

Adaptive output feedback linearization for a class of NN-based ANARX models

Petlenkov, Eduard; Nõmm, Sven; Kotta, Ülle Proceedings of the 6th IEEE International Conference on Control and Automation : Guangzhou, China, May 30 - June 1, 2007 / p. 3173-3178 <https://ieeexplore.ieee.org/document/4376947>

Adaptive output feedback linearization for a class of NN-based ANARX models

Petlenkov, Eduard; Nõmm, Sven; Kotta, Ülle 5th Junior European Meeting on Control & Information Technology : September 20-22, 2006, Tallinn, Estonia : book of abstracts 2006 / p. 10

AI ja tööturg: kes võidab, kes kaotab?

Vaaks, Eveliis Trialoog 2025 <https://trialoog.taltech.ee/ai-ja-tooturg-kes-voidab-kes-kaotab/>

AI-revolutsioon tööturul : kuidas olla valmis?

geenius.ee 2025 <https://digi.geenius.ee/blogi/teadus-ja-tulevik/ai-revolutsioon-tooturul-kuidas-olla-valmis/>

An alternative approach to measure quantity and smoothness of the human limb motions

Nõmm, Sven; Toomela, Aaro Estonian journal of engineering 2013 / p. 298-308 : ill <https://doi.org/10.3176/eng.2013.4.05> [Article at Scopus](#)

An alternative approach to distinguish movements of Parkinson disease patients

Nõmm, Sven; Toomela, Aaro; Vaske, Martti; Uvarov, Dan; Taba, Pille IFAC-PapersOnLine 2016 / p. 272-276 : ill <https://doi.org/10.1016/j.ifacol.2016.10.546> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Analysis of the impact of poisoned data within Twitter classification models

Price, Christopher; Nõmm, Sven; Priisalu, Jaan Proceedings of the 5th interdisciplinary cyber research conference 2019 : 29th of June 2019, Tallinn University of Technology [Online resource] 2019 / p. 53-57 <https://doi.org/10.1016/j.ifacol.2019.12.170> https://www.ester.ee/record=b5238490*est [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Analysis of the impact of poisoned data within Twitter classification models

Price, Christopher; Priisalu, Jaan; Nõmm, Sven IFAC-PapersOnLine 2019 / p. 175-180 <https://doi.org/10.1016/j.ifacol.2019.12.170>

Applicability of spiral drawing test for mental fatigue modelling

Senkiv, Olesja; Nõmm, 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 bidding automata for measuring the informativeness of hand motion characteristic features

Parm, Kenno; Nõmm, Sven; Vain, Jüri BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 205-208 : ill

Application of neural networks based ANARX structure to backing up control of a truck-trailer [Electronic resource]

Belikov, Juri; Petlenkov, Eduard; Nõmm, Sven 6th IFAC Symposium on Intelligent Autonomous Vehicles : IFAC \IAV 2007 : September 3-5, 2007, Toulouse, France : symposium proceedings CD ROM 2007 / [5] p. [CD-ROM] <https://www.sciencedirect.com/science/article/pii/S147466701634647X>

Application of neural networks based SANARX model for identification and control liquid level tank system

Belikov, Juri; Nõmm, Sven; Petlenkov, Eduard; Vassiljeva, Kristina 2013 12th International Conference on Machine Learning and Applications : ICMLA 2013 : 4-7 December 2013, Miami, Florida, USA : proceedings. Vol. 1 2013 / p. 246-251 : ill

Application of self organizing Kohonen Map to detection of surgeon motions during endoscopic surgery

Petlenkov, Eduard; Nõmm, Sven; Vain, Jüri; Miyawaki, Fujio 2008 International Joint Conference on Neural Networks (IJCNN2008), 2008 IEEE World Congress on Computational Intelligence (WCCI2008) : June 1-6, 2008, Hong Kong 2008 / p. 2807-2812 <https://ieeexplore.ieee.org/document/4634193>

Application of the LSTM models for Baltic Sea wave spectra estimation

Simon, Martin; Rikka, Sander; Nõmm, Sven; Alari, Victor IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 2023 / p. 83-88 : ill <https://doi.org/10.1109/JSTARS.2022.3220882> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Application of volume bounding box decomposition for surgeon's hand gestures recognition

Nõmm, Sven; Leibak, Alar; Vain, Jüri; Miyawaki, Fujio IECON 2010 : 36th Annual Conference on IEEE Industrial Electronics Society : Glendale, Arizona, USA, 07 - 10 November, 2010 : proceedings 2010 / p. 1076-1080 : ill <https://ieeexplore.ieee.org/document/5675518>

Application of volume bounding box decomposition for surgeon's hand gestures recognition

Nõmm, Sven; Leibak, Alar; Vain, Jüri; Miyawaki, Fujio Abstracts IECON 2010 - ICEIE 2010 : 36th Annual Conference of the IEEE Industrial Electronics Society, 4th International Conference on E-Learning in Industrial Electronics, IES Industry Forum 2010 : Arizona, USA, 7-10 November 2010 / p. 102 <https://ieeexplore.ieee.org/document/5675518>

CALL-technology based approach to control acquisition of foreign language skills

Nymm, Voldemar; Piotrowska, Xenia; **Nömm, Sven**; Ronzhin, Andrey Proceedings of the III International Conference on Language Engineering and Applied Linguistics (PRLEAL-2019), Saint Petersburg, Russia, November 27, 2019 2020 / art. 157532, p. 200-210 <http://ceur-ws.org/Vol-2552/Paper16.pdf> [Conference proceedings at Scopus](#) [Article at Scopus](#)

CNN based analysis of the Luria's alternating series test for Parkinson's disease diagnostics

Zarembo, Sergei; Nömm, Sven; Medijainen, Kadri; Taba, Pille; Toomela, Aaro Recent Challenges in Intelligent Information and Database Systems : 13th Asian Conference, ACIDS 2021, Phuket, Thailand, April 7–10, 2021 : proceedings 2021 / p. 3-13 https://doi.org/10.1007/978-981-16-1685-3_1 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Comparison of one- two- and three-dimensional CNN models for drawing-test-based diagnostics of the Parkinson's disease

Wang, Xuechao; Huang, Junqing; Chatzakou, Marianna; **Nömm, Sven; Valla, Elli**; Medijainen, Kadri; Taba, Pille; Toomela, Aaro; Ruzhansky, Michael Biomedical signal processing and control 2024 / art. 105436, 8 p <https://doi.org/10.1016/j.bspc.2023.105436> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Computational intelligence methods based design of closed-loop system

Belikov, Juri; Petlenkov, Eduard; Vassiljeva, Kristina; Nömm, Sven Neural information processing : 20th International Conference, ICONIP 2013, Daegu, Korea, November 3-7, 2013 : proceedings. Part I 2013 / p. 215-224 : ill https://doi.org/10.1007/978-3-642-42054-2_28 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Deep CNN based classification of the Archimedes spiral drawing tests to support diagnostics of the Parkinson's disease

Nömm, Sven; Zarembo, Sergei; Medijainen, Kadri; Taba, Pille; Toomela, Aaro IFAC-Papers OnLine 2020 / p. 260-264 <https://doi.org/10.1016/j.ifacol.2021.04.185> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Deep Learning Based Segmentation of Luria's Alternating Series Test to Support Diagnostics of Parkinson's Disease

Valla, Elli; Laur, Henry; Nömm, Sven; Medijainen, Kadri; Taba, Pille; Toomela, Aaro 2023 International Conference on Machine Learning and Applications (ICMLA) 2023 / p. 1066-1071 : ill <https://doi.org/10.1109/ICMLA58977.2023.00158>

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

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

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>

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>

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>

Dynamic output feedback linearization based adaptive control of nonlinear MIMO systems

Petlenkov, Eduard; Belikov, Juri; Nömm, Sven; Wyrwas, Malgorzata The American Control Conference (ACC2008) : Seattle, Washington, USA, June 11-13, 2008 2008 / p. 3446-3451 <https://ieeexplore.ieee.org/document/4587026>

An efficient neural network for the diagnosis of Parkinson's disease using dynamic handwriting analysis

Wang, Xuechao; **Nömm, Sven**; Huang, Junqing; Chatzakou, Marianna; Ruzhansky, Michael Extended Abstracts MWCAPDE 2023 : Methusalem Workshop on Classical Analysis and Partial Differential Equations 2024 / p. 97 - 104 https://doi.org/10.1007/978-3-031-41665-1_11 [Article Collection metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Energy-efficient multi-fragment Markov model guided online model-based testing for MPSoC

Vain, Jüri; Tsiopoulos, Leonidas; Kharchenko, Vyacheslav; **Apneet Kaur; Jenihhin, Maksim; Raik, Jaan; Nömm, Sven** Green IT Engineering: Social, Business and Industrial Applications 2019 / p. 273-297 https://doi.org/10.1007/978-3-030-00253-4_12 [Article collection at Scopus](#) [Article at Scopus](#)

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

Valla, Elli; Kanter, Gert; Nömm, 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](#)

Enhancing IoT botnet attack detection in SOCs with an explainable active learning framework

Kalakoti, Rajesh; Nömm, Sven; Bahsi, Hayretudin 2024 IEEE World AI IoT Congress (AlloT) 2024 / p. 265 - 272

<https://doi.org/10.1109/AlloT61789.2024.10578957> [Article at Scopus](#) [Article at WOS](#)

Evaluation function optimization for the genetic algorithm based tuning of NN-ANARX model structure

Nömm, Sven; Vassiljeva, Kristina; Petlenkov, Eduard WCCI 2012 : IEEE World Congress on Computational Intelligence : June, 10-15, 2012, Brisbane, Australia 2012 / p. 1682-1688 : ill <https://ieeexplore.ieee.org/document/6252599>

Evolutionary design of the closed loop control on the basis of NN-ANARX model using genetic algorithm

Vassiljeva, Kristina; Petlenkov, Eduard; Nömm, Sven Neural information processing : 19th International Conference, ICONIP 2012, Doha, Qatar, November 12-15, 2012 : proceedings. Part I 2012 / p. 592-599 : ill https://link.springer.com/chapter/10.1007/978-3-642-34475-6_71

Explainable federated learning for Botnet Detection in IoT networks

Kalakoti, Rajesh; Bahsi, Hayretudin; Nömm, Sven Proceedings of the 2024 IEEE International Conference on Cyber Security and Resilience (CSR), September 2-4, 2024, London, UK 2024 / p. 22-29 <https://doi.org/10.1109/CSR61664.2024.10679348> [Article at Scopus](#) [Article at WOS](#)

5th Junior European Meeting on Control & Information Technology : September 20-22, 2006, Tallinn, Estonia : book of abstracts

2006 http://www.ester.ee/record=b2227133*est

Further results on identifiability of discrete-time nonlinear systems

Nömm, Sven; Moog, Claude Automatica 2016 / p. 69-74 : ill <https://doi.org/10.1016/j.automatica.2016.01.054> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Gait analysis based approach for Parkinson's disease modeling with decision tree classifiers

Krajuškina, Anna; Nömm, Sven; Toomela, Aaro 2018 IEEE International Conference on Systems, Man, and Cybernetics : SMC 2018, 7-10 October 2018 Miyazaki, Japan 2018 / p. 3720-3725 : ill <https://doi.org/10.1109/SMC.2018.00630>

Generative adversarial networks as a data augmentation tool for CNN-based Parkinson's disease diagnostics

Dzotsenidze, Erik; Valla, Elli; Nömm, Sven; Medijainen, Kadri; Taba, Pille; Toomela, Aaro IFAC-Papers OnLine 2022 / p. 108-113 : ill <https://doi.org/10.1016/j.ifacol.2022.10.240> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Human limb model structure optimization with genetic algorithm

Nömm, Sven; Vassiljeva, Kristina; Kuusik, Alar EMS2013 : UKSim-AMSS 7th European Modelling Symposium, 20-22 November 2013, Manchester, United Kingdom : [proceedings] 2013 / p. 124-129

Human-robot interaction learning using timed automata

Vain, Jüri; Miyawaki, Fujio; Nömm, Sven; Totskaya, Tatiana; Anier, Aivo ICCAS-SICE 2009 : ICROS-SICE International Joint Conference 2009 : Fukuoka City, Japan, August 18-21, 2009 : final program and papers 2009 / p. 2037-2043 <https://ieeexplore.ieee.org/document/5334368>

Hybrid approach to detection of the surgeon's hand motions during endoscope surgery

Nömm, Sven; Vain, Jüri; Petlenkov, Eduard; Miyawaki, Fujio; Yoshimitsu, Kitaro ICIEA : 4th IEEE Conference on Industrial Electronics and Applications : Xi'an, 25-27 May 2009 2009 / p. 3488-3492 <https://ieeexplore.ieee.org/abstract/document/5138854>

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

Guerra Manzanares, Alejandro; Bahsi, Hayretudin; 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>

Improving IoT security with explainable AI : quantitative evaluation of explainability for IoT botnet detection

Kalakoti, Rajesh; Bahsi, Hayretudin; Nömm, Sven IEEE Internet of Things Journal 2024 / p. 18237 - 18254 <https://doi.org/10.1109/JIOT.2024.3360626> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improving transparency and explainability of deep learning based IoT botnet detection using explainable artificial intelligence (XAI)

Kalakoti, Rajesh; Nömm, Sven; Bahsi, Hayretudin 22nd IEEE International Conference on Machine Learning and Applications : ICMLA 2023 : 15-17 December 2023, Jacksonville Riverfront, Florida : proceedings (2023) 2023 / p. 595 - 601 <https://doi.org/10.1109/ICMLA58977.2023.00088>

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

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

Interpretable quantitative description of the digital clock drawing test for Parkinson's disease modelling

Nõmm, Sven; Mašarov, Ilja; Toomela, Aaro; Medijainen, Kadri; Taba, Pille 15th International Conference on Control, Automation, Robotics and Vision (ICARCV 2018) : Singapore, November 18-21, 2018 2018 / p. 1839-1844 : ill

<https://doi.org/10.1109/ICARCV.2018.8581074>

Kahe doktorikraadi omanik Sven Nõmm : [intervjuu TTÜ ja Nantes'i Ülikooli doktoriga]

Nõmm, Sven; Kotta, Ülle Tallinna Tehnikaülikooli aastaraamat 2004 2005 / lk. 123-124

KronoDroid : time-based hybrid-featured dataset for effective android malware detection and characterization

Guerra Manzanares, Alejandro; **Bahsi, Hayretidin; Nõmm, Sven** Computers & Security 2021 / art. 102399, 32 p

<https://doi.org/10.1016/j.cose.2021.102399> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

A light-weight CNN model for efficient Parkinson's disease diagnostics

Wang, Xuechao; Huang, Junqing; Chatzakou, Marianna; Medijainen, Kadri; Taba, Pille; Toomela, Aaro; **Nõmm, Sven**; Ruzhansky, Michael 36th IEEE International Symposium on Computer-Based Medical Systems, CBMS 2023, Aquila, 22-24 June 2023 2023 / p. 616-621

<https://doi.org/10.1109/CBMS58004.2023.00289> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

LSTM-CNN : an efficient diagnostic network for Parkinson's disease utilizing dynamic handwriting analysis

Wang, Xuechao; Huang, Junqing; Chatzakou, Marianna; Medijainen, Kadri; Toomela, Aaro; **Nõmm, Sven**; Ruzhansky, Michael

Computer Methods and Programs in Biomedicine 2024 / art. 108066 <https://doi.org/10.1016/j.cmpb.2024.108066> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Gorbatšov, Vassili; Valla, Elli; Nõmm, 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 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

MedBloT : generation of an IoT Botnet Dataset in a medium-sized IoT network

Guerra Manzanares, Alejandro; Medina-Galindo, Jorge; Bahsi, Hayretidin; **Nõmm, Sven** Proceedings of the 6th International Conference on Information Systems Security and Privacy, ICISPP : February 25-27, 2020, La Valletta, Malta. Vol. 1 2020 / p. 207-218

: ill <https://doi.org/10.5220/0009187802070218>

Monitoring of the human motor functions rehabilitation by neural networks based system with Kinect sensor

Nõmm, Sven; Buhhalco, Kirill 12th IFAC, IFIP, IFORS, IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems, 2013 : Las Vegas, United States of America : August 11-14 2013 : proceedings 2013 / p. 249-253

<https://doi.org/10.3182/20130811-5-US-2037.00062> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Neural networks based ANARX structure for identification and model based control

Petlenkov, Eduard; Nõmm, Sven; Kotta, Ülle 9th International Conference on Control, Automation, Robotics and Vision : 5-8

December, 2006, Singapore : [proceedings] 2006 / p. 2284-2288 <https://ieeexplore.ieee.org/document/4150221>

Neural networks based system for the supervision of therapeutic exercises

Nõmm, Sven; Kuusik, Alar; Ovsjanski, Sergei; Malmberg, Ines; **Parve, Marko**; Orunurm, Lii Neural information processing : 19th

International Conference, ICONIP 2012, Doha, Qatar, November 12-15, 2012 : proceedings. Part IV 2012 / p. 364-371 : ill

https://link.springer.com/chapter/10.1007/978-3-642-34478-7_45

A novel artificial neural networks based automatic adaptive fault detection technique for analog circuits

Petlenkov, Eduard; Jutman, Artur; Nõmm, Sven; Ubar, Raimund-Johannes BEC 2008 : 2008 International Biennial Baltic

Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 167-170 : ill

A novel Taylor series based approach for control computation in NN-ANARX structure based control of nonlinear systems

Belikov, Juri; Vassiljeva, Kristina; Petlenkov, Eduard; Nõmm, Sven Proceedings of the 27th Chinese Control Conference : July 16-18, 2008, Kunming, Yunnan, China. 2 2008 / p. 474-478 <https://ieeexplore.ieee.org/document/4605837>

Parkinson's disease diagnostics based on the analysis of digital sentence writing test

Netšunajev, Aleksei; Nõmm, Sven; Toomela, Aaro; Medijainen, Kadri; Taba, Pille Vietnam journal of computer science 2021 / p. 493-512 <https://doi.org/10.1142/S2196888821500238> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Solvak, 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](#)

Quantitative analysis in the digital Luria's alternating series tests

Nõmm, Sven; Toomela, Aaro; **Kozhenkina, Julia;** Toomsoo, Toomas 14th International Conference on Control, Automation, Robotics & Vision (ICARCV 2016) : Phuket, Thailand, November 13-15, 2016 2016 / [6] p. : ill <https://doi.org/10.1109/ICARCV.2016.7838746>

Realization and identification of discrete-time nonlinear systems

Nõmm, Sven 2004 https://www.ester.ee/record=b1910554*est

Recognition and analysis of the contours drawn during the Poppelreuter's test

Nõmm, Sven; Bardoš, Konstantin; Mašarov, Ilja; Kozhenkina, Julia; Toomela, Aaro; Toomsoo, Toomas 2016 15th IEEE International Conference on Machine Learning and Applications : 18-20 December 2016, Anaheim, California : proceedings 2016 / p. 170-175 : ill <http://doi.org/10.1109/ICMLA.2016.0036>

Recognition of the surgeon's motions during endoscopic operation by statistics based algorithm and neural networks based ANARX models

Nõmm, Sven; Petlenkov, Eduard; Vain, Jüri; Belikov, Juri; Miyawaki, Fujio; Yoshimitsu, Kitaro Proceedings of the 17th World Congress The International Federation of Automatic Control : Seoul, Korea, July 6-11, 2008 2008 / p. 14773-14778 <https://www.sciencedirect.com/science/article/pii/S1474667016413662>

Rekursiivsed juhtimissüsteemid : Eesti Teadusfondi projekt aastatel 1999-2002

Kotta, Ülle; **Nõmm, Sven** Eesti Teadusfondi Aastaraamat 2002/2003 2003 / lk. 23 : ill. (Tehnikateadused)

Roheline mõtteviis ja tehisintellekt käivad käsikäes

postimees.ee 2025 <https://roheline.postimees.ee/8230756/roheline-motteviis-ja-tehisintellekt-kaivad-kasikaes>

Sentence writing test for Parkinson disease modeling: comparing predictive ability of classifiers

Netšunajev, Aleksei; Nõmm, Sven; Toomela, Aaro; Medijainen, Kadri; Taba, Pille Intelligent Information and Database Systems : 12th Asian Conference, ACIIDS 2020, Phuket, Thailand, March 23-26, 2020 : proceedings, Part I 2020 / p. 345-357 https://doi.org/10.1007/978-3-030-41964-6_30 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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>

Soolise palgalõhe kirjeldamine ja seletamine : tehniline ülevaade [Võrguteavik]

Täht, Kadri; Unt, Marge; Roosalu, Triin; Lauri, Triin; Klesment, Martin; Rokicka, Magdalena; Kuldkepp, Elina; **Nõmm, Sven** 2019 https://www.ester.ee/record=b5330086*est "Soolise palgalõhe kirjeldamine ja seletamine : tehniline ülevaade"

Structure identification of NN-ANARX model by genetic algorithm with combined cross-correlation-test based evaluation function

Nõmm, Sven; Vassiljeva, Kristina; Belikov, Juri; Petlenkov, Eduard 2011 9th IEEE International Conference on Control and Automation (ICCA) : Santiago, Chile, December 19-21, 2011 : [proceedings] 2011 / p. 65-70 : ill <https://ieeexplore.ieee.org/document/6137961>

Supervised training of voting automata for the surgeon's motion recognition during laparoscope surgery

Vain, Jüri; Nõmm, Sven; Anier, Aivo; Miyawaki, Fujio; Totskaya, Tatiana IEEE International Conference on Control and Automation : ICCA 2009 : Christchurch, New Zealand, December 9-11, 2009 2009 / p. 1503-1508

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

Guerra Manzanares, Alejandro; Nõmm, Sven; Bahsi, Hayretdin 2019 International Conference on Cyber Security for Emerging

Towards artificial intelligence based automatic adaptive response analyzer for high frequency analog BIST

Petlenkov, Eduard; Jutman, Artur; Nõmm, Sven; Ubar, Raimund-Johannes CIMS 2008 : IEEE International Conference on Computational Intelligence for Measurement Systems and Applications : Istanbul, Turkey, July 14-16, 2008 / p. 99-104 : ill
<https://ieeexplore.ieee.org/document/4595841>

Towards establishing relationships between human arousal level and motion mass

Nõmm, Sven; Kõnnusaar, Tiit; Toomela, Aaro Neural Information Processing : 21st International Conference, ICONIP 2014, Kuching, Malaysia, November 3-6, 2014 : proceedings. Part 1 2014 / p. 19-26 : ill https://doi.org/10.1007/978-3-319-12637-1_3 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Towards generation of synthetic data sets for hybrid conflict modelling

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

Towards modeling of finger motions in virtual reality environment

Nõmm, Sven; Toomela, Aaro; Kulikov, Jaroslav Augmented Reality, Virtual Reality, and Computer Graphics : 4th International Conference, AVR 2017, Ugento, Italy, June 12-15, 2017 : proceedings. Part I 2017 / p. 106-115 : ill https://doi.org/10.1007/978-3-319-60922-5_8 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

Guerra Manzanares, Alejandro; Nõmm, Sven; Bahsi, 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>

Towards the notion of average trajectory of the repeating motion of human limbs

Nõmm, Sven; Toomela, Aaro; Gaichenja, Ilia Intelligent Information and Database Systems : 9th Asian Conference, ACIDS 2017, Kanazawa, Japan, April 3-5, 2017 : proceedings. Part II 2017 / p. 582-591 : ill https://doi.org/10.1007/978-3-319-54430-4_56 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

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

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

Valla, Elli; Nõmm, 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](#)

Unsupervised anomaly based botnet detection in IoT networks

Nõmm, Sven; Bahsi, Hayretdin 17th IEEE International Conference on Machine Learning and Applications : ICMLA 2018, 17–20 December 2018, Orlando, Florida, USA : proceedings 2018 / p. 1048-1053 <https://doi.org/10.1109/ICMLA.2018.00171>

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

Guerra Manzanares, Alejandro; Medina-Galindo, Jorge; Bahsi, Hayretdin; Nõmm, 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](#)

Uued inimesed ja positsioonid

Nõmm, Sven; Järvik, Oliver; Simm, Anneli Mente et Manu 2023 / lk. 48-49 : fot https://www.ester.ee/record=b1242496*est

Wave density spectra estimation with LSTM from Sentinel-1 SAR in the Baltic Sea

Rikka, Sander; Nõmm, Sven; Alari, Victor; Simon, Martin; Björkqvist, Jan-Victor 2024 IEEE/OES Thirteenth Current, Waves and Turbulence Measurement (CWTM), 18-20 March 2024 / 5 p. : ill <https://doi.org/10.1109/CWTM61020.2024.10526344> [Article at Scopus](#)

Why behavioral indicators may fail to reveal mental states : individual differences in arousal-movement pattern relationships

Toomela, Aaro; Nõmm, Sven; Kõnnusaar, Tiit; Tammik, Valdar Frontiers in psychology 2019 / art. 270, 8 p. : ill
<https://doi.org/10.3389/fpsyg.2019.00270> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Применение стохастической теории обучения и корпусных технологий в компьютерной лингводидактике

Nõmm, Voldemar; Piotrowska, Xenia; Nõmm, Sven PR_LEAL 2017 : R. Piotrowski's Readings in Language Engineering and Applied Linguistics : proceedings 2018 / c. 166–176 <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062462827&partnerID=40&md5=57c32238e7d7ad51adecf09a65b8e102> <http://ceur-ws.org/Vol-2233/> [Conference proceedings at Scopus](#) [Article at Scopus](#)

