

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>

Accurate prediction of international trade flows : leveraging knowledge graphs and their embeddings

Rincon-Yanez, Diego; **Ounoughi, Chahinez; Sellami, Bassem; Kalvet, Tarmo; Tiits, Marek;** Senatore, Sabrina; **Ben Yahia, Sadok** Journal of King Saud University - computer and information sciences 2023 / art. 101789, 11 p <https://doi.org/10.1016/j.jksuci.2023.101789> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Active learning-based mobile malware detection utilizing auto-labeling and data drift detection

Deng, Zhe; Hubert, Arthur; **Ben Yahia, Sadok; Bahsi, Hayret** Proceedings of the 2024 IEEE International Conference on Cyber Security and Resilience, CSR 2024 2024 / p. 146 - 151 <https://doi.org/10.1109/CSR61664.2024.10679343> [Article at Scopus](#) [Article at WOS](#)

Adaptive industrial robots using machine vision

Kuts, Vladimir; Otto, Tauno; Tähemaa, Toivo; Bukhari, Khuldoon; Pataria, Tengiz ASME 2018 International Mechanical Engineering Congress and Exposition, Pittsburgh, Pennsylvania, USA, November 9–15, 2018 2018 / Paper No. IMECE2018-86720, pp. V002T02A093, 8 p. : ill <https://doi.org/10.1115/IMECE2018-86720>

An advanced diagnostic approach for broken rotor bar detection and classification in DTC controlled induction motors by leveraging dynamic SHAP interaction feature selection (DSHAP-IFS) GBDT methodology

Khan, Muhammad Amir; Asad, Bilal; Vaimann, Toomas; Kallaste, Ants Machines 2024 / art. 495 <https://doi.org/10.3390/machines12070495> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Advancing drug–target interaction prediction: a comprehensive graph-based approach integrating knowledge graph embedding and ProtBert pretraining

Djeddi, Warith Eddine; Hermi, Khalil; **Ben Yahia, Sadok;** Diallo, Gayo BMC Bioinformatics 2023 / art. 488, 41 p.: ill <https://doi.org/10.1186/s12859-023-05593-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Advancing solar power forecasting with machine learning

Hokmabad, Hossein Nourollahi 22nd International Symposium “Topical Problems in the Field of Electrical and Power Engineering”. Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 89-90 : ill https://www.eester.ee/record=b5570906*est

Ago Luberg: on Eesti järgmine Tiigrihüpe

Luberg, Ago Trialoog 2025 <https://trialoog.taltech.ee/ago-luberg-ti-insenerid-on-eesti-jargmine-tiigrihupe/>

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>

“Al ei mõtle, Al arvutab”. Konverentsil kohtusid tehisaru rakendajad ja entusiastid

Kald, Indrek itutuudised.ee 2024 [“Al ei mõtle, Al arvutab”. Konverentsil kohtusid tehisaru rakendajad ja entusiastid](https://itutuudised.ee/ai-ei-moetle-al-arvutab-konverentsil-kohtusid-tehisaru-rakendajad-ja-entusiastid)

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>

American sign language character recognition using convolutional neural networks

Abdullah, Atesam; Ali, Nisar; Ali, Raja Hashim; **Abideen, Zain Ul;** Ijaz, Ali Zeeshan; Bais, Abdul 2023 IEEE Canadian Conference on Electrical and Computer Engineering (CCECE) : Regina, SK, Canada, 24-27 September 2023 2023 / p. 165-169 <https://doi.org/10.1109/CCECE58730.2023.10288799>

An effective inductive learning algorithm for extracting rules

Kuusik, Rein, inform.; Lind, Grete Proceedings of the 2011 2nd International Congress on Computer Applications and Computational Science. Vol. 2 2012 / p. 339-344 https://link.springer.com/chapter/10.1007/978-3-642-28308-6_46

Analyzing and investigating encrypted traffic for social media application Instagram

Iqbal, Hameed; Ahmad, Rizwan; Ahmed, Waqas; Qazi, Shams; **Alam, Muhammad Mahtab** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 p. : ill <https://doi.org/10.1109/BEC56180.2022.9935603>

Android malware concept drift using system calls : detection, characterization and challenges

Guerra Manzanares, Alejandro; Luckner, Marcin; **Bahsi, Hayret** Expert systems with applications 2022 / art. 117200, 19 p. : ill <https://doi.org/10.1016/j.eswa.2022.117200> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Anomaly detection and classification in power system state estimation: Combining model-based and data-driven methods

Asefi, Sajjad; Mitrovic, Mile; Cetenovic, Dragan; Levi, Victor; Gryazina, Elena; Terzija, Vladimir Sustainable energy, grids and networks 2023 / art. 101116, 14 p. : ill <https://doi.org/10.1016/j.segan.2023.101116> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 deep conditional generative adversarial networks to fill the gaps of satellite altimetry-based absolute dynamic topography

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 / 1 p <https://doi.org/10.57757/IUGG23-1627>

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](#)

Application of the HIDRA2 deep-learning model for sea level forecasting along the Estonian coast of the Baltic Sea

Barzandeh, Amirhossein; Licer, Matjaz; Rus, Marko; Kristan, Matej; **Maljutenko, Ilja; Elken, Juri; Lagemaa, Priidik; Uiboupin, Rivo** Ocean Science 2025 / p. 1315-1327 <https://doi.org/10.5194/os-21-1315-2025>

Applied machine learning methods in microgrid simulations

Häring, Tobias 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 151-152 : ill https://www.ester.ee/record=b5291755*est

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 l. <https://medialib.cmcdn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Applying reinforcement learning method for real-time energy management

Borhan Dayani, Aida; **Fazlollahab, Hamed; Ahmadihangar, Roya; Rosin, Argo** 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) 2019 / 5 p. : ill <https://doi.org/10.1109/EEEIC.2019.8783766>

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 tools for university fundraising 5.0 : a comprehensive analysis

Cherniavska, Olena; Belov, Alexandr; Shmygol, Nadiia; **Järvis, Marina**; Cherniavska, Oleksandra; Tsalko, Tetiana 2023 IEEE 5th International Conference on Modern Electrical and Energy System (MEES) : proceedings 2023 / 6 p
<https://doi.org/10.1109/MEES61502.2023.10402529>

Artificial Intelligence-Based Predictive Analytics for Battery Energy Storage Systems in Electric Vehicle Applications =
Tehisintellektil põhinev ennustav andmeanalüüs akupõhiste energiasalvestussüsteemide jaoks elektrisõidukites
Zequera, Rolando Antonio Gilbert 2025 https://www.ester.ee/record=b5758189*est <https://digikogu.taltech.ee/et/Item/7ecb1e38-a591-47c5-b37e-7c2e901d05f1> <https://doi.org/10.23658/taltech.61/2025>

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](#)

Assessment of data acquisition system for forecasting temperature and solar irradiation

Zahraoui, Younes; Korötko, Tarmo; Mekhilef, Saad; Alhamrouni, Ibrahim 2023 International Conference on Engineering Technology and Technopreneurship (ICE2T) 2024 / p. 408-413 <https://doi.org/10.1109/ICE2T58637.2023.10540516>

At the crossroads of product complexity, market demand, and machine learning

Kalvet, Tarmo; Tiits, Marek; Ounoughi, Chahinez; Ben Sassi, Imen; Ben Yahia, Sadok Management & marketing 2024

Author Correction : DOME : recommendations for supervised machine learning validation in biology

Walsh, Ian; Fishman, Dmytro; Garcia-Gasulla, Dario; **Titma, Tiina**; Pollastri, Gianluca Nature methods 2021 / p. 1409–1410 : ill
<https://doi.org/10.1038/s41592-021-01304-2> [Journal metrics at Scopus](#) [Article at Scopus](#)

Automatic NLOS classification from virtual 3D city models

Müürsepp, Ivo; Alam, Muhammad Mahtab 2023 Eighth International Conference on Fog and Mobile Edge Computing (FMEC) 2023 / p. 190-195 <https://doi.org/10.1109/FMEC59375.2023.10306158>

Automatic visual traffic sign damage detection and measurement of damaged area

Ersü, Can; Janson, Karl; Petlenkov, Eduard; Reinsalu, Uljana 2024 18th International Conference on Control, Automation, Robotics and Vision (ICARCV) 2024 / p. 505-510 <https://doi.org/10.1109/ICARCV63323.2024.10821546>

Autonomous cyber defence capabilities

Tammet, Tanel Autonomous cyber capabilities under international law 2021 / p. 36-50 https://www.ester.ee/record=b5395402*est

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 Intelligent Transportation Systems 2023 / p. 740 - 754 <https://doi.org/10.1109/OJITS.2023.3321110> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The bearing faults detection methods for electrical machines — the state of the art

Khan, Muhammad Amir; **Asad, Bilal; Kudelina, Karolina; Vaimann, Toomas; Kallaste, Ants** Energies 2023 / art. 296
<https://doi.org/10.3390/en16010296> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Bing-CSF-IDF+: a semantics-driven recommender system for news

Huijsduijnen, Lies Hooft van; Hoogmoed, Thom; Keulers, Geertje; Langendoen, Edmar; Langendoen, Sanne; Vos, Tim; Hogenboom, Frederik; Frasinca, Flavius; **Robal, Tarmo** New trends in databases and information systems : ADBIS 2020 short papers, Lyon, France, August 25–27, 2020 : proceedings 2020 / p. 143–153 https://doi.org/10.1007/978-3-030-54623-6_13 [Conference proceeding at Scopus](#) [Article at Scopus](#)

Biomimetics

2024 https://www.mdpi.com/journal/biomimetics/special_issues/0K2292JW30

Broken rotor bar fault detection using machine learning: Optimal frequency resolution

Koveshnikov, Semen; Bouharrouti, Nada El; **Kudelina, Karolina; Naseer, Muhammad Usman; Vaimann, Toomas**; Belahcen, Anouar 2024 International Conference on Electrical Machines (ICEM) 2024 / 6 p <https://doi.org/10.1109/ICEM60801.2024.10700228>

Building morphology influence on outdoor comfort in urban environments. An analysis through machine learning

Eslamirad, Nasim; De Luca, Francesco; Lylykangas, Kimmo Sakari Proceedings of the 12th Annual Symposium on Simulation for Architecture and Urban Design 2021 <http://www.simaud.org/2021/program.php>

Camera-LiDAR fusion based object segmentation in adverse weather conditions for autonomous driving

Gu, Junyi; Bellone, Mauro; Lind, Artjom 2024 19th Biennial Baltic Electronics Conference (BEC) 2024

<https://doi.org/10.1109/BEC61458.2024.10737955> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

CapsNet on embedded devices in a data scarce scenario

Ezechukwu, Dismas Ndubuis; Le Moullec, Yannick 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 l.

<https://doi.org/10.1109/BEC56180.2022.9935600>

Challenges in using neural networks in safety-critical applications

Forsberg, H.; Linden, Jan; Hjorth, J.; Manefjord, T.; Daneshtalab, Masoud AIAA/IEEE Digital Avionics Systems Conference - Proceedings, 2020 AIAA/IEEE 39th Digital Avionics Systems Conference (DASC), Virtual Conference, October 11-16, 2020 :

Proceedings 2020 / 7 p <https://doi.org/10.1109/DASC50938.2020.9256519>

Charge Diagnostics and State Estimation of Battery Energy Storage Systems Through Transformer Models

Zequera, Rolando Antonio Gilbert; Rassölkin, Anton; Vaimann, Toomas; Kallaste, Ants IEEE Access 2025 / p. 17733–17744

: ill <https://doi.org/10.1109/ACCESS.2025.3532858>

Classification of the energy production potential of water lens solar concentrators using machine learning

Zarrinkafsh, Hamidreza; Eslamirad, Nasim; De Luca, Francesco Journal of Physics: Conference Series 2021 / art. 012022, 6 p. : ill

<https://doi.org/10.1088/1742-6596/2042/1/012022> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Closed-loop droplet size control in microfluidics = Suletud ahelaga tilkade suuruse juhtimine mikrofluidikas

Gyimah, Nafisat 2024 <https://digikogu.taltech.ee/et/Item/c4a0c9de-83e5-41ff-bdcf-24ba61182d1f> https://www.ester.ee/record=b5698980*est

<https://doi.org/10.23658/taltech.47/2024>

Co-design of a wireless networked control system for reliability and resource-efficiency

Ashraf, Kanwal; Le Moullec, Yannick; Pardy, Tamas; Rang, Toomas 2024 19th Biennial Baltic Electronics Conference (BEC)

2024 / 7 p <https://doi.org/10.1109/BEC61458.2024.10737965> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Comparative analysis of machine learning techniques for non-intrusive load monitoring

Shabbir, Noman; Vassiljeva, Kristina; Hokmabad, Hossein Nouroollahi; Husev, Oleksandr; Petlenkov, Eduard; Belikov, Juri

Electronics 2024 / art. 1420 <https://doi.org/10.3390/electronics13081420> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A comparative analysis of symbolic and deep learning based RDFS materialization

Traagel, Mart; Carneiro Alves de Lima, Bruno Rucy; Cabral Pinheiro, Victor Henrique AICCC '23: Proceedings of the 2023 6th

artificial intelligence and cloud computing conference 2023 / p. 60-65 <https://doi.org/10.1145/3639592.3639601>

Comparing domain expert and machine learning data enrichment of building registry

Torim, Ants; Iliste, 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 deep learning models for multivariate prediction of time series wind power generation and temperature

Mishra, Sambeet; Bordin, Chiara; Taharaguchi, Kota; Palu, Ivo Energy reports 2020 / p. 273–286

<https://doi.org/10.1016/j.egy.2019.11.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of machine learning algorithms for classification of partial discharge signals in medium voltage components

Kumar, Haresh; Shafiq, Muhammad; Hussain, Ghulam Amjad; Kauhaniemi, Kimmo 2021 IEEE PES Innovative Smart Grid

Technologies Europe (ISGT-Europe), 8-21 October, 2021 : proceedings 2021 / 6 p

<https://doi.org/10.1109/ISGTEurope52324.2021.9639923>

Comparison of machine learning based methods for residential load forecasting

Shabbir, Noman; Ahmadiyahangar, Roya; Kütt, Lauri; Rosin, Argo 2019 Electric Power Quality and Supply Reliability Conference

(PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings

2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818267>

Computationally efficient multi-task learning with least-squares probabilistic classifiers

Simm, Jaak; Sugiyama, Masashi; Kato, Tsuyoshi IPSJ transactions on computer vision and applications 2011 / Feb., [8] p. : ill

https://www.researchgate.net/publication/215704981_Computationally_Efficient_Multi-task_Learning_with_Least-Squares_Probabilistic_Classifiers

Computer science students early drop-out prediction using machine learning : a case study

Maksimova, Natalja; Pentel, Avar; Dunajeva, Olga Learning with Technologies and Technologies in Learning 2022 / p. 523-549
https://doi.org/10.1007/978-3-031-04286-7_25 [Article collection metrics at Scopus](#) [Article at Scopus](#)

Computer vision framework for crack detection and estimation of air leakage through the straight-through cracks in buildings envelopes

Jahanbakhsh, Maliheh; **Ferrantelli, Andrea** Rakenteiden mekaniikka = Journal of structural mechanics 2025 / p. 71-85
<https://doi.org/10.23998/rm.152481>

Concept drift and cross-device behavior : challenges and implications for effective android malware detection

Guerra Manzanares, Alejandro; Luckner, Marcin; Bahsi, Hayretin Computers & Security 2022 / art. 102757, 20 p. : ill
<https://doi.org/10.1016/j.cose.2022.102757> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Concept formation in exploratory data analysis : case studies of linguistic and banking data = Mõiste moodustamine uurivas andmeanalüüsis: keele- ja pangandusandmete juhtumianalüüsid

Kirt, Toomas 2007 https://www.ester.ee/record=b2324671*est

Conceptual challenges of researching Artificial Intelligence in public administrations

Noordt, Colin Pascal van 23rd Annual International Conference on Digital Government Research (DGO2022) : Intelligent Technologies, Governments and Citizens, June 15-17, 2022 : proceedings 2022 / p. 183-190 <https://doi.org/10.1145/3543434.3543441>
[Conference proceedings at Scopus](#) [Article at Scopus](#)

Condition monitoring and diagnostic of electrical machines using IoT and machine learning

Raja, Hadi Ashraf 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 31-32 : ill https://www.ester.ee/record=b5504019*est

Confidences for commonsense reasoning.

Tammet, Tanel; Draheim, Dirk; Järv, Priit Automated Deduction - CADE 28 : 28th International Conference on Automated Deduction, Virtual Event, July 12-15, 2021 : proceedings 2021 / p. 507-524 https://doi.org/10.1007/978-3-030-79876-5_29 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Consolidation of crowd-sourced geo-tagged data for parameterized travel recommendations = Kasutajatelt kogutud andmete integreerimine parametriseeritud reisisoovituste loomiseks

Luberg, Ago 2021 <https://doi.org/10.23658/taltech.23/2021> <https://digikogu.taltech.ee/et/item/f5415d5d-63b8-4726-9dea-939c399058c0>
https://www.ester.ee/record=b5428765*est

Correction to: Advancing drug–target interaction prediction: a comprehensive graph-based approach integrating knowledge graph embedding and ProtBert pretraining (BMC Bioinformatics, (2023), 24, 1, (488), 10.1186/s12859-023-05593-6)

Djeddi, Warith Eddine; Hermi, Khalil; **Ben Yahia, Sadok;** Diallo, Gayo BMC Bioinformatics 2024 / art. 289
<https://doi.org/10.1186/s12859-024-05905-4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Corrigendum to Concept drift and cross-device behavior: Challenges and implications for effective android malware detection Computers & Security, Volume 120, 102757 (Computers & Security (2022) 120, (S0167404822001523), (10.1016/j.cose.2022.102757))

Guerra-Manzanares, Alejandro; Luckner, Marcin; Bahsi, Hayretin Computers and Security 2023 / art. 102998
<https://doi.org/10.1016/j.cose.2022.102998> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

A current spectrum-based algorithm for fault detection of electrical machines using low-power data acquisition devices

Asad, Bilal; Raja, Hadi Ashraf; Vaimann, Toomas; Kallaste, Ants; Pomarnacki, Raimondas; Hyunh, Van Khang Electronics 2023 / art. 1746 <https://doi.org/10.3390/electronics12071746> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

DAAG-SNP: energy efficient distance and angulation based agglomerative clustering for sink node placement

Hanif, Maria; Ahmad, Rizwan; Ahmed, Waqas; Drieberg, Micheal; **Alam, Muhammad Mahtab** IEEE Open Journal of the

Data generative machine learning model for the assessment of outdoor thermal and wind comfort in a northern urban environment

Eslamirad, Nasim; De Luca, Francesco; Lylykangas, Kimmo Sakari; Ben Yahia, Sadok Frontiers of architectural research 2023 / p. 541-555 : ill <https://doi.org/10.1016/j.foar.2022.12.001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Zequera, Rolando Antonio Gilbert; Rassölkin, 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>

Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings

2020 <https://doi.org/10.1007/978-3-030-57672-1>

Data-driven baseline generation for post-retrofit energy saving assessment, a comparison of statistical and machine learning methods

Kuivjõgi, Helena; Vasman, Sofia; Petlenkov, Eduard; Thalfeldt, Martin; Kurnitski, Jarek Journal of building engineering 2024 / art. 111016 <https://doi.org/10.1016/j.jobbe.2024.111016>

Data-driven quantification and aggregation of demand-side flexibility for symmetrical bidding in energy balancing markets

Shahid, Arqum; Ahmadihangar, Roya; Kilter, Jako; Rosin, Argo Electric Power Systems Research 2025 / art. 111823 <https://doi.org/10.1016/j.epsr.2025.111823>

Data-driven urban modelling : the case of explainable detection of urban heat island = Andmepõhine linnamodelleerimine : soojusaarte seletatav tuvastamine

Eslamirad, Nasim 2023 https://www.ester.ee/record=b5645371*est <https://doi.org/10.23658/taltech.68/2023> <https://digikogu.taltech.ee/et/Item/ff9725f6-fc34-474c-ad5b-0ed6128127ee> https://www.ester.ee/record=b5645371*est

Day-ahead PV output power forecasting utilizing boosting recursive lightGBM-LSTM framework

Hokmabad, Hossein Nouroollahi; Husev, Oleksandr; Vinnikov, Dmitri; Belikov, Juri; Petlenkov, Eduard IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 5 p <https://doi.org/10.1109/ISGTEUROPE56780.2023.10408090>

Deep learning based audio-visual emotion recognition in a smart learning environment

Dunajeva, Olga; Pentel, Avar; Ivleva, Natalja; Juštšenko, Valeria Towards a Hybrid, Flexible and Socially Engaged Higher Education : proceedings of the 26th International Conference on Interactive Collaborative Learning (ICL2023), vol. 1 2024 / p. 420-431 https://doi.org/10.1007/978-3-031-51979-6_44 [Conference proceedings at scopus](#) [Article at Scopus](#) [Article at WOS](#)

Deep Learning methodology for charging management applications in battery cells based on Neural Networks

Zequera, Rolando Antonio Gilbert; Rjabtšikov, Viktor; Rassölkin, Anton; Vaimann, Toomas; Kallaste, Ants IEEE Transactions on Intelligent Vehicles 2025 / p. 668-682 <https://doi.org/10.1109/TIV.2024.3417216>

Deep reinforcement learning for automated tuning of cavity filters

Sekhri, Even; Tamre, Mart; Kapoor, Rajiv Proceedings of IEEE Forum International Conference 2019 / p. 53 http://www.digitalxplore.org/up_proc/pdf/408-154943387153.pdf

Deep Reinforcement Learning for energy-aware task offloading in join SDN-Blockchain 5G massive IoT edge network

Sellami, Bassem; Hakiri, Akram; Ben Yahia, Sadok Future generation computer systems 2022 / p. 363-379 <https://doi.org/10.1016/j.future.2022.07.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at Scopus](#) [Article at Scopus](#)

Deep reinforcement learning-based digital twin for droplet microfluidics control

Gyimah, Nafisat; Scheler, Ott; Rang, Toomas; Pardy, Tamas Physics of Fluids 2023 / art. 082020 <https://doi.org/10.1063/5.0159981> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DeepVigor+: Scalable and Accurate Semi-Analytical Fault Resilience Analysis for Deep Neural Networks

Ahmadilivani, Mohammad Hasan; Raik, Jaan; Daneshtalab, Masoud; Jenihhin, Maksim arXiv.org 2024 / 14 p. : ill <https://doi.org/10.48550/arXiv.2410.15742>

Deliverable 2.7 Initial AI-Driven Edge Computing and Precise Localization Demonstrator

Müürsepp, Ivo 2023 [Deliverable 2.7 Initial AI-Driven Edge Computing and Precise Localization Demonstrator \(PDF\)](#)

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](#)

Detection of stellar wakes in the Milky Way: A deep learning approach

Pöder, Sven; Pata, Joosep; Benito, María; Asensio, Isaac Alonso; Vecchia, Claudio Dalla Astronomy and astrophysics 2025 / art. A227 <https://doi.org/10.1051/0004-6361/202451480>

Determining necessary length of the alternating series test for Parkinson's disease modelling

Nömm, Sven; Kossas, Tanel; Toomela, Aaro; Medijainen, Kadri; Taba, Pille 2019 International Conference on Cyberworlds : CW 2019 : 2-4 October 2019, Kyoto, Japan : proceedings 2019 / p. 261-266 : ill <http://doi.org/10.1109/CW.2019.00050>

Development and utilization of synthetic signals for fault diagnostics of electrical machines

Raja, Hadi Ashraf; Kudelina, Karolina; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton; Kallaste, Ants IEEE journal of emerging and selected topics in industrial electronics 2024 / 9 p <https://doi.org/10.1109/JESTIE.2024.3395650>

Development of continuous dynamic vertical reference for maritime and offshore engineering by applying geodetic and machine learning strategies

Ellmann, Artu; Delpeche-Ellmann, Nicole Camille; Varbla, Sander; Rajabi Kiasari, Saeed; Jahanmard, Vahidreza; Kupavõh, Aleksei EGU General Assembly 2025 2025 / art. EGU25-20596 <https://doi.org/10.5194/egusphere-egu25-20596>

Development of methods for real-time in-step anomaly detection in gait analysis = Reaalajaliste meetodite arendus sammusiseste kõrvalkallete tuvastamiseks kõnnianalüüsis

Rostovski, Jakob 2025 https://www.ester.ee/record=b5734578*est <https://digikogu.taltech.ee/et/Item/c25ff8f8-a46a-45ce-b231-23d2d52e7f54> <https://doi.org/10.23658/taltech.15/2025>

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 Economy. Emerging Technologies and Business Innovation : 6th International Conference on Digital Economy, ICDEc 2021, Tallinn, Estonia, July 15–17, 2021 : proceedings

2021 <https://doi.org/10.1007/978-3-030-92909-1>

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](#)

Digital twin based computational methods for XR applications = Digitaalkaksikute põhised arvutuslikud meetodid XR rakenduste jaoks

Alsaleh, Saleh Ragheb Saleh 2024 <https://doi.org/10.23658/taltech.15/2024> https://www.ester.ee/record=b5674508*est <https://digikogu.taltech.ee/et/Item/557fefce-a06a-479b-bc30-70910085d23d>

Digital twin simulations based reinforcement learning for navigation and control of a wheel-on-leg mobile robot

Alsaleh, Saleh Ragheb Saleh; Tepljakov, Aleksei; Tamre, Mart; Kuts, Vladimir; Petlenkov, Eduard Proceedings of ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022), 2B: Columbus, Ohio, USA, October 30 - November 3, 2022 2022 / art. IMECE2022-95411, V02BT02A025, 8 p <https://doi.org/10.1115/IMECE2022-95411>

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](#)

Distributed scalable association rule mining over Covid-19 data

Shahin, Mahtab; Inoubli, Wissem; Shah, Syed Attique; Ben Yahia, Sadok; Draheim, Dirk Future Data and Security Engineering : 8th International Conference, FDSE 2021, Virtual Event, November 24–26, 2021 : proceedings 2021 / p. 39-52 https://doi.org/10.1007/978-3-030-91387-8_3 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

DocOnTap : AI-based disease diagnostic system and recommendation system

Abideen, Zain Ul; Khan, Talha Ali; Ali, Raja Hashim; Ali, Nisar; Baig, Muhammad Muneeb; Ali, Muhammad Sajid 17th International Conference on Emerging Technologies (ICET), Swabi, Pakistan, 29-30 November 2022 2022 / p. 148-153 <https://doi.org/10.1109/ICET56601.2022.10004621>

Domain adaptation approach for Arabic sarcasm selection in hotel reviews based on hybrid learning

Ameur, Asma; Hamdi, Sana; Ben Yahia, Sadok Procedia computer science 2023 / p. 3898-3908 <https://doi.org/10.1016/j.procs.2023.10.385> [Conference proceeding at Scopus](#) [Article at Scopus](#)

DOMe : recommendations for supervised machine learning validation in biology

Walsh, Ian; Fishman, Dmytro; Garcia-Gasulla, Dario; Titma, Tiina; Pollastri, Gianluca; Harrow, Jennifer; Psomopoulos, Fotis E.; Tosatto, Silvio C. E. Nature methods 2021 / p. 1122–1127 <https://doi.org/10.1038/s41592-021-01205-4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Double deep Q-Learning approach for tuning microwave cavity filters using locally linear embedding technique

Sekhri, Even; Kapoor, Rajiv; Tamre, Mart 2020 International Conference Mechatronic Systems and Materials (MSM) 2020 / 6 p. : ill <https://doi.org/10.1109/MSM49833.2020.9202393>

A DRL strategy for optimal resource allocation along with 3D trajectory dynamics in UAV-MEC network

Khurshid, Tayyaba; Ahmed, Waqas; Rehan, Muhammad; Ahmad, Rizwan; Alam, Muhammad Mahtab; Radwan, Ayman IEEE Access 2023 / p. 54664 - 54678 <https://doi.org/10.1109/ACCESS.2023.3278591> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti idufirma paneb elektrivõrku kasutama kuni 30 protsenti tõhusamalt

postimees.ee 2025 <https://tehnika.postimees.ee/8236735/eesti-idufirma-paneb-elektivorku-kasutama-kuni-30-protsenti-tohusamalt>

Eesti insener pani püsti tarkvaraäri, mida juhib tehisaruga

Einama, Kaido postimees.ee 2024 [Eesti insener pani püsti tarkvaraäri, mida juhib tehisaruga](#)

Eesti IT valdkonna suvekool toob Tartusse masinõppe ja tehisintellekti tippteadlased [Võrguväljaanne]

postimees.ee 2022 [Eesti IT valdkonna suvekool toob Tartusse masinõppe ja tehisintellekti tippteadlased](#)

Eesti teadlased ennustavad satelliitide abil üleujutusi

Vaaks, Eveliis postimees.ee Trialoog 2025 [Eesti teadlased ennustavad satelliitide abil üleujutusi](#) [Satelliidid ja nutipoid: TalTechi teadlased loovad tuleviku keskkonnaseiret](#)

Eesti teadlased tegid tarkvara, mis ennetab küberrünnakuid

Pihel, Hele-Riin postimees.ee 2023 [Eesti teadlased tegid tarkvara, mis ennetab küberrünnakuid](#)

Eesti teadlaste masintõlge võib asendada suurfirmade loodut [Võrguväljaanne]

Ideon, Argo maaleht.ee 2022 / Lk. 10 [Eesti teadlaste masintõlge võib asendada suurfirmade loodut](#)

Effects of annotation quality on model performance

Alhazmi, Khaled; Alsumari, Walaa; Seppo, Indrek; Podkuiko, Lara; **Simon, Martin** 2021 International Conference on Artificial Intelligence in Information and Communication (ICAIIIC), 13-16 April 2021 2021 / p. 063–067 <https://doi.org/10.1109/ICAIIIC51459.2021.9415271>

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](#)

Ehitustegevuse kaardistamine kaugseirega

Puust, Raido Horisont 2020 / lk. 49-53 : fot https://www.ester.ee/record=b1072243*est

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>

Enhanced decision mechanism for RAN subslicing in management closed control loop

Kulmar, Marika; Mürsepp, Ivo; Alam, Muhammad Mahtab 2023 Eighth International Conference on Fog and Mobile Edge Computing (FMEC) 2023 / p. 175-181 : ill <https://doi.org/10.1109/FMEC59375.2023.10306223>

Enhancing cerebral palsy gait analysis with 3D computer vision : a dual-camera approach

Valla, Elli; Kanter, Gert; Nõmm, Sven; Kuusk, Anton Osvald; Maran, Peeter; Seenmaa, Karl Mihkel; Mägi, Killu; Toomela, Aaro 2024 10th International Conference on Control, Decision and Information Technologies (CoDIT) 2024 / p. 1352-1357 <https://doi.org/10.1109/CoDIT62066.2024.10708137> [Article at Scopus](#)

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 quality of transmission in a live production network using machine learning

Müller, Jasper; Fehenberger, Tobias; Patri, Sai Kireet; **Kaeval, Kaida;** Griesser, Helmut; Tikas, Marko; Elbers, Jörg-Peter 2021 Optical Fiber Communications Conference and Exhibition (OFC) : 6-10 June 2021 : San Francisco, CA, USA 2021 / paper Tu1G.2, 3 p <https://ieeexplore.ieee.org/abstract/document/9489940>

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>

Euroopa oma tehismõistus

Tammet, Tanel; Liiv, Innar Sirp 2020 / lk. 33-34 : ill <https://www.sirp.ee/s1-artiklid/c21-teadus/euroopa-oma-tehismoistus/> https://www.ester.ee/record=b1072938*est

Evaluating the robustness of ML models to out-of-distribution data through similarity analysis

Lindén, Joakim; Forsberg, Håkan; **Daneshtalab, Masoud;** Söderquist, Ingemar New Trends in Database and Information Systems; ADBIS 2023 Short Papers, Doctoral Consortium and Workshops: AIDMA, DOING, K-Gals, MADEISD, PeRS, Barcelona, Spain, September 4–7, 2023, Proceedings 2023 / p. 348 - 359 https://doi.org/10.1007/978-3-031-42941-5_30

Evaluation of data quality in the Estonian National Health Information System for digital decision support

Bertl, Markus; Kankainen, Kristian Juha Ismo; Piho, Gunnar; Draheim, Dirk; Ross, Peeter Proceedings of the 3rd International Health Data Workshop (HEDA 2023) co-located with Software Technologies: Applications and Foundations (STAF 2023) : Leicester, United Kingdom, July 21, 2023. Vol. 3440 2023 / paper 1, 13 p. : ill <https://ceur-ws.org/Vol-3440/paper1.pdf> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Evaluation of deep learning-based depression detection using medical claims data

Bertl, Markus; Bignoumba, Nzamba; Ross, Peeter; Ben Yahia, Sadok; Draheim, Dirk Artificial intelligence in medicine 2024 / art. 102745, 16 p. : ill <https://doi.org/10.1016/j.artmed.2023.102745>

Evaluation of deep learning-based depression detection using medical claims data : preprint

Bertl, Markus; Bignoumba, Nzamba; Ross, Peeter; Ben Yahia, Sadok; Draheim, Dirk SSRN 2023 / p. 1-34 : ill <https://doi.org/10.2139/ssrn.4478987>

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>

Evolutionary algorithms for hyperparameter optimization in machine learning for application in high energy physics

Tani, Laurits; Rand, Diana; Veelken, Christian; Kadastik, Mario The European Physical Journal C 2021 / art. 170, 9 p. : ill <https://doi.org/10.1140/epjc/s10052-021-08950-y>

Evolutionary algorithms for hyperparameter optimization in machine learning for application in high energy physics : [preprint]

Tani, Laurits; Rand, Diana; Veelken, Christian; Kadastik, Mario arXiv.org 2021 / 11 p. : ill <https://doi.org/10.48550/arXiv.2011.04434>

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

Kaushik, Minakshi; Sharma, Rahul; Koiva, Pilleri; 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](#)

Experimental demonstration of ML-based DWDM system margin estimation

Müller, Jasper; Slyne, Frank; Kaeval, Kaida; Troia, Sebastian; Fehenberger, Tobias; Elbers, Jörg-Peter; Kilper, Daniel C.; Ruffini, Marco; Mas-Machuca, Carmen Optical Fiber Communications Conference and Exhibition, OFC 2023 : Proceedings 2023 / paper Tu2F.2., 3 p. : ill <https://opg.optica.org/abstract.cfm?URI=OFC-2023-Tu2F.2>

An experimental pipeline for automated reasoning in natural language (short paper)

Tammet, Tanel; Järv, Priit; Verrev, Martin; Draheim, Dirk Automated Deduction – CADE 29, 29th International Conference on Automated Deduction, Rome, Italy, July 1–4, 2023 : proceedings 2023 / p. 509-521 https://doi.org/10.1007/978-3-031-38499-8_29

[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Experiments with LLMs for converting language to logic

Tammet, Tanel; Järv, Priit; Verrev, Martin; Draheim, Dirk Neural-Symbolic Learning and Reasoning : 18th International Conference, NeSy 2024, Barcelona, Spain, September 9–12, 2024, Proceedings, Part II 2024 / p. 305 - 314

https://doi.org/10.1007/978-3-031-71170-1_24 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

Guerra-Manzanares, Alejandro; Bahsi, Hayretdin 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](#)

Explainability-based trust algorithm for electricity price forecasting models

Heistrene, Leena; Machlev, Ram; Perl, Michael; Belikov, Juri; Baimel, Dmitry; Levy, Kfir; Mannor, Shie; Levron, Yoash Energy and AI 2023 / art 100259, 18 p <https://doi.org/10.1016/j.egyai.2023.100259> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#)

[Article at WOS](#)

Explainable AI based fault detection and diagnosis system for air handling units

Belikov, Juri; Meas, Molika; Machlev, Ram; Köse, Ahmet; Tepljakov, Aleksei; Loo, Lauri; Petlenkov, Eduard; Levron, Yoash Proceedings of the 19th International Conference on Informatics in Control, Automation and Robotics - ICINCO, 2022 , Lisbon, Portugal 2022 / p. 271-279 <https://doi.org/10.5220/0011350000003271>

Explaining the decisions of power quality disturbance classifiers using latent space features

Machlev, Ram; Perl, Michael; Caciularu, Avi; Belikov, Juri; Levy, Kfir Yehuda; Levron, Yoash International journal of electrical power & energy systems 2023 / art. 108949 <https://doi.org/10.1016/j.ijepes.2023.108949> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Exploration of Activation Fault Reliability in Quantized Systolic Array-Based DNN Accelerators

Taheri, Mahdi; Cherezova, Natalia; Ansari, Mohammad Saeed; Jenihhin, Maksim; Mahani, Ali; Daneshtalab, Masoud; Raik, Jaan 25th International Symposium on Quality Electronic Design (ISQED) 2025 / 8 p. : ill <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=10528372>

Extracting ontologies from relational databases

Astrova, Irina Proceedings of the 22nd IASTED International Conference on Databases and Applications (DBA) 2004 / p. 56-61 <https://spiral.imperial.ac.uk/bitstream/10044/1/52670/7/FAIA291-0043.pdf>

Fall detection and activity recognition system for usage in smart work-wear [Online resource]

Leier, Mairo; Jervan, Gert; Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600959>

FedBranched : leveraging federated learning for anomaly-aware load forecasting in energy networks

Manzoor, Habib Ullah; Khan, Ahsan Raza; Flynn, David; Alam, Muhammad Mahtab; Akram, Muhammad; Imran, Muhammad Ali; Zoha, Ahmed Sensors 2023 / art. 3570 <https://doi.org/10.3390/s23073570> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Finding Potential Phase Change Materials Among Ionic Liquids with The Aid of Machine Learning Model

Kaljusmaa, Liisa-Maria; Järvik, Oliver Conference Book : International Conference in Chemistry and Chemical Technology 2023 / p. 71 https://www.cct2023.chgf.vu.lt/images/2023/CCT_2023_Conference_book.pdf

Forecasting demand-side flexibility of a household with dynamic consumer behavior analysis

Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Korötko, Tarmo IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863005>

Forecasting of absolute dynamic topography by utilizing machinelearning with synergy of satellite altimetry data

Delpeche-Ellmann, Nicole Camille; Rajabi-Kiasari, Saeed; Ellmann, Artu 13th Coastal Altimetry Workshop & Coastal Altimetry Training, 6-10 February 2023, Universidad de Cádiz, Spain : abstract 2023 / p. 42
<https://www.coastalaltimetry.org/NikalWebsitePortal/coastal-altimetry-workshop/esa/ExtraContent/ContentSubPage?page=8&subPage=3>

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/aece.v18i3.3597> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forecasting sea level maxima using machine learning models in the Baltic Sea

Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu International Liège Colloquium 2024 : Ocean Extremes 2024 / 1 p https://gher-uliege.github.io/liege-colloquium-2024/abstracts/2024-01-26_12:01:45_IP_193.40.250.130.pdf

Forecasting short term wind energy generation using machine learning

Shabbir, Noman; Ahmadiyahangar, 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>

Fourier neural operators for emulating ocean models : Towards a knowledge-driven machine learning

Jahanmard, Vahidreza; Ellmann, Artu; Delpeche-Ellmann, Nicole Camille EGU General Assembly 2025 2025 / art. EGU25-4354 <https://doi.org/10.5194/egusphere-egu25-4354>

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](#)

From near real-time urban data to an explainable city-scale model to help reduce the Urban Heat Island (UHI) effect

Eslamirad, Nasim; De Luca, Francesco; Ben Yahia, Sadok; Lylykangas, Kimmo Sakari Journal of Physics: Conference Series 2023 / art. 092012, p. 1-6 : ill <https://doi.org/10.1088/1742-6596/2600/9/092012> [Conference proceedings at Scopus](#) [Article at Scopus](#)

From sensors to Dempster-Shafer theory and back : the axiom of ambiguous sensor correctness and its applications

Draheim, Dirk; Tammet, Tanel Database and Expert Systems Applications : 31st International Conference, DEXA 2020, Bratislava, Slovakia, September 14–17, 2020 : Proceedings, Part I 2020 / p. 3-19 https://doi.org/10.1007/978-3-030-59003-1_1 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Fully automated tuning of microwave coaxial cavity filters = Mikrolaine-koaksiaalfiltrite täisautomaatne häälestamine

Sekhri, Even 2024 https://www.ester.ee/record=b5685094*est <https://digikogu.taltech.ee/et/Item/38784e65-568e-4dd9-aef9-bb5eec5a2a9c>
<https://doi.org/10.23658/taltech.20/2024>

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](#)

GC and other methods for full and partial context coverage

Raun, Kristo; Torim, Ants; Ben Yahia, Sadok Procedia computer science 2021 / p. 746–755
<https://doi.org/10.1016/j.procs.2021.08.077> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Generalized association rule mining – dimensional unsupervised learning = Üldistatud assotsiatsioonireeglite kaevandamine – dimensiooniline juhendamata õpe

Kaushik, Minakshi 2024 https://www.ester.ee/record=b5652676*est <https://digikogu.taltech.ee/et/Item/b3fc493d-b245-43e2-bd37-87d749cca028> <https://doi.org/10.23658/taltech.6/2024>

Generation of unmeasured loading levels data for condition monitoring of induction machine using machine learning

Billah, Md Masum; Saberi, Alireza Nemat; Hemeida, Ahmed; Martin, Florian; Kudelina, Karolina; Asad, Bilal; Naseer, Muhammad Usman; Mukherjee, Victor; Belahcen, Anouar IEEE transactions on magnetism 2024 / art. 8201104
<https://doi.org/10.1109/TMAG.2023.3312267>

GK : Implementing full first order default logic for commonsense reasoning (system description)

Tammet, Tanel; Draheim, Dirk; Järv, Priit Automated Reasoning : 11th International Joint Conference, IJCAR 2022, Haifa, Israel, August 8–10, 2022 : proceedings 2022 / p. 300-309 https://doi.org/10.1007/978-3-031-10769-6_18 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

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](#)

Health index prediction of overhead transmission lines : a machine learning approach

Manninen, Henri; Kilter, Jako; Landsberg, Mart IEEE transactions on power delivery 2022 / p. 50-58 <https://doi.org/10.1109/TPWRD.2021.3052721> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Higher education teachers' perceptions about teaching and learning related qualities of telepresence robots

Leoste, Janika; Virkus, Sirje; Talisainen, Aleksei ROBOT2022 : Fifth Iberian Robotics Conference : Advances in Robotics. Vol. 1 2022 / p. 526-537 https://doi.org/10.1007/978-3-031-21065-5_43 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

How domain engineering can help to raise adoption rates of artificial intelligence in healthcare

Bertl, Markus; Klementi, Toomas; Piho, Gunnar; Ross, Peeter; Draheim, Dirk Information Integration and Web Intelligence, 25th International Conference, iiWAS 2023, Denpasar, Bali, Indonesia, December 4–6, 2023 : proceedings 2023 / p. 490-504 https://doi.org/10.1007/978-3-031-48316-5_1 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Hybrid feature selection models for machine learning based botnet detection in IoT networks

Guerra Manzanares, Alejandro; Bahsi, Hayretidin; 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](#)

An improved cooperative team spraying control of a diffusion process with a moving or static pollution source

Chen, Juan; Cui, Baotong; Chen, YangQuan; Zhuang, Bo IEEE/CAA Journal of Automatica Sinica 2020 / p. 494 - 504 : ill <https://doi.org/10.1109/JAS.2019.1911519>

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 Arabic text to image mapping using a robust machine learning technique

Zakraoui, Jezia; Elloumi, Samir; Alja'am, Jihad Mohamad; Ben Yahia, Sadok IEEE Access 2019 / p. 18772 - 18782 : ill <https://doi.org/10.1109/ACCESS.2019.2896713> [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/mnstemps/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](#)

Incorporating a machine learning approach as an established decision support system for coastal vulnerability in the Eastern Baltic Sea

Barzehkar, Mojtaba; Parnell, Kevin Ellis; Soomere, Tarmo Journal of coastal research 2024 / p. 58-62 <https://doi.org/10.2112/JCR-SI113-012.1>

In-depth feature selection and ranking for automated detection of mobile malware

Guerra Manzanares, Alejandro; Nömm, Sven; Bahsi, Hayretidin 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, Hayret 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](#)

Industrial robot training in the simulation using the machine learning agents

Nutonen, Karle 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 13-14 : ill https://www.ester.ee/record=b5504019*est

Infotehnoloogia. Sõnastik. Osa 31, Intellektitehnika. Tehisõpe

Hanson, Vello; Tavast, Arvi; **Kalja, Ahto; Võhandu, Leo** 1999 https://www.ester.ee/record=b1323638*est

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>

Interpretable machine learning for heterogeneous treatment effect estimators with Double ML: a case of access to credit for SMEs

Medianovskyi, Kyrlo; Malakauskas, Aidan; Lakstutiene, Ausrine; **Ben Yahia, Sadok** Procedia computer science 2023 / p. 2163-2172 : ill <https://doi.org/10.1016/j.procs.2023.10.207> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Interpretable machine learning for SME financial distress prediction

Medianovskyi, Kyrlo; Malakauskas, Aidan; Lakstutiene, Ausrine; **Ben Yahia, Sadok** 12th International Conference on Information Systems and Advanced Technologies "ICISAT 2022" : Intelligent Information, Data Science and Decision Support System 2023 / p. 454 - 464 https://doi.org/10.1007/978-3-031-25344-7_42 [Article collection metrics at Scopus](#) [Article at Scopus](#)

IoT based tools and methods for electrical machine diagnostics = Asjade interneti põhised tööriistad ja meetodid elektrimasinate diagnostikaks

Raja, Hadi Ashraf 2023 <https://doi.org/10.23658/taltech.20/2023> <https://digikogu.taltech.ee/et/Item/3015334f-c32b-43ae-ba2d-bfcd536aba5> https://www.ester.ee/record=b5558656*est

JÄNES : a NAS framework for ML-based EDA applications

Selg, Hardi; Jenihhin, Maksim; Ellervee, Peeter IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems 2021 <https://doi.org/10.1109/DFT52944.2021.9568321>

Jüri Vain: tehisintellekt on palju enam kui masinõpe

Vain, Jüri err.ee 2023 [Jüri Vain: tehisintellekt on palju enam kui masinõpe](#)

Kas masinõpe muudab põlevkivitööstuse senised mängureeglid?

Vaaks, Eveliis Trialoog 2025 <https://trialoog.taltech.ee/kas-masinope-muudab-polevkivitoostuse-senised-mangureeglid/>

Kas vabadust ja tehisaru saab ühendada?

Lepasaar, Tiit postimees.ee 2023 / Lk. 12 [Kas vabadust ja tehisaru saab ühendada?](#)

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>

Koju naasnud eestlane: ma ei ole vist kunagi millegi nii ajakohasega tegelenud [Võrguväljaanne]

arileht.delfi.ee 2022 [Koju naasnud eestlane: ma ei ole vist kunagi millegi nii ajakohasega tegelenud](#)

Kolm professorit versus ChatGPT

Russak, Ülo Harju Elu 2023 / Lk. 3 <https://dea.digar.ee/article/harjuelu/2023/04/14/4.1> [Kolm professorit versus ChatGPT](#)

Kus häda kõige suurem, seal robot kõige lähem

Kuts, Vladimir Trialoog 2025 <https://trialoog.taltech.ee/kus-hada-koige-suurem-seal-robot-koige-lahem/>

Large-scale commonsense knowledge for default logic reasoning

Järv, Priit; Tammet, Tanel; Verrev, Martin; Draheim, Dirk SN Computer Science 2023 / art. 550 <https://doi.org/10.1007/s42979-023-01963-2> [Journal metrics at Scopus](#) [Article at Scopus](#)

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, Hayretidin; 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

A legally relevant socio-technical language development for smart contracts = Arukate lepingute jaoks õiguslikult asjakohane sotsiaal-tehniline keelearendus

Dwivedi, Vimal Kumar 2022 <https://doi.org/10.23658/taltech.14/2022> <https://digikogu.taltech.ee/et/Item/f69ec767-0112-4342-9d4c-aceb37502c0b> https://www.ester.ee/record=b5497769*est

Leveraging artificial intelligence for microkinematic analysis of fine motor skills in Parkinson's disease detection = Tehisintellekti rakendamise peenmotoorika mikrokinemaatilises analüüsis Parkinsoni tõve tuvastamiseks

Valla, Elli 2025 <https://digikogu.taltech.ee/et/Item/e7c8ea35-6739-43fc-8f24-0c8607c62346> <https://doi.org/10.23658/taltech.26/2025> https://www.ester.ee/record=b5747730*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, Hayretidin 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](#)

Loovus pilves – TraynMe viib filmitööstuse uude ajastusse

Vaaks, Eveliis Trialoog 2025 <https://trialoog.taltech.ee/loovus-pilves-traynme-viib-filmitoostuse-uude-ajastusse/>

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 assisted design of high-entropy alloys with ultra-high microhardness and unexpected low density

Zhao, Shunli; Jiang, Bin; Song, Kaikai; Liu, Xiaoming; Wang, Wenyu; Si, Dekun; Zhang, Jilei; Chen, Xiangyan; Zhou, Changshan; Liu, Pingping; Chen, Dong; Zhang, Zequn; Ramasamy, Parthiban; Tang, Junlei; Lv, Wenquan; Prashanth, Konda Gokuldoss; Sopa, Daniel; Eckert, Jürgen Materials & design 2024 / art. 112634 <https://doi.org/10.1016/j.matdes.2024.112634>

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 based emotion recognition in a digital learning environment

Ivleva, Natalja; Pentel, Avar; Dunajeva, Olga; Juštšenko, Valeria Learning in the Age of Digital and Green Transition : Proceedings of the 25th International Conference on Interactive Collaborative Learning (ICL2022), Volume 1 2023 / p. 405-412
https://doi.org/10.1007/978-3-031-26876-2_38 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Machine learning clustering techniques for selective mitigation of critical design features

Lange, Thomas; **Balakrishnan, Aneesh**; Glorieux, Maximilien; Alexandrescu, Dan; Sterpone, Luca 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 / 7 p. : ill <https://doi.org/10.1109/IOLTS50870.2020.9159751>

Machine learning enabled fault-detection algorithms for optical spectrum-as-a-service users

Patri, Sai Kireet; Dick, Isabella; **Kaeval, Kaida**; Müller, Jasper; Pedreno-Manresa, Jose-Juan; Autenrieth, Achim; Elbers, Jörg-Peter; Tikas, Marko; Mas-Machuca, Carmen 2023 International Conference on Optical Network Design and Modeling (ONDM) : proceedings 2023 / 6 p. : ill <https://ieeexplore.ieee.org/document/10144858>

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 Forecasting of Absolute Dynamic Topography in the Baltic Sea

Rajabi-Kiasari, Saeed; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Nordic Geodetic Commission General Assembly 2022 in Copenhagen : Poster Session 2022 / 36 l. <https://medialib.cmdn.dk/medialibrary/010C1367-E991-4A33-AB10-1953247E9C23/530AEABD-3A25-ED11-84B6-00155D0B0940.pdf>

Machine learning meets communication networks : current trends and future challenges

Ahmad, Ijaz; Shahabuddin, Shariar; Malik, Hassan; Leppänen, Teemu; Loven, Lauri; Anttonen, Antti; Sodhro, Ali Hassan; **Alam, Muhammad Mahtab**; Juntti, Markku; Ylä-Jääski, Antti IEEE Access 2020 / art. 9274307, p. 223418-223460
<https://doi.org/10.1109/ACCESS.2020.3041765> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning prediction for filling the interruptions of tide gauge data using a least square estimation method from nearest stations

Jahanmard, Vahidreza; Delpeche-Ellmann, Nicole Camille; Ellmann, Artu Geodesy for a Sustainable Earth, Scientific Assembly of the International Association of Geodesy : abstract book 2021 / S5-030 p. 529 https://mm.sciconf.cn/en/minisite/poster-detail-new/1646?poster_id=1563508 https://files.sciconf.cn/upload/file/20210626/20210626085039_69146.pdf

Machine learning task as a diclique extracting task

Kuusik, Rein, inform.; Treier, Tarvo; Lind, Grete; Roosmann, Peeter 2009 Sixth International Conference on Fuzzy Systems and Knowledge Discovery : FSKD'09 : Tianjin, China, August 14-16, 2009. 1 2009 / p. 555-560 <https://ieeexplore.ieee.org/document/5358516>

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 vs human learning

Henno, Jaak; Jaakkola, Hannu; Mäkelä, Jukka 2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO), September 27 - October 1, 2021, Opatija, Croatia : proceedings 2021 / p. 542-548
<https://doi.org/10.23919/MIPRO52101.2021.9596771>

Machine learning-based detection and characterization of evolving threats in mobile and IoT Systems = Masinõppepõhine arenevate ohtude tuvastamine ning kirjeldamine mobiilseadmete ja värkvõrkude jaoks

Guerra Manzanares, Alejandro 2022 <https://doi.org/10.23658/taltech.54/2022> <https://digikogu.taltech.ee/et/Item/f56ae778-e5a5-4147-a8e4-4833e08fa789> https://www.ester.ee/record=b5511898*est

A machine learning-based forensic tool for image classification - a design science approach

Del Mar-Raave, Joanna Rose; Bahsi, Hayretidin; Mrsic, Leo; Hausknecht, Kresimir Forensic Science International : Digital Investigation 2021 / art. 301265, 13 p <https://doi.org/10.1016/j.fsdi.2021.301265> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning-based optimization design workflow based on obstruction angles for building facades

Sepulveda Luque, Abel; Eslamirad, Nasim; Seyed Salehi, Seyed Shahabaldin; Thalfeldt, Martin; De Luca, Francesco

Regenerating the City Performance-driven and Simulation-based Computational Design for Sustainable Cities and Communities : proceedings of the 9th Regional International Symposium on Education and Research in Computer Aided Architectural Design in Europe, Tallinn University of Technology, 15-16 June 2023 2023 / p. 15-24 <https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d>

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](#)

Masinõpe toetab maksimaalselt kiiret ja tõrgeteta tootmist

Alvela, Ain ohtuleht.ee 2024 [Masinõpe toetab maksimaalselt kiiret ja tõrgeteta tootmist](#)

Measurement of Higgs boson properties in leptonic final states using ML-methods = Higgsi bosoni omaduste mõõtmine leptoneid sisaldavates kanalites kasutades masinõppe meetodeid

Tani, Laurits 2024 https://www.ester.ee/record=b5685160*est <https://doi.org/10.23658/taltech.25/2024> <https://digikogu.taltech.ee/et/Item/95677715-7be7-4696-a8a6-cdbe321761b2>

Measures of Impact and Confounding – An Analysis and Experimental Comparison of Novel and Established Measures = Mõju ja segajate mõõdikud – uute ja väljakujunenud meetmete analüüs ja eksperimentaalne võrdlus

Arakkal Peious, Sijo 2025 https://www.ester.ee/record=b5745850*est <https://digikogu.taltech.ee/et/Item/81726e4a-6f3a-429b-8580-ae7710da881d> <https://doi.org/10.23658/taltech.24/2025>

A method for assessment of the general circulation model quality using the K-means clustering algorithm : a case study with GETM v2.5

Raudsepp, Urmas; **Maljutenko, Ilja** Geoscientific model development 2022 / p. 535-551 <https://doi.org/10.5194/gmd-15-535-2022> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal methods at WOS](#) [Article at WOS](#)

Methodology for reconfigurable cobot-based quality control system for SME production

Moor, Madis; **Sarkans, Martinš**; **Riives, Jüri**; **Otto, Tauno**; Vano, Jaime Masia International Journal of Engineering and Technology (IJET) 2024 / p. 113-119 <https://doi.org/10.7763/IJET.2024.V16.1265>

Microgrid oriented modeling of space heating system based on neural networks

Häring, Tobias; **Kull, Tuule Mall**; **Ahmadihangar, Roya**; **Rosin, Argo**; **Thalfeldt, Martin**; **Biechl, Helmuth** 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](#)

Miks masinõpe laialdast kasutust ei leia? [Võrguväljaanne]

toostusuudised.ee 2021 ["Miks masinõpe laialdast kasutust ei leia?"](#)

Miks meil on vaja TI-insenere?

Luberg, Ago Mente et Manu 2025 / lk. 4-5 : fot https://www.ester.ee/record=b1242496*est

Mis toimub tehisintellekti „kapoti all“ ja miks me seda teadma peame? [Võrguväljaanne]

delfi.ee 2022 [Mis toimub tehisintellekti „kapoti all“ ja miks me seda teadma peame?](#)

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>

MLC: a machine learning based checker for soft error detection in embedded processors

Nosrati, Nooshin; **Jenihhin, Maksim**; Navabi, Zainalabedin Proceedings - 2022 IEEE 28th International Symposium on On-Line Testing and Robust System Design, IOLTS 2022 2022 / Code 183305 <https://doi.org/10.1109/IOLTS56730.2022.9897309> [Article at Scopus](#) [Article at WOS](#)

Mobiilse pahavara plahvatusele võib pakkuda leevendust masinõpe [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 [Mobiilse pahavara plahvatusele võib pakkuda leevendust masinõpe](#)

Model-free deep reinforcement learning-based current control for the dual-purpose dc-dc/ac power converter

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr**; **Matiushkin, Oleksandr**; Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604305>

Monotone systems approach in inductive learning

Roosmann, Peeter; Vöhandu, Leo; Kuusik, Rein, inform.; Treier, Tarvo; Lind, Grete International journal of applied mathematics and informatics 2008 / 2, p. 47-56 : ill <https://data laundering.com/download/ami-30.pdf>

Multi-objective machine learning optimization of cylindrical TPMS lattices for bone implants

Rezapourianghahfarokhi, Mansoureh; Cheloe Darabi, Ali; Khoshbin, Mohammadreza; **Hussainova, Irina** Biomimetics 2025 / art. 475 <http://doi.org/10.3390/biomimetics10070475>

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>

An NB-IoT based edge-of-things framework for energy-efficient image transfer

Khan, Sikandar Muhammad Zulqarnain; Le Moullec, Yannick; Alam, Muhammad Mahtab Sensors 2021 / art. 5929, 21 p. : ill <https://doi.org/10.3390/s21175929> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Neuro-fuzzy approach for fault prediction of mechanical bearing faults using vibration analysis

Shirokova, Veroonika; Kudelina, Karolina; Raja, Hadi Ashraf; Rjabtsikov, Viktor; Barashkova, Tatjana; Nutonen, Karle IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / p. 1-6 <https://doi.org/10.1109/IECON55916.2024.10905990> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Neuro-fuzzy framework for fault prediction in electrical machines via vibration analysis

Kudelina, Karolina; Raja, Hadi Ashraf Energies 2024 / art. 2818 <https://doi.org/10.3390/en17122818> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A new efficient ALignment-driven Neural Network for mortality prediction from irregular multivariate time series data

Bignoumba, Nzamba; Mellouli, Nedra; **Ben Yahia, Sadok** Expert systems with applications 2024 / art. 122148 <https://doi.org/10.1016/j.eswa.2023.122148>

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

Non-intrusive load monitoring based smart energy management system for smart buildings

Jawad, Muhammad; **Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo;** Khaleel, T.; Tahir, W. 2024 7th International Conference on Information and Computer Technologies (ICICT) : proceedings 2024 / p. 46-50 <https://doi.org/10.1109/ICICT62343.2024.00014>

Non-Line of Sight detection based on 5G signal strength- and quality measurements and its impact on mobile positioning accuracy

Müürsepp, Ivo; Fjodorov, Aleksei; Alam, Muhammad Mahtab 2024 International Wireless Communications and Mobile Computing (IWCMC) 2024 / p. 256-261 <https://doi.org/10.1109/IWCMC61514.2024.10592586>

Noore IT-teadlase preemia pälvinu TalTechist uurib, miks masinõpe pole veel laialt levinud [Võrguväljaanne]

Kald, Indrek itutuudised.ee 2022 ["Noore IT-teadlase preemia pälvinu TalTechist uurib, miks masinõpe pole veel laialt levinud"](https://doi.org/10.1109/IWCMC61514.2024.10592586)

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](#)

Numerical association rule mining : a systematic literature review

Kaushik, Minakshi; Sharma, Rahul; Fister, Iztok jr.; **Draheim, Dirk** arXiv.org 2023 / 50 p. : ill <https://doi.org/10.48550/arXiv.2307.00662>

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

Medianovskyi, 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, Hayretdin 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, Hayretdin 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](#)

Optimal Q-learning approach for tuning the cavity filters

Sekhri, Even; Tamre, Mart; Kapoor, Rajiv 2019 20th International Conference on Research and Education in Mechatronics (REM) : [proceedings] 2019 / 5 p. : ill <https://doi.org/10.1109/REM.2019.8744118>

Optimal tuning of fractional order sliding mode controller for PMSM speed using neural network with reinforcement learning

Zahraoui, Younes; Zaihidee, Fardila M.; Kermadi, Mostefa; Mekhilef, Saad; Alhamrouni, Ibrahim; Seyedmahmoudian, Mehdi; Stojcevski, Alex Energies 2023 / art. 4353 <https://doi.org/10.3390/en16114353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimising full waveform inversion with inhomogeneous transducers: Parameters and considerations for successful implementation

Rasgado Moreno, Carlos Omar; Xu, Panpan; Rist, Marek; Ratassepp, Madis NDT & E International 2025 / art. 103265 <https://doi.org/10.1016/j.ndteint.2024.103265>

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](#)

Oskuste nappus takistab Eesti ettevõtete arengut

Tomberg, Hanno Postimees 2025 / lk. 14 <https://dea.digar.ee/article/postimees/2025/02/04/14.9>

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](#)

A PD-type iterative learning algorithm for semi-linear distributed parameter systems with sensors/actuators

Zhang, Jianxiang; Cui, Baotong; Jiang, Zhengxian; **Chen, Juan** IEEE Access 2019 / p. 159037-159047 : ill

Peeter Ross: radioloogia areng on väga kiire ja liigub aina enam mitmemõõtmelise pildi esitamise suunas

Ross, Peeter med24.ee 2024 [Peeter Ross: radioloogia areng on väga kiire ja liigub aina enam mitmemõõtmelise pildi esitamise suunas](#)

Performance improvement of decision tree : a robust classifier using tabu search algorithm

Hafeez, Muhammad Asfand; Rashid, Muhammad; Tariq, Hassan; **Abideen, Zain Ul**; Alotaibi, Saud S.; Sinky, Mohammed H. Applied Sciences (Switzerland) 2021 / art. 6728 <https://doi.org/10.3390/app11156728> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Pitfalls of machine learning methods in smart grids : a legal perspective

Antonov, Alexander; Häring, Tobias; **Korōtko, Tarmo**; Rosin, Argo; Kerikmäe, Tanel; **Biechl, Helmuth** 2021 International Symposium on Computer Science and Intelligent Controls : (ISCSIC 2021), 12-14 November 2021, Rome, Italy : proceedings 2021 / p. 248-256 <https://doi.org/10.1109/ISCSIC54682.2021.00053>

PMU placement for fault line location using neural additive models—A global XAI technique

Perl, Michael; Sun, Zhenglong; Machlev, Ram; **Belikov, Juri**; Levy, Kfir Yehuda; Levron, Yoash International journal of electrical power and energy systems 2024 / art. 109573, 10 p. : ill <https://doi.org/10.1016/j.ijepes.2023.109573> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Practical real-time data-driven approach for district cooling plant operational optimization

Sukhanov, Ivan; Köse, Ahmet; **Tepljakov, Aleksei**; **Petlenkov, Eduard**; **Belikov, Juri** IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863248>

Predicting psychiatric diseases using autoAI : a performance analysis based on health insurance billing data

Bertl, Markus; **Ross, Peeter**; **Draheim, Dirk** Database and Expert Systems Applications : 32nd International Conference, DEXA 2021, Virtual Event, September 27-30, 2021 : proceedings. Part I 2021 / p. 104-111 https://doi.org/10.1007/978-3-030-86472-9_9 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [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](#)

Predictive systems using machine learning tools to forecast adverse events during medical stays = Ennustavad süsteemid, mis kasutavad masinõppe vahendeid kõrvalekallete prognoosimiseks haiglas viibimise ajal

Bignoumba, Nzamba 2024 <https://doi.org/10.23658/taltech.49/2024> https://www.ester.ee/record=b5700796*est <https://digikogu.taltech.ee/et/Item/19abb999-27b2-46a1-8fe6-1f1c43a5fe0d>

Preface

Jallouli, Rim; Tobji, Mohamed Anis Bach; Mcheick, Hamid; **Piho, Gunnar** Digital Economy. Emerging Technologies and Business Innovation : 6th International Conference on Digital Economy, ICDEc 2021, Tallinn, Estonia, July 15–17, 2021 : proceedings 2021 / p. v–vi <https://link.springer.com/content/pdf/bfm:978-3-030-92909-1/1> [Collection metrics at Scopus](#) [Article at Scopus](#)

Preliminary analysis of bearing current faults for predictive maintenance

Kudelina, Karolina; Raja, Hadi Ashraf; **Vaimann, Toomas**; **Kallaste, Ants**; Pomarnacki, Raimondas; Hyunh, Van Khang 2023 IEEE International Conference on Electric Machines and Drives (IEMDC) 2023 / 5 p. : ill <https://doi.org/10.1109/IEMDC55163.2023.10238934>

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>

Preliminary results in using attention for increasing attack identification efficiency

Ahmad, Tanwir; Truscan, Dragos; **Vain, Juri** 2023 IEEE 16th International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2023, 16-20 April 2023, Dublin, Ireland, Proceedings 2023 / p. 159 - 164

A primer on public safety communication in the context of terror attacks: the NATO SPS “COUNTER-TERROR” project
Alam, Muhammad Mahtab; Le Moullec, Yannick; Ahmad, Rizwan; Magarini, Maurizio; Reggiani, Luca Advanced Technologies for Security Applications : Proceedings of the NATO Science for Peace and Security 'Cluster Workshop on Advanced Technologies', 17-18 September 2019, Leuven, Belgium 2020 / p. 19-34 https://doi.org/10.1007/978-94-024-2021-0_3 [Article collection metrics at Scopus](#)
[Article at Scopus](#)

ProAct: Progressive Training for Hybrid Clipped Activation Function to Enhance Resilience of DNNs
Mousavi, Seyedhamidreza; **Ahmadilivani, Mohammad Hasan; Raik, Jaan; Jenihhin, Maksim; Daneshtalab, Masoud** arXiv.org 2024 / 12 p. : ill <https://doi.org/10.48550/arXiv.2406.06313>

A probabilistic synapse with strained MTJs for Spiking Neural Networks
Pagliarini, Samuel Nascimento; Bhui, Sudipta; Isgenc, Mehmet Meric; Biswas, Ayan Kumar; Pileggi, Larry IEEE Transactions on Neural Networks and Learning Systems 2020 / p. 1113-1123 : ill <https://doi.org/10.1109/TNNLS.2019.2917819>

Professor Sven Nõmm AI toimimisest: auto kapoti alt leiad mootori ja tehisintellekti kapoti alt leiad masinõppe
Nõmm, Sven geenius.ee 2024 [Professor Sven Nõmm AI toimimisest: auto kapoti alt leiad mootori ja tehisintellekti kapoti alt leiad masinõppe](#)

Programmi RITA tegevuse 1 projekti „Masinõppe ja AI toega teenused“ lõpparuanne
Slovak, Mihkel; Vilo, Jaak; Reisberg, Sulev; Tamm, Sirli; Oja, Marek; Ligi, Kadri; Unt, Taavi; Võrk, Andres; Leets, Peeter; **Tammet, Tanel; Vaarandi, Risto; Nõmm, Sven; Lepik, Toomas; Lember, Veiko; Nõmmik, Steven; Noordt, Colin Pascal van; Kerikmäe, Tanel** 2022 [Programmi RITA tegevuse 1 projekti „Masinõppe ja AI toega teenused“ lõpparuanne](#)

Radio spectrum and power optimization cognitive techniques for wireless body area networks = Raadiospektri ja võimsuse optimeerimise kognitiivsed tehnikad traadita kehavõrkudele
Ahmed, Tauseef 2017 <https://digi.lib.ttu.ee/i/?7677> https://www.ester.ee/record=b4677631*est

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>

Reinforcement Learning-based Energy Management Strategy for Flexible Hybrid ac/dc Microgrid
Gutiérrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr; Matiushkin, Oleksandr;** Barrero-González, Fermín; González-Romera, Eva IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905501> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Relatedness and Product Complexity Meet Gravity Models of International Trade
Tiits, Marek; Kalvet, Tarmo; Ounoughi, Chahinez; Ben Yahia, Sadok Journal of open innovation: technology, market, and complexity 2024 / art. 100288 <https://doi.org/10.1016/j.joitmc.2024.100288>

Residential DC load forecasting using long short-term memory network (LSTM)
Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Husev, Oleksandr; Jalakas, Tanel; Martins, Joao 2023 IEEE 11th International Conference on Smart Energy Grid Engineering (SEGE) 2023 / p. 131-136 <https://doi.org/10.1109/SEGE59172.2023.10274596>

Residential energy management system to support increased renewable penetration = Taastuvenergiaallikate kasutustihedust toetav energiahaldussüsteem
Shabbir, Noman 2022 <https://doi.org/10.23658/taltech.37/2022> <https://digikogu.taltech.ee/et/Item/2c178a6b-f918-4932-bd1b-48fefb7fc7aa> https://www.ester.ee/record=b5503996*est

Residential load forecasting for flexibility prediction using machine learning-based regression model
Ahmadiyahangar, Roya; Häring, Tobias; Rosin, Argo; Korõtko, 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 machine learning techniques : a comparative analysis
Shabbir, Noman 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2021 / p. 73-74 : ill https://www.ester.ee/record=b5457278*est

Residential load forecasting using recurrent neural networks
Shabbir, Noman; Ahmadiyahangar, 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 remote-sensing-based harmful cyanobacterial bloom monitoring services

Janatian, Nasim; Raudsepp, Urmas; Broomandi, Parya; Fickas, Kate; Olli, Kalle; Heimovaara, Timo; **Männik, Aarne; Uiboupin, Rivo;** Pahlevan, Nima Remote sensing applications society and environment 2025 / art. 101488
<https://doi.org/10.1016/j.rsase.2025.101488>

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>

A robust pathological voices recognition system based on DCNN and scattering transform

Souli, Sameh; Amam, Rimah; **Ben Yahia, Sadok** Applied acoustics 2021 / art. 107854 : ill
<https://doi.org/10.1016/j.apacoust.2020.107854> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Saving time and cost on the scheduling of fog-based IoT applications using deep reinforcement learning approach

Gazori, Pegah; **Rahbari, Dadmehr;** Nickray, Mohsen Future generation computer systems 2020 / p. 1098-1115
<https://doi.org/10.1016/j.future.2019.09.060>

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>

Semi-parametric approach to random forests for high-dimensional bayesian optimisation

Kuzmanovski, Vladimir; Hollmén, Jaakko Discovery Science : 25th International Conference, DS 2022, Montpellier, France, October 10–12, 2022, Proceedings 2022 / p. 418 - 428 https://doi.org/10.1007/978-3-031-18840-4_30 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

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 residential DC load forecasting using extreme gradient boost (XgBoost) algorithm

Shabbir, Noman; Husev, Oleksandr; Daniel, Kamran; Jawad, Muhammad; **Rosin, Argo;** Martins, Joao 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p
<https://doi.org/10.1109/CPE-POWERENG60842.2024.10604392>

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](#)

Simultaneous road edge and road surface markings detection using convolutional neural networks

Pihlak, Rene; Riid, Andri Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings 2020 / p. 109-121 https://doi.org/10.1007/978-3-030-57672-1_9 [Conference proceeding at Scopus](#) [Article at Scopus](#)

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 :

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

Valla, Elli; Väli, Lilian; Nõmm, 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>

Strengthening active learning with a reinforcement approach in engineering education

Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p <https://doi.org/10.1109/RTUCON62997.2024.10830891>

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A survey on AI and decision support systems in psychiatry – Uncovering a dilemma

Bertl, Markus; Ross, Peeter; Draheim, Dirk Expert Systems with Applications 2022 / art. 117464, 14 p. : ill <https://doi.org/10.1016/j.eswa.2022.117464> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A survey on artificial intelligence approaches in supporting frontline workers and decision makers for the COVID-19 pandemic

Rasheed, Jawad; Jamil, Akhtar; Draheim, Dirk Chaos, solitons & fractals 2020 / art. 110337, 17 p <https://doi.org/10.1016/j.chaos.2020.110337> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

Süvatehnoloogiate alternatiivsed arengutrajektoorid ja nende tähendus Eestile : lõpparuanne

Koppel, Kaupo; Kuusik, Alar; Arrak, Kadri; Raik, Jaan; Niidu, Allan; Kõks, Kerttu-Liis; Lahtvee, Petri-Jaan 2023 <https://media.voog.com/0000/0037/5345/files>

A symbiosis between population based incremental learning and LP-relaxation based parallel genetic algorithm for solving integer linear programming models

Fallah, Mohammad K.; Fazlali, Mahmood; Daneshtalab, Masoud Computing 2023 / p. 1121-1139 <https://doi.org/10.1007/s00607-021-01004-x>

Synergy of in-situ and hydrodynamic modelling to develop machine learning strategies for dynamic vertical Reference for Maritime and Offshore Engineering

Delpeche-Ellmann, Nicole Camille; Ellmann, Artu XXVIII General Assembly of the International Union of Geodesy and Geophysics (IUGG) 2023 <https://doi.org/10.57757/IUGG23-3653>

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

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

Systematic AI support for decision-making in the healthcare sector : obstacles and success factors

Bertl, Markus; Ross, Peeter; Draheim, Dirk Health policy and technology 2023 / art. 100748, 8 p. : ill <https://doi.org/10.1016/j.hlpt.2023.100748> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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/fpsyt.2022.923613> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A systematic literature review on hardware reliability assessment methods for deep neural networks

Ahmadilivani, Mohammad Hasan; Taheri, Mahdi; Raik, Jaan; Daneshtalab, Masoud; Jenihhin, Maksim ACM Computing Surveys 2024 / art. 141, 39 p. : ill <https://doi.org/10.1145/3638242> [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](#)

TalTech lõi käed tehisarul põhineva õigusplatvormiga

goodnews.ee 2025 <https://eestiulu.goodnews.ee/taltech-loi-kaed-tehisarul-pohineva-oigusplatvormiga/>

TalTechi tarkvarateaduse instituut sai uue rakendusliku masinõppe professori

Kald, Indrek ituudised.ee 2023 [TalTechi tarkvarateaduse instituut sai uue rakendusliku masinõppe professori](#)

TalTechi teadlane uurib tehisintellekti potentsiaali. "Tulevikku silmas pidades ülioluline teema"

Kald, Indrek ituudised.ee 2022 [TalTechi teadlane uurib tehisintellekti potentsiaali. "Tulevikku silmas pidades ülioluline teema"](#)

Teadlane arutleb : missugused on moodsa kübersõja eetilised aspektid ja kas me suudame ennast kaitsta?

Leier, Mairo digi.geenius.ee 2024 [Teadlane arutleb : missugused on moodsa kübersõja eetilised aspektid ja kas me suudame ennast kaitsta?](#)

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](#)

Tehisaru - inimesed - robotid : [viienda tööstusrevolutsiooni ootel]

Alvela, Ain Tehnikamaailm 2025 / lk. 44-48 : ill https://www.ester.ee/record=b1073050*est

Tehisintellekt - kas koll, millega hirmutada või hoopis suur sõber? [Võrguäljaanne]

Einama, Kaido postimees.ee 2022 / Lk. 9 [Tehisintellekt - kas koll, millega hirmutada või hoopis suur sõber?](#)

Tehisintellekt oskab näha Parkinsoni tõve algust inimese käekirjast

mu.ee 2023 [Tehisintellekt oskab näha Parkinsoni tõve algust inimese käekirjast](#) [Tehisaru aitab leida joonistustestidest Parkinsoni tõve varajasi jälgi](#)

Tehisintellekt rohepöörde eesmärkide teenistuses

Petlenkov, Eduard; Belikov, Juri RUP. Finants- ja õigusajakiri 2023 / lk. 9-13 : ill https://www.ester.ee/record=b5550879*est

Tehisintellektide pealetung: kas inimkond peaks kartma või rõõmustama?

Einama, Kaido Postimees 2023 / Lk. 11 <https://dea.digar.ee/article/ak/2023/02/11/7.1>

Tehismõistus muudab masinate töö paremaks

Alvela, Ain toostusest.ee 2024

Tehismõistus muudab masinate töö paremaks

Alvela, Ain TööstusEST 2024 / lk. 6-9 : ill., portr https://www.ester.ee/record=b4481084*est

Tehismõistus õpetab masinaid

Tammet, Tanel Tehnikamaailm 2024 / lk. 60-65 : ill., fot., portr https://www.ester.ee/record=b1073050*est

Tehnoloogiaettevõtte Gridraven lisab elektrivõrgule särtsu

Vaaks, Eveliis Trialoog 2025 <https://trialoog.taltech.ee/tehnoloogiaettevotte-gridraven-lisab-elektrivorgule-sartsu/>

The Compatibility between SDGs and the EU regulatory framework of AI

Cabral Costa Andrade, Aline; Solarte Vasquez, Maria Claudia Journal of ethics and legal technologies 2024 / p. 111-144 <https://jelt.padovauniversitypress.it/2024/1/6>

The gender wealth gap in Europe: Application of machine learning to predict individual-level wealth

Kukk, Merike; Meriküll, Jaanika; Rõõm, Tairi Review of income and wealth 2023 / p. 289 - 317 <https://doi.org/10.1111/roiw.12596> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The usage of fuzzy logic for detecting mechanical faults in gearboxes of robotic system

Autsou, Sjarhei; Kudelina, Karolina; Vaimann, Toomas; Rassõlkin, Anton 2024 International Conference on Electrical Machines (ICEM) 2024 / 7 p <https://doi.org/10.1109/ICEM60801.2024.10700425>

The validation of graph model-based, gate level low-dimensional feature data for machine learning applications

Balakrishnan, Aneesh; Lange, Thomas; Glorieux, Maximilien; Alexandrescu, Dan; **Jenihhin, Maksim** 2019 IEEE Nordic Circuits and Systems Conference (NORCAS) : NORCHIP and International Symposium of System-on-Chip (SoC), 29-30 October 2019, Helsinki, Finland : proceedings in IEEE Xplore 2019 / 7 p <https://doi.org/10.1109/NORCHIP.2019.8906974>

This fish does not exist : fish species dataset augmentation using stable diffusion

Dubrovinskaya, Elizaveta; Tuhtan, Jeffrey Andrew OCEANS 2023 - Limerick 2023 / 6 p.
<https://doi.org/10.1109/OCEANSLimerick52467.2023.10244720>

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

Guerra Manzanares, Alejandro; Nömm, Sven; Bahsi, Hayretdin 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; Tepljakov, 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

Nömm, 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; Nömm, Sven; Bahsi, Hayretdin 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; Nömm, 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](#)

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](#)

Tuule Mall Parts: energiatõhususe fännist nooreks tippteadlaseks

Parts, Tuule Mall Trialoog 2025 <https://trialoog.taltech.ee/tuule-mall-parts-energiatõhususe-fannist-nooreks-tippteadlaseks/>

Türgist Eestisse üksarvikut ehitama. „Tahan Eestile midagi tagasi anda“

Sildmets, Kadri Eesti Päevaleht 2023 <https://dea.digar.ee/article/lp/2023/07/28/15.1> [Türgist Eestisse üksarvikut ehitama. „Tahan Eestile midagi tagasi anda“](#)

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](#)

Unsupervised fouling reconstruction in the pipe bend

lablonskyi, Denys; Rasgado Moreno, Carlos Omar; Ratassepp, Madis; Klami, Arto; Hæggström, Edward; Salmi, Ari 2023 IEEE International Ultrasonics Symposium (IUS) 2023 / 3 p <https://doi.org/10.1109/IUS51837.2023.10306373>

Using machine learning algorithms to form an automatic student's grade based on the sets of assessment questions

Shvets, Oleg; Kuzmina, Jelena; Murtazin, Kristina; Piho, Gunnar; Meeter, Martijn INTED2023 Proceedings 2023 / p. 1066-1074
<https://doi.org/10.21125/inted.2023.0319>

Using machine learning for automated assessment of misclassification of goods for fraud detection

Spitšakova, Margarita; Haav, Hele-Mai Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings 2020 / p. 144-158 https://doi.org/10.1007/978-3-030-57672-1_12 [Conference proceeding at Scopus](#) [Article at Scopus](#)

Using machine learning to develop customer insights from user-generated content

Mustak, Mekhail; Hallikainen, Heli; Laukkanen, Tommi; Ple, Loïc; **Hollebeek, Linda Desiree**; Aleem, Majid Journal of retailing and consumer services 2024 / art. 104034, 14 p. : ill <https://doi.org/10.1016/j.jretconser.2024.104034> [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, Hayretudin; Nömm, Sven Information Systems Security and Privacy : 6th International Conference, ICISP 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](#)

Using reinforcement learning to optimize the acceptance threshold of a credit scoring model

Herasymovych, Mykola; **Märka, Karl**; Lukason, Oliver Applied Soft Computing Journal 2019 / Art. 105697 <https://doi.org/10.1016/j.asoc.2019.105697> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uuring: Eesti majanduse veduriks võib saada kuus tehnoloogiavaldkonda

Bioneer.ee 2023 [Uuring: Eesti majanduse veduriks võib saada kuus tehnoloogiavaldkonda](#)

Uus meetod aitab mõista masinõppe hingeelu [Võrguväljaanne]

postimees.ee 2021 ["Uus meetod aitab mõista masinõppe hingeelu"](#)

Uus teadusdoktor Markus Bertl

Eesti Arst 2024 / lk. 55 <https://dea.digar.ee/article/AKeestiarst/2024/03/0/19.5> <https://digikogu.taltech.ee/et/Item/a77022c7-b2af-46f9-ae83-62fe04f9bc72>

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

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

UWB positioning integrity estimation using ranging residuals and ML augmented filtering

Tommingas, Mihkel; **Alam, Muhammad Mahtab**; **Müürsepp, Ivo**; Ulp, Sander IEEE Journal of indoor and seamless positioning and navigation 2024 / p. 205-218 <https://doi.org/10.1109/JSPIN.2024.3418296>

Wafer-level die re-test success prediction using machine learning

Selg, Hardi; **Jenihhin, Maksim**; **Ellervee, Peeter** 21st IEEE Latin-American Test Symposium (LATS) 2020 : proceedings 2020 / 5 p <https://doi.org/10.1109/LATS49555.2020.9093672>

Verification of machine learning modelling strategy in microgrid simulations

Häring, Tobias 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2021 / p. 79-80 : ill https://www.ester.ee/record=b5457278*est

What do we know about learning - conversations with chatGPT

Henno, Jaak; Jaakkola, Hannu; Mäkeläinen, Jukka 2023 46th ICT and Electronics Convention (MIPRO), May 22-May 26, 2023, Opatija, Croatia : proceedings 2023 / p. 572-577 <https://doi.org/10.23919/MIPRO57284.2023.10159818> <https://ieeexplore.ieee.org/document/10159818>

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, IWB, 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](#)

Virtual inertia control of microgrids using deep reinforcement learning methods = Mikrovõrkude virtuaalse inertsia juhtimine sügava stiimulõppe meetoditega

Skiparev, Vjatšeslav 2023 <https://doi.org/10.23658/taltech.37/2023> <https://digikogu.taltech.ee/et/Item/6d924a63-2390-4324-bf1c-00b24111605e> https://www.ester.ee/record=b5571224*est

Virtual reality meets intelligence in large scale architecture

Köse, Ahmet; **Petlenkov, Eduard**; **Tepljakov, Aleksei**; **Vassiljeva, Kristina** Augmented Reality, Virtual Reality, and Computer Graphics : 4th International Conference, AVR 2017, Ugento, Italy, June 12-15, 2017 : proceedings. Part II 2017 / p. 297-309 : ill https://doi.org/10.1007/978-3-319-60928-7_26 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Work-in-progress : exploring psychological and behavioural differences between university IT student segments formed based on dropout time and academic performance

Puudist, Eerik Sven; **Luberg, Ago**; Aus, Kati Learning in the Age of Digital and Green Transition : Proceedings of the 25th International Conference on Interactive Collaborative Learning (ICL2022), Volume 2 2023 / p. 590-596 https://doi.org/10.1007/978-3-031-26190-9_62 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Ülikool mineviku ja tuleviku vahel: mida toob tehismõtlemine?

Tammet, Tanel digi.geenius.ee 2024 [Ülikool mineviku ja tuleviku vahel: mida toob tehismõtlemine?](#) [Mente et manu](#)

XgBoost based short-term electrical load forecasting considering trends & periodicity in historical data

Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Jawad, Muhammad; Kilter, Jako; Martins, Joao 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 6 p <https://doi.org/10.1109/ETFG55873.2023.10407926>

Yet another canonical nondeterministic automaton

Maarand, Hendrik; Tamm, Hellis Descriptive Complexity of Formal Systems : 24th IFIP WG 1.02 International Conference, DCFS 2022, Debrecen, Hungary, August 29-31, 2022, proceedings 2022 / p. 184-196 : ill https://doi.org/10.1007/978-3-031-13257-5_14 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Аго Луберг: искусственный интеллект даст фору тем, кто умеет им пользоваться

Luberg, Ago rus.err.ee 2025 <https://rus.err.ee/1609685564/ago-luberg-iskusstvennyj-intellekt-dast-foru-tem-kto-umeet-im-polzovatsja>

Искусственный интеллект в решении задач зеленого поворота

Petlenkov, Eduard; Belikov, Juri RUP. Финансово-правовой журнал 2023 / с. 3-7 https://www.ester.ee/record=b5550868*est

Искусственный интеллект может найти ранние признаки Паркинсона в рисунках

Valla, Elli nauka.err.ee 2024 [Искусственный интеллект может найти ранние признаки Паркинсона в рисунках](#)

Самообучение машин как задача выделения эталонов в образах : диссертация ... кандидата технических наук

Mullat, Jossif 1973 http://www.ester.ee/record=b2411155*est