

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 <https://doi.org/10.1016/j.segan.2023.101116>

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>

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>

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

Shabbir, Noman; Vassiljeva, Kristina; Hokmabad, Hossein Nourollahi; Husev, Oleksandr; Petlenkov, Eduard; Belikov, Juri Electronics 2024 / art. 1420 <https://doi.org/10.3390/electronics13081420>

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](#)

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>

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>

Deep reinforcement learning for automated tuning of cavity filters

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

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>

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 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>

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](#)

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>

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

Berl, 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>

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

Berl, 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>

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>

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>

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](https://doi.org/10.1007/978-3-030-59003-1_1)

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**; Sopu, Daniel; Eckert, Jurgen Materials & design 2024 / art. 112634 <https://doi.org/10.1016/j.matdes.2024.112634>

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 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; Yla-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](https://doi.org/10.1109/ACCESS.2020.3041765)

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>

A machine learning-based forensic tool for image classification - a design science approach
Del Mar-Raave, Joanna Rose; Bahsi, Hayretdin; Mrsic, Leo; Hausknecht, Kresimir Forensic Science International : Digital Investigation 2021 / art. 301265, 13 p [https://doi.org/10.1016/j.fsidi.2021.301265 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](https://doi.org/10.1016/j.fsidi.2021.301265)

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 / 7 p

Pitfalls of machine learning methods in smart grids : a legal perspective
Antonov, Aleksander; Häring, Tobias; Korõtko, 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>

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](https://doi.org/10.1007/978-3-030-86472-9_9)

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>

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](https://doi.org/10.1007/978-94-024-2021-0_3)
[Article at Scopus](#)

Residential DC load forecasting using long short-term memory network (LSTM)
Shabbir, Noman; Ahmadiahangar, 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>

A review of optimal control methods for energy storage systems - energy trading, energy balancing and electric vehicles
Machlev, Ram; Zargari, Noa; Chowdhury, N; **Belikov, Juri**; Levron, Yoash Journal of energy storage 2020 / art. 101787, 16 p
<https://doi.org/10.1016/j.est.2020.101787> [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](https://doi.org/10.1007/978-3-030-57672-1_9)
[Article at Scopus](#)

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](#)

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.hpt.2023.100748>

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 2022 / 29 p <https://doi.org/10.1111/roiw.12596>

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>

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](https://doi.org/10.1007/978-3-030-57672-1_12)
[Article at Scopus](#)

Wafer-level die re-test success prediction using machine learning
Selg, Hardi; **Jenihhin, Maksim; Ellerjee, Peeter** 21st IEEE Latin-American Test Symposium (LATS) 2020 : proceedings 2020 / 5 p
<https://doi.org/10.1109/LATS49555.2020.9093672>

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

XgBoost based short-term electrical load forecasting considering trends & periodicity in historical data
Shabbir, Noman; Ahmadiahangar, 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>