

LIST OF PUBLICATIONS

Conf. Dr. Ing Hangan Lia Anca

Nr.	Journal Papers
1	Arcas, G. I., Cioara, T., Anghel, I., Lazea, D., & Hangan, A. (2024). Edge Offloading in Smart Grid. <i>Smart Cities</i> , 7(1), 680-711.
2	Popa, S. L., Surdea-Blaga, T., Dumitrascu, D. L., Chiarioni, G., Savarino, E., David, L., Ismaiel, A Leucuta, D.C., Zsigmond, I., Sebestyen, G., Hangan, A. & Czako, Z. (2022). Automatic Diagnosis of High-Resolution Esophageal Manometry using Artificial Intelligence. <i>Journal of Gastrointestinal & Liver Diseases</i> , 31(4).
3	Surdea-Blaga, T., Sebestyen, G., Czako, Z., Hangan, A. , Dumitrascu, D. L., Ismaiel, A, ... & Popa, S. L. (2022). Automated chicago classification for esophageal motility disorder diagnosis using machine learning. <i>Sensors</i> , 22(14), 5227.
4	Hangan, A. , Chiru, C. G., Arsene, D., Czako, Z., Lisman, D. F., Mocanu, M., ... & Sebestyen, G. (2022). Advanced techniques for monitoring and management of urban water infrastructures—an overview. <i>Water</i> , 14(14), 2174.
5	Czako, Z., Surdea-Blaga, T., Sebestyen, G., Hangan, A. , Dumitrascu, D. L., David, L., ... & Popa, S. L. (2021). Integrated relaxation pressure classification and probe positioning failure detection in high-resolution esophageal manometry using machine learning. <i>Sensors</i> , 22(1), 253.
6	Czako, Z., Sebestyen, G., & Hangan, A. (2021). AutomaticAI—A hybrid approach for automatic artificial intelligence algorithm selection and hyperparameter tuning. <i>Expert Systems with Applications</i> , 182, 115225.
7	Kovács, G., Sebestyen, G., & Hangan, A. (2019). Evaluation metrics for anomaly detection algorithms in time-series. <i>Acta Universitatis Sapientiae, Informatica</i> , 11(2), 113-130.
8	Deak, N., Creț, O., Echim, M., Teodorescu, E., Negrea, C., Văcariu, L., ... & Hangan, A. (2018). Edge computing for space applications: Field programmable gate array-based implementation of multiscale probability distribution functions. <i>Review of Scientific Instruments</i> , 89(12).
9	Sebestyen, G., & Hangan, A. (2017). Anomaly detection techniques in cyber-physical systems. <i>Acta Universitatis Sapientiae, Informatica</i> , 9(2), 101-118.
10	Vacariu, L., Hangan, A. , & Mocanu, M. (2015). Pollution detection on the Cyberwater platform. <i>Environmental Engineering & Management Journal (EEMJ)</i> , 14(9).
List of books and book chapters	
1	Hangan, A. , Văcariu, L., Creț, O., Hedeșiu, H., & Bacoțiu, C. (2021). A System for Monitoring Water Quality Parameters in Rivers. <i>Challenges and Solutions. Big Data Platforms and Applications: Case Studies, Methods, Techniques, and Performance Evaluation</i> , 181-206.
2	Czako, Z., Sebestyen, G., & Hangan, A. (2021). Artificial Intelligence Algorithms Selection and Tuning for Anomaly Detection. In <i>Computational Intelligence: International Joint Conference, IJCCI 2018 Seville, Spain, September 18–20, 2018 Revised Selected Papers</i> (pp. 73-88). Springer International Publishing.
3	Czako, Z., Sebestyen, G., & Hangan, A. (2020). Colorectal image classification with transfer learning and auto-adaptive artificial intelligence platform. In <i>Trends and</i>

	Innovations in Information Systems and Technologies: Volume 2 8 (pp. 534-543). Springer International Publishing.
4	Hangan A., (2020) Contributions to the development of parallel and distributed real-time systems, UTPRESS, ISBN 978-606-737-444-5 https://biblioteca.utcluj.ro/files/carti-online-cu-coperta/444-5.pdf
	List of proceedings papers
1	Serban, C. M., Sebestyen, G. and Hangan, A. (2024). Anomaly Detection in Water Consumption Patterns Using Prediction and Clustering Approaches, 2024 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), Cluj-Napoca, Romania, pp. 1-6, doi: 10.1109/AQTR61889.2024.10554265.
2	Czako, Z., Sebestyen, G., & Hangan, A. (2023, October). Benchmarking Anomaly Detection Algorithms using Hyperparameter Optimization. In 2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 71-78). IEEE.
3	Czako, Z., Hangan, A., Lisman, D., Sebestyen, G., & Deszi, M. M. (2022, September). A Prototype System for Urban Water Consumption Monitoring and Anomaly Detection. In 2022 IEEE 18th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 17-23). IEEE.
4	Serban, C. M., & Hangan, A. (2022, May). A System for Evaluating the Correctness of Physical Exercises Execution. In 2022 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-6). IEEE.
5	Tosa, A., Hangan, A., Sebestyen, G., & István, Z. (2021, December). In-Storage Computation of Histograms with differential privacy. In 2021 International Conference on Field-Programmable Technology (ICFPT) (pp. 1-4). IEEE.
6	Hangan, A., Czako, Z., & Sebestyen, G. (2021, October). IoT data collection and analysis services on CloudUT. In 2021 IEEE 17th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 85-91). IEEE.
7	Mihali, C., Hangan, A., Sebestyen, G., & István, Z. (2021, June). The case for adding privacy-related offloading to smart storage. In Proceedings of the 14th ACM International Conference on Systems and Storage (pp. 1-11).
8	Sebestyen, G., Hangan, A., & Czako, Z. (2021, May). Anomaly detection in water supply infrastructure systems. In 2021 23rd International Conference on Control Systems and Computer Science (CSCS) (pp. 349-355). IEEE.
9	Suciu, A., Hangan, A., Marginean, A., Joldos, M., Voitcu, G., & Echim, M. (2020, September). Parallel implementation of a PIC simulation algorithm using OpenMP. In 2020 15th Conference on Computer Science and Information Systems (FedCSIS) (pp. 381-385). IEEE
10	Czako, Z., Sebestyen, G., & Hangan, A. (2020, September). COVID-19 Preliminary Patient Filtering based on Regular Blood Tests using Auto-Adaptive Artificial Intelligence Platform. In 2020 IEEE 16th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 109-116). IEEE.
11	Joldos, M., Voitcu, G., Suciu, A., Hangan, A., Echim, M., & Marginean, A. (2020, September). A Multi-threaded Particle-in-cell Approach for Kinetic Plasma Simulations. In 2020 IEEE 16th International Conference on Intelligent Computer Communication and Processing (ICCP) (pp. 597-601). IEEE.
12	Sebestyen, G., Hangan, A., & Misin, A. (2020, May). Travel assistant for persons with visual disabilities. In 2020 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-6). IEEE.

13	Sebestyen, G., Hangan, A., Czako, Z., & Kovacs, G. (2018, May). A taxonomy and platform for anomaly detection. In 2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-6). IEEE.
14	Czako, Z., Sebestyen, G., & Hangan, A. (2018). Evaluation Platform for Artificial Intelligence Algorithms. In IJCCI (pp. 39-46).
15	Sebestyen, G., & Hangan, A. (2018). Anomaly Detection using System Identification Techniques. In ICINCO (1) (pp. 492-497).
16	Sebestyen, G., Hangan, A., Kovacs, G., & Czako, Z. (2018) Platform for Anomaly Detection in Time-Series, XXXIV. Kando Conference, Budapest, Hungary
17	Vacariu, L., Hangan, A., Cret, O., & Cretu, A. (2017, May). A decision support system on the cyberwater platform. In 2017 21st International Conference on Control Systems and Computer Science (CSCS) (pp. 591-598). IEEE.
18	Sebestyen, G., Stoica, I., & Hangan, A. (2016, September). Human activity recognition and monitoring for elderly people. In 2016 IEEE 12th international conference on intelligent computer communication and processing (ICCP) (pp. 341-347). IEEE.
19	Sebestyen, G., & Hangan, A. (2016, May). Bloom filters for information retrieval in the context of IoT. In 2016 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-6). IEEE.
20	Vacariu, L., Cret, O., Hangan, A., & Bacotiu, C. (2015, May). Water parameters monitoring on a cyberwater platform. In 2015 20th international conference on control systems and computer science (pp. 797-802). IEEE.
21	Vacariu, L., Hangan, A., Cret, O., & Hedesiu, H. (2015, May). An INSPIRE-Compliant System for Pollution Detection for Somes River. In 2015 20th International Conference on Control Systems and Computer Science (pp. 803-808). IEEE.
22	Sebestyen, G., Muresan, D., & Hangan, A. (2015, May). Road quality evaluation with mobile devices. In Proceedings of the 2015 16th International Carpathian Control Conference (ICCC) (pp. 458-464). IEEE.
23	Sebestyen, G., Hangan, A., Oniga, S., & Gal, Z. (2014, May). eHealth solutions in the context of Internet of Things. In 2014 IEEE International Conference on Automation, Quality and Testing, Robotics (pp. 1-6). IEEE.
24	Hangan, A., Vacariu, L., Cret, O., & Muste, M. (2014, September). Providing water parameters monitoring data through interoperable web services. In 2014 11th International Conference on Informatics in Control, Automation and Robotics (ICINCO) (Vol. 1, pp. 684-690). IEEE.
25	Hangan, A. ; Vacariu, L.; Cret, O.; Hedesiu, H., "A Prototype for the Remote Monitoring of Water Parameters," Control Systems and Computer Science (CSCS), 2013 19th International Conference on , vol., no., pp.634,639, 29-31 May 2013 ISBN: 978-1-4673-6140-8
26	Gheorghe Sebestyen, Anca Hangan , Katalin Sebestyen, Roland Vachter, Self-tuning Multimedia Streaming System on Cloud Infrastructure, Procedia Computer Science, Volume 18, 2013, Pages 1342-1351, ISSN 1877-0509
27	Gheorghe Sebestyen, Anca Hangan , "Genetic approach for real-time scheduling on multiprocessor systems," Intelligent Computer Communication and Processing (ICCP), 2012 IEEE International Conference on , vol., no., pp.267,272, Aug. 30 2012-Sept. 1 2012 ISBN: 978-1-4673-2953-8

28	Gheorghe Sebestyen, Anca Hangan , Alin Suci, "Simulation-based Schedulability Tests for Multiprocessor Real-time Systems," in Proceedings of 2012 IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2012 ISBN: 978-1-4673-0704-8
29	Anca Hangan, Gheorghe Sebestyen, "RTMultiSim: A versatile simulator for multiprocessor real-time systems," in Proceedings of The 3rd International Workshop on Analysis Tools and Methodologies for Embedded and Real-time Systems (WATERS) in conjunction with ECRTS2012 Pisa, Italy, p. 15, 2012
30	Anca Hangan , Gheorghe Sebestyen, "Cyclic executive-based method for scheduling hard real-time transactions on distributed systems" iccp, pp.441-444, Proceedings of the 2011 IEEE 6th International Conference on Intelligent Computer Communication and Processing
31	Vlad Olaru, Anca Hangan , Gheorghe Sebestyen-Pal: Java Support Packages and Benchmarks for Multi-core Processors. HPCC 2011
32	Anca Hangan , Gheorghe Sebestyen, "Simulation-based evaluation of real-time multiprocessor scheduling strategies" iccp, pp.375-378, Proceedings of the 2010 IEEE 6th International Conference on Intelligent Computer Communication and Processing, 2010 ISBN 978-1-4244-8228-3
33	Olaru, V.; Hangan, A. ; Sebestyen, Gh.; , "RTSJMcBench, a framework for writing parallel benchmarks for Real-Time Java on multi-core architectures," Automation Quality and Testing Robotics (AQTR), 2010 IEEE International Conference on , vol.2, no., pp.1-6, 28-30 May 2010
34	Anca Hangan , Ramona Marfievici, Gheorghe Sebestyen - "Solutions for Real-Time Communication over Best-Effort Networks", RoEduNet International Conference 2008, pp.44, ISBN: 978-973-662-393-6
35	Vlad Olaru, Anca Hangan , Gheorghe Sebestyen, Gavril Saplacan - "Real-time Java and multi-core architectures", Intelligent Computer Communication and Processing, 2008. ICCP 2008, pp.215-222, ISBN: 978-1-4244-2673-7
36	Ramona Marfievici, Anca Hangan , Gheorghe Sebestyen - "Periodic real-time data flows over general purpose networks", Intelligent Computer Communication and Processing, 2008. ICCP 2008, pp.207-213, ISBN: 978-1-4244-2673-7
37	Gheorghe Sebestyen, Anca Hangan - "Transaction-based model for real-time distributed control systems", Automation, Quality and Testing, Robotics, 2008. AQTR 2008, pp.165-170, ISBN: 978-1-4244-2576-1
38	Anca Hangan , Ramona Marfievici, Gheorghe Sebestyen - "Reservation-Based Data Flow Scheduling in Distributed Control Applications" - The Third International Conference on Networking and Services, 19-25 June 2007, Athens, Greece, in Proceedings of the Third International Conference on Networking and Services, IEEE Computer Society Washington, DC, USA, 2007
39	Ramona Marfievici, Gheorghe Sebestyen, Anca Pop-Bidian - "Industrial Control Communication Framework based on an IPv6 Infrastructure" - International Multi-Conference on Computing in the Global Information Technology - Challenges for the Next Generation of IT&C, Bucuresti, Romania, 1-3 August 2006, in IEEE Computer Society Order Number E2629, ISBN 0-7695-2629-2
40	Ramona Marfievici, Gheorghe Sebestyen, Anca Pop-Bidian - "QoS and IPv6 Infrastructure for Industrial Control Applications" - 5th RoEduNet IEEE International Conference, Sibiu, Romania, June 2006, in "Proceedings of the 5th

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