

A method for heuristic fuzzy modeling in noisy environment

Riid, Andri; Rüstern, Ennu 5th IEEE International Conference on Intelligent Systems (IS 2010) : London, 7-9 July 2010 : proceedings 2010 / p. 468-473 : ill <https://ieeexplore.ieee.org/document/5548337>

A multistage procedure of mobile vehicle acoustic identification for single-sensor embedded device

Astapov, Sergei; Riid, Andri International journal of electronics and telecommunications 2013 / p. 151-160 : ill

A solution to perceptual aliasing through probabilistic fuzzy logic and SIFT

Qamar, Syeda Madiha; Iqbal, Khawaja Fahad; Muhammad, Naveed 2013 IEEE/ASME International Conference on Advanced Intelligent Mechatronics : Mechatronics for Human Wellbeing : July 9-12, 2013, Wollongong, Australia 2013 / p. 1393-1398 : ill

An enhancement of the driver distraction detection and evaluation method based on computational intelligence algorithms

Aksjonov, Andrei; Nedoma, Pavel; Vodovozov, Valery; Petlenkov, Eduard 2018 IEEE 16th International Conference on Industrial Informatics (INDIN 2018) : Porto, Portugal, 18-20 July 2018 2018 / p. 201-206 : ill <https://doi.org/10.1109/INDIN.2018.8472045>

An integrated approach for the identification of compact, interpretable and accurate Fuzzy rule-based classifiers from data

Riid, Andri; Rüstern, Ennu INES 2011 : 15th International Conference on Intelligent Engineering Systems : June 23-25, 2011, Poprad, Slovakia 2011 / p. 101-107 : ill <https://ieeexplore.ieee.org/document/5954728>

Andmetöötlus hägusloogika vahenditega ja selle rakendused

Riid, Andri Tallinna Tehnikaülikooli aastaraamat 2010 2011 / lk. 118-121 : ill

Artificial intelligence methods for data based modeling and analysis of complex processes : real life examples [Online resource]

Vassiljeva, Kristina; Petlenkov, Eduard; Vansovitš, Vitali; Tepljakov, Aleksei Proceedings of the 2016 IEEE First International Conference on Data Stream Mining & Processing (DSMP) : Lviv, Ukraine, August 23-27, 2016 2016 / p. 363-368 : ill <https://doi.org/10.1109/DSMP.2016.7583579>

Bbuzz : a Bit-aware fuzzing framework for network protocol systematic reverse engineering and analysis

Blumbergs, Bernhards; Vaarandi, Risto MILCOM 2017 - 2017 IEEE Military Communications Conference : Baltimore, Maryland, USA, 23-25 October 2017 2017 / p. 707-712 <https://doi.org/10.1109/MILCOM.2017.8170785>

Car navigation and collision avoidance system with fuzzy logic

Riid, Andri; Pahhomov, Dmitri; Rüstern, Ennu 2004 IEEE International Conference on Fuzzy Systems : proceedings : Budapest, Hungary, 25-29 July, 2004. Vol. 3 2004 / p. 1443-1448 : ill <https://ieeexplore.ieee.org/document/1375386>

Combining fuzzy and probabilistic reasoning for crowd-sourced categorization and tagging

Tammet, Tanel; Luberg, Ago Web Reasoning and Rule Systems : 8th International Conference, RR 2014, Athens, Greece, September 15-17, 2014 : proceedings 2014 / p. 247-248

Combining multiple sound sources localization hybrid algorithm and fuzzy rule based classification for real-time speaker tracking application

Ibala, Christian; Astapov, Sergei; Riid, Andri International journal of microelectronics and computer science 2013 / p. 12-25 : ill

Computational intelligence methods for process control : fed-batch fermentation application

Riid, Andri; Rüstern, Ennu International journal of computational intelligence in bioinformatics and systems biology 2009 / 2, p. 135-162 https://www.academia.edu/19788077/Computational_intelligence_methods_for_process_control_fed_batch_fermentation_application

Design and experimentation of fuzzy logic control for an anti-lock braking system

Aksjonov, Andrei; Vodovozov, Valery; Petlenkov, Eduard BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 207-210 : ill http://www.ester.ee/record=b2150914*est

Design understanding : from logic to specification

Fey, Goerschwin; Ghasempouri, Tara; Jacobs, Swen; Raik, Jaan Proceedings of the 2018 IFIP/IEEE International Conference on Very Large Scale Integration (VLSI-SoC) : October 8-10, 2018, Verona, Italy 2018 / p. 172-175 : ill <https://doi.org/10.1109/VLSI-SoC.2018.8644732>

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](#)

Determination of regional variants in the versification of Estonian folksongs using an interpretable fuzzy rule-based classifier

Riid, Andri; Sarv, Mari Proceedings of the 8th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2013), Milano, Italy, September 11-13, 2013 2013 / p. 61-66 : ill

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

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard** 15th International Workshop on Advanced Motion Control : (AMC 2018), Tokyo, Japan 2018 / p. 523–528 : ill

https://www.researchgate.net/publication/323747995_Driver_Distraction_Detection_and_Evaluation_with_Artificial_Neural_Network_and_Fuzzy_Logic_In-vehicle_information_system_as_a_driver%27s_secondary_activity_Case_study

Driver distraction while performing a secondary task evaluation approach based on fuzzy expert system

Aksjonov, Andrei; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard**; Herrmann, Martin 2017 / p. 1-27 : ill

<https://www.etis.ee/File/DownloadPublic/9fe35346-efcf-4429-af04-ba8325dc1480?name=GSVF2017-Aksjonov.pdf&type=application%2Fpdf>
<https://www.gsvf.at/index.php/en/program-2017>

Dynamic radio frame configuration by exploiting uplink control channel for URLLC

Sharma, Navuday; **Alam, Muhammad Mahtab**; **Le Moullec, Yannick**; **Malik, Hassan**; Bennis, Mehdi; **Päränd, Sven** 2019 IEEE Wireless Communications and Networking Conference Workshop (WCNCW) 2019 / 6 p. : ill

<https://doi.org/10.1109/WCNCW.2019.8902898>

Fuzzy knowledge-based control for backing multi-trailer systems

Riid, Andri; Ketola, J.; **Rüstern, Ennu** Proceedings of the IEEE Intelligent Vehicles Symposium (IV'07) : Istanbul, 13-15 June, 2007 2007 / p. 498-504 <https://ieeexplore.ieee.org/document/4290164>

Fuzzy logic and slip controller of clutch and vibration for hybrid vehicle

Vu, Trieu Minh; Pumwa, John International journal of control, automation and systems 2013 / p. 526-532 : ill

Fuzzy logic control for a ball and beam system

Moezzi, Reza; **Vu, Trieu Minh**; **Tamre, Mart** International Journal of Innovative Technology and Interdisciplinary Sciences : IJTIS 2018 / p. 39-48 : ill <https://doi.org/10.1515/IJTIS.2018.1.1.39-48>

Fuzzy logic control for non-linear model of the ball and beam system

Moezzi, Reza; **Vu, Trieu Minh** Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 60-65 : ill <http://innomet.ttu.ee/daaam/>

Fuzzy logic control of electric vehicles in changing braking conditions

Vodovozov, Valery; **Raud, Zoja**; **Aksjonov, Andrei**; **Petlenkov, Eduard** 2020 XI International Conference on Electrical Power Drive Systems (ICEPDS), Saint-Petersburg, Russia, October 4-7, 2020 2020 / art. 20192756, p. 107-112

<https://doi.org/10.1109/ICEPDS47235.2020.9249083>

Fuzzy modelling and control of fed-batch fermentation

Riid, Andri; **Rüstern, Ennu** Computational intelligence and applications 1999 / p. 283-291

Generic membership function and its application to fuzzy modeling

Riid, Andri; **Isotamm, Raul**; **Rüstern, Ennu** BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 129-132 : ill

Hardware-in-the-Loop test of an open loop fuzzy control method for decoupled electro-hydraulic antilock braking system

Aksjonov, Andrei; Ricciardi, Vincenzo; Augsburg, Klaus; **Vodovozov, Valery**; **Petlenkov, Eduard** IEEE transactions on fuzzy systems 2020 / p. 965-975: ill <https://doi.org/10.1109/TFUZZ.2020.2965868> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Heuro-fuzzy extraction of interpretable fuzzy rules from data

Riid, Andri; **Rüstern, Ennu** 2004 IEEE International Conference on Systems, Man & Cybernetics : The Hague, Netherlands, 10-13 October, 2004. Vol. 3 2004 / p. 2266-2271 : ill

A hierarchical algorithm for moving vehicle identification based on acoustic noise analysis

Astapov, Sergei; **Riid, Andri** Proceedings of the 19th International Conference Mixed Design of Integrated Circuits and Systems : MIXDES 2012 : Warsaw, Poland, 24-26 May, 2012 2012 / p. 467-472 : ill <https://ieeexplore.ieee.org/document/6226235>

Häigus loogika ja automaatjuhtimine : ettekanne XXXIX automaatikapäeval 12. märtsil TTÜ aulas

Riid, Andri Tallinna Tehnikaülikooli aastaraamat 2001 2003 / lk. 262-266

Häigus, häigusad süsteemid ja inimene : ettekanne XXXIV automaatikapäeval 12. märtsil 1996. a. TTÜ aulas

Sillamaa, Hanno Tallinna Tehnikaülikooli aastaraamat 1996 1997 / lk. 146-152

Interpretability improvement of Fuzzy systems : reducing the number of unique singletons in Zeroth order Takagi-Sugeno systems

Riid, Andri; Rüstern, Ennu WCCI 2010 IEEE World Congress on Computational Intelligence : July, 18-23, Barcelona, Spain : proceedings 2010 / p. 2913-2018 : ill <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=2d2002fb7518da488fde49a2eeeb7a109438a04c>

Interpretability of Fuzzy Systems and its application to process control

Riid, Andri; Rüstern, Ennu Proceedings of the 2007 IEEE International Conference on Fuzzy Systems : FUZZ-IEEE 2007 : London, 23.-26. July 2007 2007 / [6] p <https://ieeexplore.ieee.org/document/4295370>

Maritime investment appraisal: The case of waste heat recovery systems installation

Olaniyi, Eunice Omolola; Prause, Gunnar Klaus Reliability and statistics in transportation and communication : Selected Papers from the 20th International Conference on Reliability and Statistics in Transportation and Communication, RelStat'20, 14-17 October 2020, Riga, Latvia 2021 / p. 603-612 https://doi.org/10.1007/978-3-030-68476-1_56 [Article collection metrics at Scopus](#) [Article at Scopus](#)

A method for detection and evaluation of driver distraction induced by in-vehicle information systems

Aksjonov, Andrei; Nedoma, Pavel; Vodovozov, Valery; Petlenkov, Eduard IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 4513-4518 : ill <https://doi.org/10.1109/IECON.2018.8591252>

A method of driver distraction evaluation using fuzzy logic : phone usage as a driver's secondary activity : case study

Aksjonov, Andrei; Nedoma, Pavel; Vodovozov, Valery; Petlenkov, Eduard; Herrmann, Martin Proceedings : IACAT 2017 : XXVI International Conference on Information, Communication and Automation Technologies, October 26-28, 2017, Sarajevo, Bosnia-Herzegovina 2017 / 6 p. : ill <https://doi.org/10.1109/ICAT.2017.8171599>

Methods of condition monitoring and fault detection for electrical machines

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

Modelling of a versatile vehicle braking system with a fuzzy PID torque controller

Vodovozov, Valery; Raud, Zoja; Aksjonov, Andrei; Petlenkov, Eduard 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/BEC49624.2020.9276798>

A Novel driver performance model based on machine learning

Aksjonov, Andrei; Nedoma, Pavel; Vodovozov, Valery; Petlenkov, Eduard; Herrmann, Martin IFAC-PapersOnLine 2018 / p. 267-272 : ill <http://dx.doi.org/10.1016/j.ifacol.2018.07.044>

On synergy deployment in engineering design

Hindreus, Tiit; Kaljas, Frid; Källo, Rommi; Martin, Andres; Tähemaa, Toivo; Reedik, Vello Journal of materials science and engineering. B 2012 / p. 408-413 : ill

An overview of fuzzy logic approaches for fault diagnosis in energy conversion devices

Demidova, Galina; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants; Zakis, Janis; Suzdalenko, Alexander 2021 28th International Workshop on Electric Drives : Improving Reliability of Electric Drives (IWED) 2021 / 7 p <https://doi.org/10.1109/IWED52055.2021.9376389>

Performances of PID and different fuzzy methods for controlling a ball on beam

Vu, Trieu Minh; Tamre, Mart; Moezzi, Reza; Mets, Oliver; Jürise, Mart; Pölder, Ahti; Teder, Leo; Juurma, Märt Open engineering 2016 / p. 145-151 : ill <https://doi.org/10.1515/eng-2016-0018>

Ranking strategic objectives in a strategy map based on logarithmic fuzzy preference programming and similarity method

Safari, Hossein; Khanmohammadi, Ehsan; Maleki, Meysam; Cruz-Machado, Virgilio; Ševtšenko, Eduard Management Systems in Production Engineering 2019 / p. 153-161 : ill <https://doi.org/10.1515/mspe-2019-0025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Regression models and fuzzy logic prediction of TBM penetration rate

Vu, Trieu Minh; Katušin, Dmitri; Antonov, Maksim; Veinthal, Renno Open engineering 2017 / p. 60-68 : ill <https://doi.org/10.1515/eng-2017-0012>

Self-scaling laboratory crane fuzzy logic control with anti-swing regulation [Online resource]

Aksjonov, Andrei; Vodovozov, Valery; Petlenkov, Eduard 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763088>

Simulation of three-rate neural and neuro-fuzzy hybrid control for the multidimensional stochastic model of a fighter aircraft

Astrov, Igor; Pedai, Andrus; Rüstern, Ennu SCI 2004 : the 8th World Multi-Conference on Systemics, Cybernetics and Informatics : July 18-21, 2004, Orlando, Florida, USA. Vol. 8 : proceedings 2004 / p. 351-356

Simulation of two-rate adaptive hybrid control with neural and neuro-fuzzy networks for stochastic model of an experimental aircraft

Astrov, Igor; Pedai, Andrus; Rüstern, Ennu Proceedings of the International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2004) [and] 10th International Conference on Information System Analysis and Synthesis (ISAS 2004) : Orlando, Florida, USA. Vol. 2 2004 / p. 295-300

Simulation of two-rate adaptive hybrid control with neural and neuro-fuzzy networks for stochastic model of missile autopilot

Astrov, Igor; Pedai, Andrus; Rüstern, Ennu WCICA 2004 : Fifth World Congress on Intelligent Control and Automation : June 15-19, 2004, Hangzhou, China : conference proceedings. Vol. 3 2004 / p. 2603-2607 : ill

Simulation of two-rate adaptive neural network and fuzzy logic hybrid control for stochastic model of an experimental aircraft

Astrov, Igor; Pedai, Andrus; Rüstern, Ennu Canadian Conference on Electrical and Computer Engineering 2004 = Conference canadienne en genie electrique et informatique : May 2-5, 2004, Fallsview Sheraton, Niagara Falls, Canada : proceedings. Vol. 1 2004 / p. 125-128 : ill

Supervisory fed-batch fermentation control on the basis of linguistically interpretable fuzzy models

Riid, Andri; Rüstern, Ennu Proceedings of the Estonian Academy of Sciences. Engineering 2000 / 2, p. 96-112 : ill
https://artiklid.elnet.ee/record=b1004040*est

Towards an Intelligent Control System for district heating plants : design and implementation of a fuzzy logic based control loop

Vansovitš, Vitali; Tepljakov, Aleksei; Vassiljeva, Kristina; Petlenkov, Eduard 2016 IEEE 14th International Conference on Industrial Informatics (INDIN) : Palais des Congrès du Futuroscope, Futuroscope - Poitiers, France, 19-21 July, 2016 : proceedings 2016 / p. 405-410 : ill <https://doi.org/10.1109/INDIN.2016.7819193>