

Accuracy analysis of selected time series and machine learning methods for smart cities based on Estonian electricity consumption forecast

Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo; Korõtko, Tarmo; Biechl, Helmuth 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 425-428 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161690>

AI applications to enhance resilience in power systems and microgrids - a review

Zahraoui, Younes; **Korõtko, Tarmo; Rosin, Argo;** Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex; Alhamrouni, Ibrahim Sustainability 2024 / art. 4959 <https://doi.org/10.3390/su16124959>

AI generated route data pre-processing for faster decision making

Maas, Rene; Ševtšenko, Eduard; **Karaulova, Tatjana** 2024 8th International Young Engineers Forum on Electrical and Computer Engineering (YEF-ECE) 2024 / p. 82-87 <https://doi.org/10.1109/YEF-ECE62614.2024.10625086>

Anomaly detection, classification and identification Tool (ADCIT)

Asefi, Sajjad; Mitrovic, Mile; Cetenovic, Dragan; Levi, Victor; Gryazina, Elena; Terzija, Vladimir Software impacts 2023 / art. 100465, 3 p. : ill <https://doi.org/10.1016/j.simpa.2023.100465> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Anti-money laundering powered by graph machine learning: 'Show me your friends and I will tell you who you are'

Astrova, Irina Intelligent decision technologies 2023 / p. 243-261 <https://doi.org/10.3233/IDT-220193> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Applicability of spiral drawing test for mental fatigue modelling

Senkiv, Olesja; Nömm, Sven; Toomela, Aaro IFAC-PapersOnLine 2019 / p. 190-195 : ill <https://doi.org/10.1016/j.ifacol.2019.01.064> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Application of artificial intelligence and machine learning for BIM : review

Bassir, David; Lodge, Hugo; Chang, Haochen; **Majak, Jüri;** Chen, Gonfa International journal for simulation and multidisciplinary design optimization 2023 / art. 5 <https://doi.org/10.1051/smdo/2023005> [Journal metrics at Scopus](#) [Article at Scopus](#)

Application of machine learning for assessment of HS code correctness

Spitšakova, Margarita; Haav, Hele-Mai Baltic journal of modern computing 2020 / p. 698-718 <https://doi.org/10.22364/bjmc.2020.8.4.13> [Journal Metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Applying machine learning with satellite altimetry data for prediction of absolute dynamic topography for the Baltic Sea

Mostafavi, Majid; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 26 I. <https://medialib.cmcndn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Artificial intelligence and education

Jaakkola, Hannu; **Henno, Jaak;** Lahti, J-P.; Järvinen, Raimo; Mäkeläinen, Jukka 2020 43rd International Convention on Information, Communication and Electronic Technology (MIPRO), 28 Sept.-2 Oct. 2020, Opatija, Croatia : proceedings 2020 / p. 548-555 <https://doi.org/10.23919/MIPRO48935.2020.9245329>

Artificial intelligence and the GDPR : Inevitable nemeses?

Kesa, Aleksandr; **Kerikmäe, Tanel** TalTech journal of European studies 2020 / p. 68-90 <https://doi.org/10.1515/bjes-2020-0022> https://content.sciendo.com/view/journals/bjes/bjes-overview.xml?tab_body=latestIssueToc-79907 https://www.ester.ee/record=b5290032*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Artificial intelligence in monitoring and diagnostics of electrical energy conversion systems

Vaimann, Toomas; Rassõlkin, Anton; Kallaste, Ants; Pomarnacki, Raimondas; **Belahcen, Anouar;** Van Khang, Hyunh 2020 27th International Workshop on Electric Drives: MPEI Department of Electric Drives 90th Anniversary (IWED), Moscow, Russia, January 27-30, 2020 2020 / 4 p <https://doi.org/10.1109/IWED48848.2020.9069566>

Artificial intelligence within the military domain and cyber warfare

Hallaq, Bil; **Sömer, Tiia; Osula, Anna-Maria;** Ngo, Kim; Mitchener-Nissen, Timothy Proceedings of the 16th European Conference on Cyber Warfare and Security, ECCWS 2017 : hosted by University College Dublin, Ireland, 29-30 June 2017 2017 / p. 153-156 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85028013021&origin=resultslist&zone=contextBox>

Artificial lateral line for aquatic habitat modelling: An example for Lefua echigonia

Garcia-Vega, Ana; Fuentes-Perez, Juan Francisco; Fukuda, Shinji; **Kruusmaa, Maarja;** Sanz-Ronda, Francisco Javier; **Tuhtan, Jeffrey Andrew** Ecological Informatics 2021 / art. 101388 <https://doi.org/10.1016/j.ecoinf.2021.101388> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A Bayesian optimization approach for calibrating large-scale activity-based transport models

Agriesti, Serio; Kuzmanovski, Vladimir; Hollmen, Jaakko; Roncoli, Claudio; Nahmias-Biran, Bat-Hen IEEE Open Journal of

Behavioural compass : animal behaviour recognition using magnetometers

Chakravarty, Pritish; **Maalberg, Maiki**; Cozzi, Gabriele; Ozgul, Arpat; Aminian, Kamiar Movement Ecology 2019 / Art. nr. 28 <https://doi.org/10.1186/s40462-019-0172-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CapsNet on embedded devices in a data scarce scenario

Ezechukwu, Dismas Ndubuis; **Le Moulec, Yannick** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 l. <https://doi.org/10.1109/BEC56180.2022.9935600>

Comparing domain expert and machine learning data enrichment of building registry

Torim, Ants; **Ilste, Elisa**; **Pikas, Ergo**; **Liiv, Innar**; **Robal, Tarmo**; **Kalamees, Targo** Buildings 2025 / art. 1798 <https://doi.org/10.3390/buildings15111798>

Comparison of Bayesian and particle swarm algorithms for hyperparameter optimisation in machine learning applications in high energy physics

Tani, Laurits; **Veelken, Christian** Computer physics communications 2024 / p. 108955 <https://doi.org/10.1016/j.cpc.2023.108955>

Comparison of Bayesian and particle swarm algorithms for hyperparameter optimisation in machine learning applications in high energy physics : [preprint]

Tani, Laurits; **Veelken, Christian** arXiv.org 2024 / 8 p. : ill <https://doi.org/10.48550/arXiv.2201.06809>

Comparison of machine learning based methods for residential load forecasting

Shabbir, Noman; **Ahmadihangar, Roya**; **Kütt, Lauri**; **Rosin, Argo** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818267>

Current AI applications by Estonian tax authorities and use case scenarios

Künnapas, Kaido; **Maslionkina, Palina**; **Hinno, Risto**; **Liberts, Raivis** TalTech Journal of European Studies 2025 / p. 179-208 https://www.ester.ee/record=b5290032*est <https://doi.org/10.2478/bjes-2025-0010>

Custom simplified machine learning algorithms for fault diagnosis in electrical machines

Raja, Hadi Ashraf; **Asad, Bilal**; **Vaimann, Toomas**; **Kallaste, Ants**; **Rassõlkin, Anton**; **Belahcen, Anouar** Diagnostika '22 : 2022 International Conference on Diagnostics in Electrical Engineering : Conference proceedings 2022 / 4 p. <https://doi.org/10.1109/Diagnostika55131.2022.9905174>

Data science-based techniques for modelling and diagnostics of battery cells based on end-of-life criteria

Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** 2023 International Conference on Electrical Drives and Power Electronics (EDPE) 2023 / 6 p <https://doi.org/10.1109/EDPE58625.2023.10274007>

Data-driven approaches based microwave filter tuning - a review

Sekhri, Even; **Tamre, Mart**; **Kapoor, Rajiv** Advances in Artificial-Business Analytics and Quantum Machine Learning : Select Proceedings of the 3rd International Conference, Com-IT-Con 2023, Volume 2 2024 / p. 273-286 https://doi.org/10.1007/978-981-97-4860-0_22 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Detailed analysis of the Luria's alternating series tests for Parkinson's disease diagnostics

Nõmm, Sven; **Bardõš, Konstantin**; **Toomela, Aaro**; **Medijainen, Kadri**; **Taba, Pille** 17th IEEE International Conference on Machine Learning and Applications : ICMLA 2018, 17–20 December 2018, Orlando, Florida, USA : proceedings 2018 / p. 1347–1352 <https://doi.org/10.1109/ICMLA.2018.00219>

Detecting Simpson's paradox : a machine learning perspective

Sharma, Rahul; **Garayev, Huseyn**; **Kaushik, Minakshi**; **Arakkal Peious, Sijo**; **Tiwari, Prauag**; **Draheim, Dirk** Database and Expert Systems Applications : 33rd International Conference, DEXA 2022, Vienna, Austria, August 22-24, 2022 : proceedings. Part I 2022 / p. 323-335 : ill https://doi.org/10.1007/978-3-031-12423-5_25 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Detecting Simpson's paradox : a step towards fairness in machine learning

Sharma, Rahul; **Kaushik, Minakshi**; **Arakkal Peious, Sijo**; **Bertl, Markus**; **Ankit, Vidyarthi**; **Ashwani, Kumar**; **Draheim, Dirk** New Trends in Database and Information Systems : ADBIS 2022 Short Papers, Doctoral Consortium and Workshops : DOING, K-GALS, MADEISD, MegaData, SWODCH, Turin, Italy, September 5-8, 2022 : proceedings 2022 / p. 67-76 : ill https://doi.org/10.1007/978-3-031-15743-1_7 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Detection and evaluation of driver distraction using machine learning and fuzzy logic

Aksjonov, Andrei; **Nedoma, Pavel**; **Vodovozov, Valery**; **Petlenkov, Eduard**; **Herrmann, Martin** IEEE Transactions on Intelligent Transportation Systems 2019 / p. 2048 - 2059 <https://doi.org/10.1109/TITS.2018.2857222> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Detection of bulbar involvement in patients with amyotrophic lateral sclerosis by machine learning voice analysis : diagnostic decision support development study

Tena, Alberto; Claria, Francec; Solsona, Francesc; **Meister, Einar**; Povedano, Monica JMIR Medical Informatics 2021 / e21331, 18 p. : ill <https://doi.org/10.2196/21331> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Differences in Android behavior between real device and emulator : a malware detection perspective

Guerra Manzanares, Alejandro; Bahsi, Hayretidin; Nömm, Sven 6th International Conference on Internet of Things: Systems, Management and Security (IOTSMS), Granada, Spain, October 22-25, 2019 2019 / art. 8939268, p. 399-404 <https://doi.org/10.1109/IOTSMS48152.2019.8939268>

Digital transformation insights from an AI solution in search of a problem

Dreyling III, Richard Michael; Tammet, Tanel; Pappel, Ingrid Future Data and Security Engineering. Big Data, Security and Privacy, Smart City and Industry 4.0 Applications : 10th International Conference, FDSE 2023, Da Nang, Vietnam, November 22–24, 2023 : proceedings 2023 / p. 341 - 351 https://doi.org/10.1007/978-981-99-8296-7_24 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Dimensionality reduction for machine learning based IoT botnet detection

Bahsi, Hayretidin; Nömm, Sven 15th International Conference on Control, Automation, Robotics and Vision (ICARCV 2018) : Singapore, November 18-21, 2018 2018 / p. 1857-1862 : ill <https://doi.org/10.1109/ICARCV.2018.8581205>

Discretizing numerical attributes : an analysis of human perceptions

Kaushik, Minakshi; Sharma, Rahul; Draheim, Dirk arXiv.org 2023 / 18 p. : ill <https://doi.org/10.48550/arXiv.2311.03278>

Discretizing numerical attributes : an analysis of human perceptions : [conference paper]

Kaushik, Minakshi; Sharma, Rahul; Vidyarthi, Ankit; Draheim, Dirk New Trends in Database and Information Systems : ADBIS 2022 Short Papers, Doctoral Consortium and Workshops : DOING, K-GALS, MADEISD, MegaData, SWODCH, Turin, Italy, September 5-8, 2022 : proceedings 2022 / p. 188-197 https://doi.org/10.1007/978-3-031-15743-1_18 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Driver distraction detection and evaluation with artificial neural network and fuzzy logic : In-vehicle information system as a driver's secondary activity: case study

Aksjonov, Andrei; Nedoma, Pavel; Vodovozov, Valery; Petlenkov, Eduard 2018 IEEE 15th International Workshop on Advanced Motion Control (AMC 2018) 2018 / p. 523–528 : ill [Driver distraction detection and evaluation with artificial neural network and fuzzy logic : In-vehicle information system as a driver's secondary activity: case study](#)

An efficient assistance in cavity filter tuning using filter screw classification

Sekhri, Even; Tamre, Mart; Kapoor, Rajiv Advances in artificial-business analytics and quantum machine learning : select proceedings of the 3rd international conference, Com-IT-Con 2023, volume 1 2024 / p. 791-799 https://doi.org/10.1007/978-981-97-2508-3_58 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Enabling cross-layer reliability and functional safety assessment through ML-based compact models

Alexandrescu, Dan; **Balakrishnan, Aneesh**; Lange, Thomas; Glorieux, Maximilien Proceedings : 2020 26th IEEE International Symposium on On-Line Testing and Robust System Design : IOLTS 2020, Napoli, Italy, July 13-16, 2020 : virtual edition 2020 / 6 p. : ill <https://doi.org/10.1109/IOLTS50870.2020.9159750>

Ensemble approach for detection of depression using EEG features

Avots, Egils; Jermakovs, Klavs; **Bachmann, Maie; Päeske, Laura**; Ozcinar, Cagri; Anbarjafari, Gholamreza Entropy 2022 / art. 211 <https://doi.org/10.3390/e24020211> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimating UWB positioning integrity based on ranging residuals

Tommingas, Mihkel; Ulp, Sander; Alam, Muhammad Mahtab; Mürsepp, Ivo; Laadung, Taavi 2023 24th International Conference on Applied Electromagnetics and Communications (ICECOM) 2023 / 5 p <https://doi.org/10.1109/ICECOM58258.2023.10367954>

Evelekt AS turnover forecasting using the machine learning method

Reiman, Riido AI IN BUSINESS : proceedings of the scientific workshop on business implications of artificial intelligence, June 7, 2022 2022 / p. 58-60 : ill https://www.ester.ee/record=b5506022*est <https://digikogu.taltech.ee/et/Item/2096bada-661d-4928-99a7-bfbce51825d8>

An exhaustive multi-aspect analysis of swarm intelligence algorithms in numerical association rule mining

Kaushik, Minakshi; Sharma, Rahul; Koiva, Pilleriin; Fister, Iztok; Draheim, Dirk IEEE Access 2024 / p. 138985 - 139002 <https://doi.org/10.1109/ACCESS.2024.3417334> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Experts still needed : boosting long-term android malware detection with active learning

Guerra-Manzanares, Alejandro; Bahsi, Hayretidin Journal of Computer Virology and Hacking Techniques 2024 / p. 901 - 918 <https://doi.org/10.1007/s11416-024-00536-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Explainability and transparency of classifiers for air-handling unit faults using explainable artificial intelligence (XAI)
Meas, Molika; Machlev, Ram; **Köse, Ahmet;** Tepljakov, Aleksei; **Loo, Lauri;** Levron, Yoash; **Petlenkov, Eduard;** Belikov, Juri
Sensors 2022 / art. 6338 : ill <https://doi.org/10.3390/s22176338> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forecasting of energy consumption and production using recurrent neural networks
Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; **Iqbal, Muhammad Naveed;** Ghahfarokhi, Payam Shams
Advances in electrical and electronic engineering 2020 / p. 190–197 <https://doi.org/10.15598/aeee.v18i3.3597> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forecasting short term wind energy generation using machine learning
Shabbir, Noman; Ahmadiahangar, Roya; **Kütt, Lauri;** Iqbal, Muhammad Naveed; **Rosin, Argo** 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 4 p <https://doi.org/10.1109/RTUCON48111.2019.8982365>

Fractional order sliding mode controller based on supervised machine learning techniques for speed control of PMSM
Zahraoui, Younes; Zaihidee, Fardila M.; Kermadi, Mostefa; Mekhilef, Saad; Mubin, Marizan; Tang, Jing Rui; Zaihidee, Ezrinda M.
Mathematics 2023 / art. 1457 <https://doi.org/10.3390/math11061457> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Future opportunities for systematic AI support in healthcare
Bertl, Markus; Piho, Gunnar; **Draheim, Dirk;** Ross, Peeter; Pechmann, Ludwig; Bucciarelli, Nicholas; **Sharma, Rahul** Bridging the Gap Between AI and Reality : First International Conference, AISoLA 2023, Crete, Greece, October 23–28, 2023, Selected Papers 2024 / p. 203 - 224 https://doi.org/10.1007/978-3-031-73741-1_13 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Generation of unmeasured loading levels data for condition monitoring of induction machine using machine learning
Billah, Md Masum; Saberi, Alireza Nemat; Hemeida, Ahmed; Martin, Floran; **Kudelina, Karolina;** **Asad, Bilal;** **Naseer, Muhammad Usman;** Mukherjee, Victor; Belahcen, Anouar IEEE transactions on magnetics 2024 / art. 8201104
<https://doi.org/10.1109/TMAG.2023.3312267>

Harnessing graph neural networks to predict international trade flows
Sellami, Bassem; Ounoughi, Chahinez; **Kalvet, Tarmo;** Tiits, Marek; Rincon-Yanez, Diego Big Data and Cognitive Computing 2024 / art. 65 <https://doi.org/10.3390/bdcc8060065> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hybrid feature selection models for machine learning based botnet detection in IoT networks
Guerra Manzanares, Alejandro; **Bahsi, Hayretdin;** **Nömm, Sven** 2019 International Conference on Cyberworlds : CW 2019 : 2-4 October 2019, Kyoto, Japan : proceedings 2019 / p. 324-327 : ill <https://doi.org/10.1109/CW.2019.00059>

The impact of load on global parameters of electrical machines in case of healthy and broken rotor bars
Kudelina, Karolina; Raja, Hadi Ashraf; **Autsou, Siarhei;** **Asad, Bilal;** **Vaimann, Toomas;** **Rassõlkin, Anton;** **Kallaste, Ants;** **Shabbir, Noman** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 5 l. <https://doi.org/10.1109/BEC56180.2022.9935614>

Impact-driven discretization of numerical factors : case of two- and three-partitioning
Kaushik, Minakshi; **Sharma, Rahul;** **Arakkal Peious, Sijo;** **Draheim, Dirk** Big Data Analytics. BDA 2021 : 9th International Conference, BDA 2021, Virtual Event, December 15-18, 2021 : proceedings 2021 / p. 244–260 https://doi.org/10.1007/978-3-030-93620-4_18 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Improved fault classification and localization in power transmission networks using vae-generated synthetic data and machine learning algorithms
Khan, Muhammad Amir; **Asad, Bilal;** **Vaimann, Toomas;** **Kallaste, Ants;** Pomarnacki, Raimondas; Hyunh, Van Khang Machines 2023 / art. 963 <https://doi.org/10.3390/machines11100963> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improving response time of task and Adaboost classifiers in mobile fog computing
Darbanian, Elham; **Rahbari, Dadmehr;** Ghanizadeh, Roghayeh; Nickray, Mohsen Jordanian journal of computers and information technology 2020 / p. 345–360 <https://www.ejmanager.com/mnstemp/71/71-1590557276.pdf?t=1608030630>

In silico machine learning methods in drug development
Dobchev, Dimitar Atanasov; Pillai, Girinath Gopinathan; **Karelson, Mati** Current topics in medicinal chemistry 2014 / p. 1913-1922
<https://doi.org/10.2174/1568026614666140929124203> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In-depth feature selection and ranking for automated detection of mobile malware
Guerra Manzanares, Alejandro; **Nömm, Sven;** **Bahsi, Hayretdin** Proceedings of the 5th International Conference on Information Systems Security and Privacy : ICISPP 2019 : February 23-25, 2019, Prague, Czech Republic. Vol. 1 2019 / p. 274-283 : ill
<https://doi.org/10.5220/0007349602740283>

In-depth feature selection for the statistical machine learning-based botnet detection in IoT networks

Kalakoti, Rajesh; Nömm, Sven; Bahsi, Hayrettdin IEEE Access 2022 / p. 94518-94535

<https://doi.org/10.1109/ACCESS.2022.3204001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Industrial robot training in the simulation using the machine learning agent

Nutonen, Karle; Kuts, Vladimir; Otto, Tauno Procedia computer science 2023 / p. 446-455

<https://doi.org/10.1016/j.procs.2022.12.240> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Integrating Digital Twin Software Solutions with Collaborative Industrial Systems : A Comprehensive Review for Operational Efficiency

Guerra-Zubiaga, David; Aksu, Murat; Richards, Gershom; Kuts, Vladimir Applied Sciences 2025 / art. 7049

<https://doi.org/10.3390/app15137049>

Knowledge based decision making in mechanical workshops

Kruuser, Kaarel; Riives, Jüri; Kiolein, Indrek Proceedings of the 32nd International DAAAM Virtual Symposium "Intelligent Manufacturing & Automation" 2021 / p. 0514-0521 <https://doi.org/10.2507/32nd.daaam.proceedings.074>

Latest research trends in gait analysis using wearable sensors and machine learning: A systematic review

Saboor, Abdul; Kask, Triin; Kuusik, Alar; Alam, Muhammad Mahtab; Le Moullec, Yannick IEEE Access 2020 / art. 3022818, p. 167830-167864 <https://doi.org/10.1109/ACCESS.2020.3022818> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Learning from few cyber-attacks : addressing the class imbalance problem in machine learning-based intrusion detection in software-defined networking

Mirsadeghi, Seyed Mohammad Hadi; Bahsi, Hayrettdin; Vaarandi, Risto; Inoubli, Wissem IEEE Access 2023 / p. 140428 - 140442 <https://doi.org/10.1109/ACCESS.2023.3341755> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Learning timed automata from interaction traces

Vain, Jüri; Kanter, Gert; Anier, Aivo IFAC-PapersOnLine 2019 / p. 205-210 <https://doi.org/10.1016/j.ifacol.2019.12.097> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Legal engineering of the anti-abuse rule in ATAD : architecture of the regression tree model

Künnapas, Kaido TalTech journal of European studies 2021 / p. 65-82 : ill https://www.ester.ee/record=b5290032*est

Leveraging the first line of defense : a study on the evolution and usage of android security permissions for enhanced android malware detection

Guerra Manzanares, Alejandro; Luckner, Marcin; Bahsi, Hayrettdin Journal of Computer Virology and Hacking Techniques 2022 / 32 p. : ill <https://doi.org/10.1007/s11416-022-00432-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

LightGBM-based fault diagnosis of rotating machinery under changing working conditions using modified recursive feature elimination

Saberi, Alireza Nemat; Belahcen, Anouar; Sobra, Jan; Vaimann, Toomas IEEE Access 2022 / p. 81910-81925

<https://doi.org/10.1109/ACCESS.2022.3195939> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Lowering uncertainty of cancer classification

Okun, O.; Priisalu, Helen Proceedings of IPMU'08 2008 / p. 543-550 : ill

Machine learning and deep learning techniques for residential load forecasting : a comparative analysis

Shabbir, Noman; Kütt, Lauri; Raja, Hadi Ashraf; Ahmadiyahangar, Roya; Rosin, Argo; Husev, Oleksandr 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2021 / p. 1-5 <https://doi.org/10.1109/RTUCON53541.2021.9711741>

A machine learning approach to achieving energy efficiency in relay-assisted LTE-a downlink system

Hassan, Hammad; Ahmed, Ifran; Ahmad, Rizwan; Khammari, Hedi; Bhatti, Ghulam; Ahmed, Waqas; Alam, Muhammad Mahtab Sensors 2019 / art. 3461, 25 p. : ill <https://doi.org/10.3390/s19163461> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning based analysis of the upper limb freezing during handwriting in Parkinson's disease patients

Gorbatšov, Vassili; Valla, Elli; Nömm, Sven; Medijainen, Kadri; Taba, Pille; Toomela, Aaro IFAC-PapersOnLine 2022 / p. 91-95 <https://doi.org/10.1016/j.ifacol.2022.10.237> [Conference Proceeding metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Machine learning for android malware detection : mission accomplished? a comprehensive review of open challenges and future perspectives

Guerra-Manzanares, Alejandro Computers and Security 2024 / art. 103654 <https://doi.org/10.1016/j.cose.2023.103654> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning techniques for wireless-powered ambient backscatter communications : enabling intelligent iot networks in 6g era

Jameel, Furqan; **Sharma, Navuday**; Khan, Muhammad Awais; Khan, Imran; **Alam, Muhammad Mahtab**; Alam, Muhammad Mahtab; Mavromoustakis, Constandinos X. Internet of Things / 2020 https://doi.org/10.1007/978-3-030-44907-0_8 [Article collection metrics at Scopus](#) [Article at Scopus](#)

Machine learning to tackle the challenges of transient and soft errors in complex circuits

Lange, Thomas; **Balakrishnan, Aneesh**; Glorieux, Maximilien; Alexandrescu, Dan; Sterpone, Luca 2019 IEEE 25th International Symposium on On-Line Testing and Robust System Design (IOLTS), 1-3 July 2019, Greece 2019 / p. 7-14 : ill <https://doi.org/10.1109/IOLTS.2019.8854423>

Machine learning-based prediction of specific energy consumption for cut-off grinding

Awan, Muhammad Rizwan; Rojas, Hernan A. Gonzalez; **Hameed, Saqib**; Riaz, Fahid; Hamid, Shahzaib; **Hussain, Abrar** Sensors 2022 / art. 7152 <https://doi.org/10.3390/s22197152> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Malicious accounts detection from online social networks : a systematic review of literature

Ben Sassi, Imen; **Ben Yahia, Sadok** International Journal of General Systems 2021 / p. 741-814 <https://doi.org/10.1080/03081079.2021.1976773> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Methods of condition monitoring and fault detection for electrical machines

Kudelina, Karolina; **Asad, Bilal**; **Vaimann, Toomas**; **Rassõlkin, Anton**; **Kallaste, Ants**; Khang, Huynh Van Energies 2021 / art. 7459, 20 p. : ill <https://doi.org/10.3390/en14227459> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microgrid oriented modeling of space heating system based on neural networks

Häring, Tobias; **Kull, Tuule Mall**; **Ahmadihangar, Roya**; **Rosin, Argo**; **Thalfeldt, Martin**; **Biechl, Helmut** Journal of building engineering 2021 / art. 103150, 12 p. : ill <https://doi.org/10.1016/j.jobe.2021.103150> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

ML-based online design error localization for RISC-V implementations

Selg, Hardi; **Jenihhin, Maksim**; **Ellervee, Peeter**; **Raik, Jaan** 2023 IEEE 29th International Symposium on On-Line Testing and Robust System Design (IOLTS) : IOLTS 2023 : July 3rd-5th, 2023, Platania, Chania (Crete), Greece : proceedings 2023 / 7 p. <https://doi.org/10.1109/IOLTS59296.2023.10224864>

Multi-Rate Vibration Signal Analysis for Enhanced Data-Driven Monitoring of Bearing Faults in Induction Machines

El Bouharrouti, Nada; Koveshnikov, Semen; Garcia-Calva, Tomas Alberto; Vehvilainen, Milla; **Kudelina, Karolina**; **Naseer, Muhammad Usman**; **Vaimann, Toomas**; Belahcen, Anouar 2024 International Conference on Electrical Machines, ICEM 2024 2024 / 7 p. <http://dx.doi.org/10.1109/ICEM60801.2024.10700488>

Network IDS alert classification with active learning techniques

Vaarandi, Risto; Guerra-Manzanares, Alejandro Journal of Information Security and Applications 2024 / art. 103687 <https://doi.org/10.1016/j.jisa.2023.103687> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New solution for extracting inductive learning rules and their post-analysis

Kuusik, Rein, inform.; **Lind, Grete** IMMM 2011 : The First International Conference on Advances in Information Mining and Management : Barcelona, Spain, October 23-28, 2011 2011 / p. 121-126 http://personales.upv.es/thinkmind/dl/conferences/immm/immm_2011/immm_2011_6_30_20160.pdf

Novel real-time in-step gait anomaly detection algorithms

Rostovski, Jakob; **Krivošei, Andrei**; **Kuusik, Alar**; **Le Moullec, Yannick**; **Alam, Muhammad Mahtab** techrxiv.org 2024 <https://doi.org/10.36227/techrxiv.171173236.66440239/v1>

A novel short receptive field based dilated causal convolutional network integrated with Bidirectional LSTM for short-term load forecasting

Javed, Umar; Ijaz, Khalid; Jawad, Muhammad; Khosa, Ikramullah; Ansari, Ejaz Ahmad; Zaidi, Khurram Shabih; Rafiq, Muhammad Nadeem; **Shabbir, Noman** Expert systems with applications 2022 / art. 117689 <https://doi.org/10.1016/j.eswa.2022.117689> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An analysis of human perception of partitions of numerical factor domains

Kaushik, Minakshi; **Sharma, Rahul**; **Shahin, Mahtab**; **Arakkal Peious, Sijo**; **Draheim, Dirk** Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) ; Vol. 13635 LNCS 2022 / p. 137-144 https://doi.org/10.1007/978-3-031-21047-1_13 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

On explainable AI and abductive inference

Medianovskiy, Kyrlo; Pietarinen, Ahti-Veikko Philosophies 2022 / art. 35 <https://doi.org/10.3390/philosophies7020035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On statistical paradoxes and overcoming the impact of bias in expert systems : towards fair and trustworthy decision making

Sharma, Rahul SSRN 2023 / 37 p. : ill <https://doi.org/10.2139/ssrn.4506432>

On the application of active learning for efficient and effective botnet detection

Guerra Manzanares, Alejandro; Bahsi, Hayretidin Future Generation Computer Systems 2023 / p. 40-53 : ill <https://doi.org/10.1016/j.future.2022.10.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the estimation of complex circuits functional failure rate by machine learning techniques

Lange, Thomas; **Balakrishnan, Aneesh**; Glorieux, Maximilien; Alexandrescu, Dan; Sterpone, Luca 49th Annual IEEE/IFIP International Conference on Dependable Systems and Networks - DSN 2019 : Supplemental Volume : proceedings 2019 / p. 35-41 : ill <https://doi.org/10.1109/DSN-S.2019.00021>

On the relativity of time : implications and challenges of data drift on long-term effective android malware detection

Guerra Manzanares, Alejandro; Bahsi, Hayretidin Computers & Security 2022 / art. 102835, 15 p. : ill <https://doi.org/10.1016/j.cose.2022.102835> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Open urban mmWave radar and camera vehicle classification dataset for traffic monitoring

Soom, Jürgen; Leier, Mairo; Janson, Karl; Tuhtan, Jeffrey A. IEEE Access 2024 / p. 65128 - 65140 <https://doi.org/10.1109/ACCESS.2024.3397013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of physical activity recognition for real-time wearable systems : effect of window length, sampling frequency and number of features

Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert Applied sciences 2019 / art. 4833, 14 p. : ill <https://doi.org/10.3390/app9224833> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An optimized metamodel for predicting damage and oil outflow in tanker collision accidents

Das, Tanmoy; Goerlandt, Floris; **Tabri, Kristjan** Proceedings of the institution of mechanical engineers, part M: journal of engineering for the maritime environment 2022 / 14 p. : ill <https://doi.org/10.1177/14750902211039659> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pattern based software architecture for predictive maintenance

Torim, Ants; Liiv, Innar; Ounoughi, Chahinez; Ben Yahia, Sadok Nordic Artificial Intelligence Research and Development : 4th Symposium of the Norwegian AI Society, NAIS 2022, Oslo, Norway, May 31 - June 1, 2022 : revised selected papers 2022 / p. 26-38 https://doi.org/10.1007/978-3-031-17030-0_3 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Performance of a distributed apriori algorithm using the serverless functions of the Apollo framework

Shahin, Mahtab; Shah, Syed Attique; Sharma, Rahul; **Ghasempouri, Tara**; Poveda, Juan Aznar; Fahringer, Thomas; **Draheim, Dirk** Machine Learning Methods in Systems : proceedings of 13th Computer Science On-line Conference 2024 2024 / 12 p <https://link.springer.com/book/9783031705946> https://doi.org/10.1007/978-3-031-70595-3_37 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Predicting first-year computer science students drop-out with machine learning methods: A case study

Maksimova, Natalja; Pentel, Avar; Dunajeva, Olga Educating Engineers for Future Industrial Revolutions : Proceedings of the 23rd International Conference on Interactive Collaborative Learning (ICL2020). Volume 2 2021 / p. 719-726 https://doi.org/10.1007/978-3-030-68201-9_70 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Predicting students final test results based on previous grades and demographics

Pentel, Avar; Kaiva, Lisanne-Liis The 11th International Conference on Information, Intelligence, Systems and Applications : IISA 2020, 15-17 July 2020, University of Piraeus, Greece 2020 / p. 377-382 <https://doi.org/10.1109/IISA50023.2020.9284401>

Predictive analytics beyond time series : predicting series of events extracted from time series data

Mishra, Sambeet; Bordin, Chiara; **Taharaguchi, Kota**; Purkayastha, Adri Wind Energy 2022 / p. 1596-1609 <https://doi.org/10.1002/we.2760> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Preliminary analysis of global parameters of induction machine for fault prediction in rotor bars

Kudelina, Karolina; Raja, Hadi Ashraf; Autsou, Siarhei; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton; Kallaste, Ants 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) : Brasov, Romania, 25-28 Sept. 2022 : proceedings 2022 / p. 243-248 : ill <https://doi.org/10.1109/PEMC51159.2022.9962922>

Real-time gait anomaly detection using SVM time series classification

Rostovski, Jakob; Krivošei, Andrei; Kuusik, Alar; Alam, Muhammad Mahtab; Ahmadov, Ulvi 2023 International Wireless Communications and Mobile Computing (IWCMC) 2023 / p. 1389-1394 <https://doi.org/10.1109/IWCMC58020.2023.10182666>

Residential load forecasting for flexibility prediction using machine learning-based regression model

Ahmadihangar, Roya; Häring, Tobias; Rosin, Argo; Korötko, Tarmo; Martins, Joao 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) 2019 / 4 p. : ill <https://doi.org/10.1109/EEEIC.2019.8783634>

Residential load forecasting using recurrent neural networks

Shabbir, Noman; Ahmadihangar, Roya; Raja, Hadi Ashraf; Kütt, Lauri; Rosin, Argo 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 478-481 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161565>

A review on the application of machine learning in gamma spectroscopy : challenges and opportunities

Zehtabvar, Mehrnaz; Taghandiki, Kazem; Madani, Nahid; Sardari, Dariush; **Bashiri, Bashir** Spectroscopy journal 2024 / p. 123-144 <https://doi.org/10.3390/spectroscj2030008>

Scalable and imbalance-resistant machine learning models for anti-money laundering : a two-layered approach

Tertychnyi, Pavlo; Slobozhan, Ivan; **Ollikainen, Madis;** Dumas, Marlon Enterprise Applications, Markets and Services in the Finance Industry : 10th International Workshop, FinanceCom 2020, Helsinki, Finland, August 18, 2020, Revised Selected Papers 2020 / p. 43-58 https://doi.org/10.1007/978-3-030-64466-6_3 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Sea surface circulation in the Baltic Sea : decomposed components and pattern recognition

Barzandeh, Amirhossein; Maljutenko, Ilja; Rikka, Sander; Lagemaa, Priidik; Männik, Aarne; Uiboupin, Rivo; Raudsepp, Urmas Scientific reports 2024 / art. 18649 <https://doi.org/10.1038/s41598-024-69463-8>

Sentiment analysis for hotel reviews : a systematic literature review

Ameur, Asma; Hamdi, Sana; **Ben Yahia, Sadok** ACM Computing Survey 2023 / art. 51 <https://doi.org/10.1145/3605152> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Short-term wind energy forecasting using deep learning-based predictive analytics

Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; **Husev, Oleksandr** CMC-Computers, Materials & Continua 2022 / p. 1017-1033 <https://doi.org/10.32604/cmc.2022.024576> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Signal processing and machine learning techniques for predictive maintenance of rotor bars in induction machine

Kudelina, Karolina; Raja, Hadi Ashraf; Rjabtšikov, Viktor; Naseer, Muhammad Usman; Vaimann, Toomas; Kallaste, Ants 2023 International Conference on Electrical Drives and Power Electronics (EDPE) 2023 / 7 p. : ill <https://doi.org/10.1109/EDPE58625.2023.10274030>

Signal spectrum-based machine learning approach for fault prediction and maintenance of electrical machines

Raja, Hadi Ashraf; Kudelina, Karolina; Asad, Bilal; Vaimann, Toomas; Kallaste, Ants; Rassõlkin, Anton; Khang, Huynh Van Energies 2022 / art. 9507 <https://doi.org/10.3390/en15249507> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Small languages and big models : using ML to generate Norwegian language social media content for training purposes

Aasen, Ole Joachim Arnesen; **Lugo, Ricardo Gregorio;** Knox, Benjamin James Augmented Cognition : 18th International Conference, AC 2024, Held as Part of the 26th HCI International Conference, HCII 2024, Washington, DC, USA, June 29–July 4, 2024, Proceedings, Part II 2024 / p. 103-121 https://doi.org/10.1007/978-3-031-61572-6_8 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Smart elevator with unsupervised learning for visitor profiling and personalised destination prediction

Leier, Mairo; Riid, Andri; Alumäe, Tanel; Pihlak, Rene; Udal, Andres; Heinsar, Risto; Vainküla, Sven 2021 IEEE International Conference on Cognitive and Computational Aspects of Situation Management (CogSIMA) : Virtual Conference, 14-22 May 2021 : proceedings 2021 / p. 9-16 <https://doi.org/10.1109/CogSIMA51574.2021.9475921>

Smartphone-based microkinematic feature analysis for mental fatigue detection using machine learning

Valla, Elli; Väli, Lilian; Nömm, Sven; Toomela, Aaro Cognition, Technology & Work 2025 / 32 p. : ill <https://doi.org/10.21203/rs.3.rs-6601096/v1>

Social, legal, and technical considerations for machine learning and artificial intelligence systems in government

Dreyling III, Richard Michael; Jackson, Eric Blake; Tammet, Tanel; Labanava, Alena; Pappel, Ingrid Proceedings of the 23rd International Conference on Enterprise Information Systems ; vol. 1 2021 / p. 701-708 <https://doi.org/10.5220/0010452907010708>

Special session: in-field ML-assisted intermittent fault localization and management in RISC-V SoCs

Selg, Hardi; Shibin, Konstantin; Tsertov, Anton; Jenihhin, Maksim; Ellervee, Peeter; Raik, Jaan 2024 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) 2024 <https://doi.org/10.1109/DFT63277.2024.10753541> [Article at Scopus](#)

Status Detector for Fuzzing-Based Vulnerability Mining of IEC 61850 Protocol

Visky, Gabor; Lavrenovs, Arturs; **Maennel, Olaf Manuel** Proceeding of the 20th European Conference on Cyber Warfare and Security 2021 / p. 454-461 <https://doi.org/10.34190/EWS.21.007>

Study of bearing currents in induction machine : diagnostic possibilities, fault detection, and prediction
Kudelina, Karolina; Raja, Hadi Ashraf; Naseer, Muhammad Usman; Autsou, Siarhei; Asad, Bilal; Vaimann, Toomas; Kallaste, Ants Electrical engineering 2024 / 14 p. : ill <https://doi.org/10.1007/s00202-024-02411-x>

Swarm-intelligence algorithms for mining numerical association rules : an exhaustive multi-aspect analysis of performance assessment data

Kaushik, Minakshi; Kõiva, Pilleriin; Sharma, Rahul; Fister, Iztok jr.; Draheim, Dirk SSRN 2023 / 37 p
<https://ssrn.com/abstract=4399331> <https://doi.org/10.2139/ssrn.4399331>

SVM Time series classification of selected gait abnormalities

Rostovski, Jakob; **Krivošei, Andrei; Kuusik, Alar; Ahmadov, Ulvi** BODYNETS 2021: Body Area Networks. Smart IoT and Big Data for Intelligent Health Management : 16th EAI International Conference, BODYNETS 2021, Virtual Event, October 25-26, 2021 : proceedings 2022 / 15 p https://doi.org/10.1007/978-3-030-95593-9_16 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Synthetic Data-Driven Detection of Broken Rotor Bars in Induction Machines Under Adjusted Noise Level

Nuha, Nurjahan Amin; Siddik Injam, Md Tanbir; El Bouharrouiti, Nada; Hemeida, Ahmed; **Kudelina, Karolina; Naseer, Usman Muhammad**; Belahcen, Anouar 2025 IEEE Workshop on Electrical Machines Design, Control and Diagnosis (WEMDCD) 2025 / 6 p
<https://doi.org/10.1109/WEMDCD61816.2025.11014141>

A systematic literature review of AI-based digital decision support systems for post-traumatic stress disorder

Bertl, Markus; Metsallik, Janek; Ross, Peeter Frontiers in Psychiatry 2022 / art. 923613, 13 p. : ill
<https://doi.org/10.3389/fpsy.2022.923613> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A systematic review of cutting-edge radar technologies : applications for unmanned ground vehicles (UGVs)

Ersü, Can; Petlenkov, Eduard; Janson, Karl Sensors 2024 / art. 7807 <https://doi.org/10.3390/s24237807> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Techno-economic analysis and energy forecasting study of domestic and commercial photovoltaic system installations in Estonia

Shabbir, Noman; Kütt, Lauri; Raja, Hadi Ashraf; Jawad, Muhammad; Allik, Alo; Husev, Oleksandr Energy 2022 / art. 124156
<https://doi.org/10.1016/j.energy.2022.124156> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Time-frame analysis of system calls behavior in machine learning-based mobile malware detection

Guerra Manzanares, Alejandro; Nõmm, Sven; Bahsi, Hayrettdin 2019 International Conference on Cyber Security for Emerging Technologies : CSET 2019, Doha, Qatar, 27 October 2019 through 29 October 2019 2019 / art. 89049088 ; 8 p. : ill
<https://doi.org/10.1109/CSET.2019.8904908>

Towards a machine learning-based framework for DDOS attack detection in software-defined IoT (SD-IoT) networks

Bhayo, Jalal; Shah, Syed Attique; Hameed, Sufian; Ahmed, Awais; Nasir, Jamal; **Draheim, Dirk** Engineering Applications of Artificial Intelligence 2023 / art. 106432 <https://doi.org/10.1016/j.engappai.2023.106432> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Towards artificial intelligence driven immersive environments in virtual reality for industrial applications

Alsaleh, Saleh Ragheb Saleh; Tepļakov, Aleksei; Tamre, Mart; Petlenkov, Eduard 44th International Conference on Telecommunications and Signal Processing (TSP) 2021 / p. 340-345 <https://doi.org/10.1109/TSP52935.2021.9522676>

Towards generation of synthetic data sets for hybrid conflict modelling

Nõmm, Sven; Venables, Adrian Nicholas IFAC-Papers OnLine 2022 / p. 25-30 <https://doi.org/10.1016/j.ifacol.2022.10.226> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Towards personalized elevator travel with smart elevator system

Robal, Tarmo; Reinsalu, Uljana; Leier, Mairo Baltic journal of modern computing 2020 / p. 675-697
<https://doi.org/10.22364/bjmc.2020.8.4.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Towards the integration of a post-hoc interpretation step into the machine learning workflow for IoT botnet detection

Guerra Manzanares, Alejandro; Nõmm, Sven; Bahsi, Hayrettdin 18th IEEE International Conference on Machine Learning and Applications : ICMLA 2019, 16–19 December 2019, Boca Raton, Florida, USA : proceedings 2019 / p. 1162-1169 : ill
<https://doi.org/10.1109/ICMLA.2019.00193>

Transforming fatigue assessment : smartphone-based system with digitized motor skill tests

Valla, Elli; Toose, Ain-Joonas; Nõmm, Sven; Toomela, Aaro International Journal of Medical Informatics 2023 / art. 105152
<https://doi.org/10.1016/j.ijmedinf.2023.105152> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tree-based ensemble multi-task learning method for classification and regression

Simm, Jaak; Magrans De Abril, Idefons; Sugiyama, Masashi IEICE transactions on information and systems 2014 / p. 1677-1681
<https://doi.org/10.1587/transinf.E97.D.1677> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tremor-related feature engineering for machine learning based Parkinson's disease diagnostics

Valla, Elli; Nömm, Sven; Medijainen, Kadri; Taba, Pille; Toomela, Aaro Biomedical signal processing and control 2022 / art. 103551
<https://doi.org/10.1016/j.bspc.2022.103551> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Trends and challenges in intelligent condition monitoring of electrical machines using machine learning

Kudelina, Karolina; Vaimann, Toomas; Asad, Bilal; Rassõlkin, Anton; Kallaste, Ants; Demidova, Galina Applied sciences 2021 / art. 2761, 19 p. : ill <https://doi.org/10.3390/app11062761> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Understanding multidimensional verification : where functional meets non-functional

Lai, Xinhui; Balakrishnan, Aneesh; Lange, Thomas; Jenihhin, Maksim; Ghasempouri, Tara; Raik, Jaan; Alexandrescu, Dan Microprocessors and microsystems 2019 / art. 102867, 13 p. : ill <https://doi.org/10.1016/j.micpro.2019.102867> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Using MedBloT dataset to build effective machine learning-based IoT botnet detection systems

Guerra Manzanares, Alejandro; Medina-Galindo, Jorge; Bahsi, Hayretdin; Nömm, Sven Information Systems Security and Privacy : 6th International Conference, ICISSP 2020, Valletta, Malta, February 25–27, 2020 : revised selected papers 2022 / p. 222–243 https://doi.org/10.1007/978-3-030-94900-6_11 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

UWB and GNSS Sensor Fusion Using ML-Based Positioning Uncertainty Estimation

Tommingas, Mihkel; Laadung, Taavi; Varbla, Sander; Mürsepp, Ivo; Alam, Muhammad Mahtab IEEE Open Journal of the Communications Society 2025

Why not to trust big data : discussing statistical paradoxes

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Shahin, Mahtab; Vidyarthi, Ankit; Tiwari, Prayag; Draheim, Dirk Database Systems for Advanced Applications : DASFAA 2022, International Workshops BDMS, BDQM, GDMA, WBT, MATQTDS, and PMBD, Virtual Event, April 11–14, 2022 : proceedings 2022 / p. 50-63 : ill https://doi.org/10.1007/978-3-031-11217-1_4 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Wind energy forecasting using recurrent neural networks

Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; Ahmadiyahangar, Roya; Iqbal, Muhammad Naveed; Rosin, Argo 2019 Big Data, Knowledge and Control Systems Engineering (BdKCSE) 2019 / 5 p. : ill <https://doi.org/10.1109/BdKCSE48644.2019.9010593>