBN: 978-1-4503-4789-1
2. **Popa B.**, "*Innovative Computing Systems in Volume Rendering for the Medical Images*", 2016, 20th Panhellenic Conference on Informatics (PCI). Patra, Greece, ACM Digital Library, Conference Proceedings Series (ICPS), ISBN: 978-1-4503-4789-1

Reviste B și B+

1. **Popa B.**,Popescu D. "*Lossless Compression in Image Processing Technologies and Applications*", 2014, Annals of the University of Craiova, 2014 Volume 11 no. 2, p. 13-18, ISSN 1841-0626.
2. **Popa B.**,Popescu D. "*Improving of the Backtracking Algorithm using different strategy for solving the 2-d problems*",2015, Annals of the University of Craiova, 2015 Volume 12 no. 1, p. 29-33, ISSN 1841-0626

Reviste neindexate

1. **Popa B.** "*Visual Study About the Fractals and New Means of Viewing*",2016, International Journal of Scientific Research, October 2016, Volume 5, Issue 10,p 383-386, ISSN No 2277 – 8179.
2. I.M. Popescu, **B. Popa**, R. Prejbeanu, "*Technology based on FPGA circuits and simultaneous processing of signals with great dynamic over time*", 2017, Annals of the University of Craiova, Volume 14 no. 1, p. 25-30, ISSN 1841-0626
3. **Popa B.**, Popescu D. "*Summary of bread production and review of new methods for estimating process parameters*", 2017, Annals of the University of Craiova, Volume 14 no. 2, p. 26-33, ISSN 1841-0626
4. Sendrescu D., Selisteanu D., **B. Popa,** "*Modelling of biotechnological systems using parallel computing*", 2016, Proc. 4th Int. Conf. on Advanced Technology & Sciences (ICAT'2016), Rome, Italy, 6 p., 2016, https://www.icatsconf.org/ITALY2016

Articole prezentate la conferinţe internaţionale neindexate

1. **Popa B.** ”*The influence of the ICT and IoT in the teaching systems*”, 2017, New innovative approaches in teaching, 6-7 May 2017, Vidin ,Bulgaria, p. 155-160, ISBN: 978-954-9399-47-9
2. **Popa B.**, Radulescu V., Poenaru M.L., "*International system for connecting high-school graduate study databases*", New innovative approaches in teaching, 6-7 May 2017, Vidin, Bulgaria, Erasmus+ project 2015-1BG01-KA219-014218-"Opening up education through the school projects and ICT". ISBN: 978-954-9399-47-9

Capitole în cărţi publicate în edituri internaţionale

1. Dan Selișteanu, Ion Marian Popescu, Emil Petre, Monica Roman, Dorin Șendrescu, **Bogdan Popa**, „*Distributed Control Systems for a Wastewater Treatment Plant: Architectures and Advanced Control Solutions*”, *Wastewater and Water Quality*, IntechOpen, DOI: 10.5772/intechopen.74827
2. **Popa, B**., Selișteanu, D., Popescu, I.M. (2023). Real-Time Parallel Processing of Vibration Signals Using FPGA Technology. In: Arai, K. (eds) Intelligent Systems and Applications. IntelliSys 2022. Lecture Notes in Networks and Systems, vol 542. Springer, Cham. https://doi.org/10.1007/978-3-031-16072-1_18 WOS:000890312800018

Membru în echipa granturilor de cercetare

1. **Sisteme de conducere avansată a unor bioprocese din industria alimentară (ADCOSBIO)**, PN-II-PT-PCCA-2013-4-0544, PNCDI II, Parteneriate – PCCA, contract nr. 211/2014, 2014-2017, coordonator Univ. Craiova, nr. înreg. UCV 66C/2014, parteneri: S.C. Moara Calafatului SRL, Univ. Politehnica Timișoara, Univ. „Dunărea de Jos” din Galaţi, director: Selișteanu D.
2. **Systems with Propagation: New Approaches in Control Design for Oscillations Quenching–ProCO**, grant finanțat de MCI, CCCDI-UEFISCDI, PNCDIIII, Program 3: CooperareInternațională și Europeană, Subprogram 3.1 Bilateral/Multilateral, Cooperare Bilaterală România-Franţa, Cod:PN-III-P3-3.1-PM-RO-FR-2016-0055, Contract:78BM/2017, Nr.Inreg.UEFISCDI:PN3-P3-229/04.04.2017, Nr.Inreg. Univ. din Craiova:7C/03.04.2017, Partener: Laboratoire des Signaux et Systèmes,

CNRS-Centrale Supelec-Université ParisSud, Gif-sur-Yvette,Franţa,2017-2018, director: Danciu D.

3. **Tehnologie informațională pentru achiziția, prelucrarea paralelă, sincronizată și în timp real a unor semnale de vibrații, folosind tehnologia FPGA (TIAVIB)**. National. PN-III-P2-2.1-CI-2017-0167. Cecuri de inovare UEFISCDI Nr. 116Cl/2017, director: Popescu M.
4. **Modelarea, simularea și controlul avansat al biosistemelor (MOSCBIOS)**, Programul: Resurse umane - Proiecte de cercetare pentru stimularea tinerelor echipe independente, Cod depunere proiect UEFISCDI: PN-III-P1-1.1-TE-2016-0862, Nr. contract de finanţare: 25/2018, Nr. înregistrare Univ. din Craiova: 5C/27.04.2018, Nr. Înregistrare UEFISCDI: 1004/04.05.2018, director: Roman M.
5. **"CERT ENTTRUST – Soluții și tehnologii inovative bazate pe servicii SaaS (Software as a Service) pentru Întreprindere Digitală",** cod proiect POC/163/1/3/120269, proiect aprobat în cadrul Programului Operațional Competitivitate 2014-2020, Contract de finanțare nr.396/390072/20.10.2021, Proiect tehnologic inovativ-regiuni mai puțin dezvoltate. Director: Conf. univ. dr. Popescu M.
6. **POC SMIS 124488, "Creșterea capacității de cercetare a Universității din Craiova prin investiții în infrastructuri de tip Cloud și Big Data**" presupune identificarea soluțiilor de virtualizare performante, flexibile, adaptate la specificul cercetării din Universitatea din Craiova; identificarea soluțiilor de tip "Big Data" performante și eficiente din punct de vedere financiar și implicarea în activitățile A2 - " Achiziția de echipamente IT, echipamente pentru comunicații și echipamente conexe necesare pentru funcționarea centrului de resurse CLOUD și a INFRASTRUCTURILOR MASIVE DE DATE" și A3 - "Achiziția de aplicații informatice și licențe pentru software specifice funcționării CLOUD și INFRASTRUCTURILOR MASIVE DE DATE (inclusiv middleware)".
7. **Proiectul privind Învățământul Secundar (ROSE), Schema de Granturi pentru Universități - Necompetitiv, Beneficiar: UNIVERSITATEA DIN CRAIOVA,** Titlul subproiectului: Pot mai mult, deci NU renunt! (FACE), Acord de grant nr. AG193/SGU/NC/II din 12.09.2019.