



MINISTERUL EDUCAȚIEI
UNIVERSITATEA „AUREL VLAICU” DIN ARAD
310130 Arad, B-dul Revoluției nr. 77, P.O. BOX 2/158 AR
Tel.: 0040-257- 283010; fax. 0040-257- 280070
<http://www.uav.ro>; e-mail: rectorat@uav.ro
Operator de date cu caracter personal nr. 2929

Lista de lucrări Facultatea de Științe Exacte Cadre didactice titulare 2019 - 2025

Participări la conferințe naționale și internaționale

1. Mariana Nagy, Simon R. Cowell, Valeriu Beiu, Optimal Cubic Fibonacci Identities for 3D Packing , ISREIE 2019, Secțiunea Informatică.
2. Radu Emil Mares, Mariana Nagy, Ioan Radu, Aplicarea arborelui de evenimente în analiza unui accident de muncă la operațiile de mentenanță, ISREIE 2019, Secțiunea Inginerie.
3. Radu Emil Mares, Mariana Nagy, Ioan Radu, Using the event tree analysis in the Investigation of a work accident , ISREIE 2019, Secțiunea Inginerie.
4. L. Sida, L. Popa, S. Nădăban and I. Dzițac, Some Remarks on Fuzzy Hilbert Spaces, International Symposium Research and Education in Innovation Era ISREIE'19 Arad, Romania, May 23-25, 2019.
5. M. Tache, S. R. Cowell, and V. Beiu, Turning Sizing on Its Head and More , International Symposium Research and Education in Innovation Era ISREIE'19 Arad, Romania, May 23-25, 2019.
6. R.-M. Beiu, and V. Beiu, Sidestepping the Bounds of Diffraction, International Symposium Research and Education in Innovation Era ISREIE'19 Arad, Romania, May 23-25, 2019.
7. G. Cristescu, V. Dragoi, and V. Beiu , Cubic Spline Approximation of the Reliability Polynomials of Two Dual Hammock Networks, International Symposium Research and Education in Innovation Era ISREIE'19 Arad, Romania, May 23-25, 2019.
8. T. Gyulai, M. Nagy, Intelligens városok szerepe a regionális intelligens szakosodási stratégiában, MRTT Conference, Budapest, Nov.2021
9. T. Gyulai, M. Nagy, Új európai eszközök a vállalati digitalizációban, MRTT Conference, Budapest, oct. 2022

10. M. Nagy, L. Bocancios, Digital Cities Challenge initiative – a good experience on the road to the Intelligent City, the 61st ERSAC Congress, Aug, 2022
11. Madeleine Togher, Nicolaie Popescu-Bodorin, Valentina Emilia Balas, Mariana Nagy and Alina Barbulescu, Fast, Soft, Sub-optimal, Low-Complexity, Fuzzy Linear Regression with Python And Scikit-Learn, SOFA 2022
12. Valentina Emilia Balas, Madeleine Togher, Nicolaie Popescu-Bodorin, Alina Barbulescu and Mariana Nagy, Fuzzy Data Science with Python and SciKit-Learn, SOFA 2022
13. Nicolaie Popescu-Bodorin, Valentina Emilia Balas, Madeleine Togher, Mariana Nagy, Alina Barbulescu and Lucian S. Grigore, Deep Learning Based Fuzzy Iris Recognition in Python, Keras, OpenCV and Tensorflow, SOFA 22
14. M. Nagy, T. Gyulai, Digital Okos városok területi innovációval – okos fejlesztések európai együttműködéssel, MRTT Conference, Pecs, Nov.2023
15. T. Gyulai, Zs. Kereszturi, M. Nagy, Okos és fenntartható városfejlesztés felelősségteljes digitális innovációval, Sopron, 20.11.2023
16. Mariana Nagy, Vlad-Florin Dragoi, Valeriu Beiu, Employing Sorting Nets for Designing Reliable Computing Nets, International Conference on Nanotechnology (IEEE-NANO), July 2020, Virtual.
17. Valeriu Beiu, Vlad-Florin Dragoi, Roxana-Mariana Beiu, Why Reliability for Computing Needs Rethinking, International Conference on Rebooting Computing (IEEE-ICRC), Dec. 2020, Virtual.
18. Ali Chouria, Vlad-Florin Dragoi, Jean-Gabriel Luque, On Recursively Defined Combinatorial Classes and Labelled Trees, International Conference on Computers Communications and Control, May 2020, Virtual.
19. Vlad-Florin Dragoi, Simon Cowell, Valeriu Beiu, Tight Bounds on the Coefficients of Consecutive k -out-of- $n:F$ Systems, International Conference on Computers Communications and Control, May 2020, Virtual.
20. Pierre-Louis Cayrel, Brice Colombier, Vlad-Florin Dragoi, Alexandre Menu, Lilian Bossuet, Message-Recovery Laser Fault Injection Attack on the Classic McEliece Cryptosystem, Annual International Conference on the Theory and Applications of Cryptographic Techniques (Eurocrypt), Oct. 2021, Zagreb, Croatia.
21. Vlad-Florin Dragoi, Brice Colombier, Pierre-Louis Cayrel, Vincent Grosso, Integer Syndrome Decoding in the Presence of Noise, IEEE Information Theory Workshop (ITW), Nov. 6 - 9, 2022, Mumbai, India.
22. Vlad-Florin Dragoi, Brice Colombier, Vincent Grosso, Pierre-Louis Cayrel, Physical Security of Code-based Cryptosystems based on the Syndrome Decoding Problem,

Cryptographic architectures embedded in logic devices, CryptArchi, 30-31 May 2022, Porquerolles, France.

23. Vlad-Florin Dragoi, Brice Colombier, Pierre-Louis Cayrel, Vincent Grosso, Punctured Syndrome Decoding Problem Efficient Side-Channel Attacks Against Classic McEliece, International Workshop on Constructive Side-Channel Analysis and Secure Design COSADE 2023, April 3-4, Munich, Germany.
24. Vlad-Florin Dragoi, Hsin-Po Wang, Fast Methods for Ranking Synthetic Bees, International Symposium on Information Theory, ISIT, June 2023, Taipei, Taiwan.
25. Mihai Tache, Sorin Hoara, Vlad-Florin Dragoi, Valeriu Beiu, Green AI from Kirkhoff to Shannon, Intelligent Methods Systems and Applications in Computing, Communications and Control. ICCCC 2022. Advances in Intelligent Systems and Computing, vol 1435. Springer, Cham.
26. Leonard Daus, Vlad-Florin Dragoi, Marilena Jianu, Dominic Bucerzan, Valeriu Beiu, On the Roots of Certain Reliability Polynomials, Intelligent Methods Systems and Applications in Computing, Communications and Control. ICCCC 2022. Advances in Intelligent Systems and Computing, vol 1435. Springer, Cham.
27. Vlad-Florin Drăgoi , Andreea Szocs, Structural Properties of Self-dual Monomial Codes with Application to Code-Based Cryptography, Cryptography and Coding. IMACC 2021. Lecture Notes in Computer Science, vol 13129. Springer, Cham.
28. Vlad-Florin Drăgoi, Valeriu Beiu, Consecutive Systems Asymptotic Threshold Behaviors, Soft Computing Applications. SOFA 2020. Advances in Intelligent Systems and Computing, vol 1438. Springer, Cham.
29. Vlad-Florin Dragoi, Alin Tiberiu Lacatus, Alexandru Popoviciu, Combinatorial Algorithms for Integer Syndrome Decoding Problem, Soft Computing Applications. SOFA 2020. Advances in Intelligent Systems and Computing, vol 1438. Springer, Cham.
30. Luputi A., Mnerie C., Duma V.-F, „Polygon mirror-based optical micrometers : Programming aspects”, Proc. 8th ISREIE, Series : Engineering, Arad (Romania), May 24 – 25, 2019.
31. Luputi A. SLAM algorithms for odometry”, Proc. 8th ISREIE, Series : Engineering, Arad (Romania), May 24 – 25, 2019.
32. P.Gaspar, On some aspects of random normal operators, International Conference on Operator Theory OT 28, Timisoara, Romania, June 27 – July 1, 2022
33. BUCERZAN, Dominic; BEJAN, Crina Anina. WALLET KEY MANAGEMENT IN BLOCKCHAIN TECHNOLOGY. Education, 2023, <http://www.conferenceie.ase.ro/index.php/conference-program/>

34. Gros Bogdan, Crina Anina Bejan, Bayesian networks with applicability in sonoluminescence, International Conference on Applied Informatics Imagination, Creativity, Design, Development – ICDD, <http://sites.conferences.ulbsibiu.ro/icdd/2020/program.php>
35. Miruna Maura Trocan, Alexandru Nicolăiță, Crina Anina Bejan and Dominic Bucerzan, CryptoCircle eXchange– An Advanced Crypto-currency Exchanges Solution, 9TH INTERNATIONAL WORKSHOP ON SOFT COMPUTING APPLICATIONS SOFA2020, [https:// www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/](https://www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/)
36. Sorin Miroiu, Dominic Bucerzan and Bogdan-George Gros, Reactive-based and scalable-driven architecture for mobile development, 9TH INTERNATIONAL WORKSHOP ON SOFT COMPUTING APPLICATIONS SOFA2020, [https:// www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/](https://www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/)
37. Bogdan-George Gros, Crina Anina Bejan and Sorin Miroiu, Overview of the Cyber Threats Facing CryptoWallets, 9TH INTERNATIONAL WORKSHOP ON SOFT COMPUTING APPLICATIONS SOFA2020, [https:// www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/](https://www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/)
38. Camelia Daciana Stoian, Dominic Bucerzan, Adrian Lile and Crina Anina Bejan, The Future of Cryptocurrency Services in Romania- Legal Aspects, 9TH INTERNATIONAL WORKSHOP ON SOFT COMPUTING APPLICATIONS SOFA2020, [https:// www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/](https://www.sofa-org.eu/2020/special-session-2-6-blockchain-computing-and-applications/)
39. BUCERZAN, Dominic; GROS, Bogdan George; BEJAN, Crina Anina. Cryptocurrency Wallet Passwordless Authentication 20th International Conference on Informatics in Economy. 2021, <https://www.conferenceie.ase.ro/index.php/previous-conferences/ie-2021-the-20th-international-conference-on-informatics-in-economy/>.
40. BEJAN, Crina Anina; BUCERZAN, Dominic; CRĂCIUN, Mihaela Daciana. Perspectives of Cryptocurrency Price Prediction. 21st International Conference on Informatics in Economy (IE 2022).
41. Bejan, C.A., Muntean, M., Bucerzan, D., Stoian, C.D. Considerations About the Regulatory Framework of Cryptocurrency. 22nd International Conference on Informatics in Economy (IE 2023).
42. Stoian, C.D., Bucerzan, D., Bejan, C.A. Virtual Currency - Current Affairs Through the Prism of Legal Regulations. Soft Computing Applications. SOFA 2020.
43. Camelia Daciana STOIAN, Dominic BUCERZAN, Crina Anina BEJAN, Blockchain Technology and Smart Contracts - Public Policy Needed in the Technology Race, Conferința Internațională de Drept al Tehnologiilor Financiare, <https://www.adjuris.ro/fintech/>

44. Craciun Mihaela, Chis Violeta, Craciun Alexandru „Bayesian Network using R” - International Symposium Research and Education in an Innovation ERA - 8rd Edition, May 2019
45. Chis Violeta, Ampwera Brian, Craciun Mihaela, „Text Mining Using R” - International Symposium Research and Education in an Innovation ERA - 8rd Edition, May 2019
46. P. Poulin, S.R. Cowell, and V. Beiu, On the K4-ladder Two-terminal Reliability Once Again, International Conference on Mathematical Modeling in Physical Sciences (IC-MSQUARE), Belgrade, Serbia, 28-31 August 2023. Springer Proc. Maths. & Statistics, vol. 446 (978-3-031-529641), Apr. 2024. <https://doi.org/pending>
47. P. Poulin, S.R. Cowell, and V. Beiu, Two-terminal reliability of the K4-ladder – Revisited, IEEE Advances in Science & Engineering Technology (ASET), Dubai, UAE, February 20-23, 2023. <https://hct.ac.ae/en/events/aset-2023/>
48. R.-M. Beiu, V.-F. Dragoi, and V. Beiu, 3D Hammocks for Communications, Intl. Workshop Soft Comp. Appls. (SOFA2022), Arad, Romania, 21-23 Nov. 2022. <https://doi.org/pending>
49. R.-M. Beiu, S. Hoara, and V. Beiu, Quantum Is Making Hammocks Ubiquitous, Intl. Workshop Soft Comp. Appls. (SOFA2022), Arad, Romania, 21-23 Nov. 2022. <https://doi.org/pending>
50. M. Tache, V.-F. Dragoi, and V. Beiu, On Low Power Redundant Systems, Intl. Workshop Soft Comp. Appls. (SOFA2022) Arad, Romania, 21-23 Nov. 2022. <https://doi.org/pending>
51. A.-C. Beiu and V. Beiu, Designing Highly Reliable Systems Using Random Devices, IBM/IEEE CAS/EDS - AI Compute Symposium @ IBM T.J. Watson Research Center, Yorktown Heights, NY, USA, October 12-14, 2022. <https://doi.org/10.54985/peeref.2303p1524423>
52. A.-C. Beiu, R.-M. Beiu, and V. Beiu, Optimal Design of Linear Consecutive Systems, ACM Intl. Conf. Nanoscale Comp. & Comm. (NanoCom2022), Barcelona, Spain, 5-7 Oct. 2022. <https://doi.org/10.1145/3558583.3558863>
53. M. Tache, S. Hoara, V.-F. Dragoi, and V. Beiu, Green AI from Kirchhoff to Shannon, Intl. Conf. Comp. Comm. & Ctrl. (ICCCC2022), pp. 433–443, Baile Felix, Romania, 16-20 May 2022. https://doi.org/10.1007/978-3-031-16684-6_37
54. L. Daus, M. Jianu, R.-M. Beiu, and V. Beiu, A Tale of Catalan Triangles – Counting Lattice Paths, International Workshop on Soft Computing Applications (SOFA2020), Virtual conference, 27-29 November 2020 (Springer, AISC vol. 1438, 2023), pp. 677–690, https://doi.org/10.1007/978-3-031-23636-5_52

55. R.-M. Beiu, V.-F. Dragoi, and V. Beiu, 3D Hammocks and 2.5D Consecutive – Biology Fine Balancing, International Workshop on Soft Computing Applications SOFA 2020, Virtual conference, November 27-29, 2020. <https://www.sofa-org.eu/2020>
56. R.-M. Beiu, S. Hoara, and V. Beiu, And Now This: Hammocks for Quantum and Photonics, International Workshop on Soft Computing Applications SOFA2020, Virtual conference, November 27-29, 2020 <https://www.sofa-org.eu/2020>
57. V. Beiu, The Unfolding Road from Dust to Trust, SPIE International Conference “Advances in 3OM: Opto-Mechatronics, Opto-Mechanics and Optical Metrology” (Adv3OM 2021), Timisoara, Romania, 13-16 December 2021 (SPIE vol. 12170, May 2022), art. 1217007 (pp. 1–7). <https://doi.org/10.1117/12.2601821>
58. M. Tache, R.-M. Beiu, and V. Beiu, Where Reliability Gets Ugly – The Devil Is in the Details, International Workshop on Soft Computing Applications SOFA 2020, Virtual conference, November 27-29, 2020. <https://www.sofa-org.eu/2020>
59. M. Tache, R.-M. Beiu, and V. Beiu, Where Reliability Gets Ugly – The Devil Is in the Details, International Workshop on Soft Computing Applications SOFA 2020, Virtual conference, November 27-29, 2020. <https://www.sofa-org.eu/2020>
60. S.R. Cowell, S. Hoara, and V. Beiu, Experimenting with Beta Distributions for Approximating Hammocks’ Reliability, International Conference on Computers Communications and Control (ICCCC2020), virtual conference, 11-15 May 2020. In I. Dzitac et al. (Eds.): ICCCC 2020, Springer AISC 1243, 2021, pp. 70–81. https://doi.org/10.1007/978-3-030-53651-0_6
61. M. Jianu, L. Daus, S. Hoara, and V. Beiu, Using Delta-Wye Transformations for Estimating Network’s Reliability, Intl. Conf. Comp. Comm. & Ctrl. (ICCCC2022), pp. 415–426, Baile Felix, Romania, 16-20 May 2022. https://doi.org/10.1007/978-3-031-16684-6_35
62. V. Beiu, S. Hoara, and R.-M. Beiu, Bridging Reliability to Efficiency – Consecutive Elegant and Simple Design, Intl. Conf. Comp. Comm. & Ctrl. (ICCCC2022), pp. 387–400, Baile Felix, Romania, 16-20 May 2022. https://doi.org/10.1007/978-3-031-16684-6_33
63. S. Hoara, R.-M. Beiu, and V. Beiu, Investigating Hammock Networks on IBM Q, International Conference on Computers Communications and Control (ICCCC2020), virtual conference, 11-15 May 2020. In I. Dzitac et al. (Eds.): ICCCC2020, Springer AISC 1243, 2021, pp. 57–69, https://doi.org/10.1007/978-3-030-53651-0_5
64. S.R. Cowell, M. Nagy, and V. Beiu, Reliability of Two-Terminal Networks Equivalent to Small Optimal Sorting Nets, International Conference on Computers Communications and Control (ICCCC2020), virtual conference, 11-15 May 2020. In I. Dzitac et al. (Eds.): ICCCC 2020, Springer AISC 1243, 2021, pp. 45–56. https://doi.org/10.1007/978-3-030-53651-0_4

65. R.-M. Beiu, M.M. Balas, V.E. Balas, and V. Beiu, Seeing is Believing, International Summit on Optics, Photonics and Laser Technologies OPTICS&LASERS'19, San Francisco, CA, USA, 3-5 June 2019.
<https://unitedscientificgroup.com/conferences/optics-and-lasers-2019/home.php>
66. R.-M. Beiu and V. Beiu, Sidestepping the Bounds of Diffraction, International Symposium Research and Education in Innovation Era ISREIE'19, Arad, Romania, 23-25 May 2019. <https://www.uav.ro/academic/cercetare-stiintifica/apeluri-conferin%C8%9Be/isreie/isreie-2020-1>
67. M. Tache, S.R. Cowell, and V. Beiu, Turning Sizing on Its Head and More, International Symposium Research and Education in Innovation Era ISREIE'19, Arad, Romania, 23-25 May 2019. <https://www.uav.ro/academic/cercetare-stiintifica/apeluri-conferin%C8%9Be/isreie/isreie-2020-1>
68. The 22nd International Conference of Numerical Analysis and Applied Mathematics - Crete, Greece - Trends in the study of stochastic dynamics
69. C. Stoica, The 18th International Conference on Mathematics & Statistics: Teaching, Theory & Applications - Athens Institute for Education and Research, ATINER, Athens, Greece - On evolution cocycles associated to control systems
70. C. Stoica, The 21st International Conference of Numerical Analysis and Applied Mathematics - Crete, Greece - Approaching the difference equations by means of $\mathbb{I}^p$ asymptotic behaviours
71. C. Stoica, The 17th International Conference on Mathematics & Statistics: Teaching, Theory & Applications - Athens Institute for Education and Research, ATINER, Athens, Greece - Advances in the study of integral type properties
72. C. Stoica, The 20th International Conference of Numerical Analysis and Applied Mathematics - Rhodes, Greece - Muldowney class asymptotic properties: an overview
73. C. Stoica, The 16th International Conference on Mathematics & Statistics: Teaching, Theory & Applications - Athens Institute for Education and Research, ATINER, Athens, Greece - A study in discrete time of trichotomic issues
74. C. Stoica, The 19th International Conference of Numerical Analysis and Applied Mathematics - Rhodes, Greece - On stochastic issues in the study of evolution equations
75. C. Stoica, Semaine de la Francophonie scientifique - Agence Universitaire de la Francophonie - Bucarest - La recherche scientifique et l'enseignement universitaire dans le contexte des défis de la société d'aujourd'hui
76. C. Stoica, The 15th International Conference on Mathematics & Statistics: Teaching, Theory & Applications - Athens Institute for Education and Research, ATINER, Athens, Greece - An alternative approach to difference equations by evolution cocycles
77. C. Stoica, The 18th International Conference of Numerical Analysis and Applied Mathematics - Rhodes, Greece - An approach to evolution cocycles from a stochastic point of view

78. C. Stoica, The 14th International Conference on Mathematics & Statistics: Teaching, Theory & Applications - Athens Institute for Education and Research, ATINER, Athens, Greece - Modelling with evolution cocycles
79. C. Stoica, International Colloquium "Gender Equality" - Aurel Vlaicu University of Arad - On gender equality in science
80. C. Stoica, The 17th International Conference of Numerical Analysis and Applied Mathematics - Rhodes, Greece - Advances in the stability theory of evolution equations
81. C. Stoica, The 13th International Conference on Mathematics & Statistics: Teaching, Theory & Applications - Athens Institute for Education and Research, ATINER, Athens, Greece - Current trends in the approach of evolution equations
82. C. Stoica, International Symposium - Research and Education in an Innovation Era, 8th Edition - Aurel Vlaicu University of Arad - Approaching the evolution equations by means of operator families
83. C. Stoica, Promoting business culture among young people - Aurel Vlaicu University of Arad - The importance of research and innovation in the formation of entrepreneurship
84. C. Stoica, The International Conference on Mathematics Tiberiu Popoviciu - The Romanian Mathematical Society - Research and education in the romanian academic system
85. C. Stoica, International Conference "Europe: Tradition, Culture, Administration" - Aurel Vlaicu University of Arad & The General Consulate of Romania in Gyula, Hungary - Innovation and research in the European context