

### **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>

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

**Vassiljeva, Kristina**; **Petlenkov, Eduard**; **Vansovits, 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>

### **Clutch control and vibration reduction for a hybrid electric vehicle**

**Vu, Trieu Minh** Proceedings of the Institution of Mechanical Engineers. Part I, Journal of systems and control engineering 2012 / p. 867-874 : ill <https://journals.sagepub.com/doi/10.1177/0959651812445842?icid=int.sj-full-text.similar-articles.1>

### **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 [https://www.researchgate.net/publication/261467057\\_Combining\\_Multiple\\_Sound\\_Sources\\_Localization\\_Hybrid\\_Algorithm\\_and\\_Fuzzy\\_Rule\\_Based\\_Classification\\_for\\_Real-time\\_Speaker\\_Tracking\\_Application](https://www.researchgate.net/publication/261467057_Combining_Multiple_Sound_Sources_Localization_Hybrid_Algorithm_and_Fuzzy_Rule_Based_Classification_for_Real-time_Speaker_Tracking_Application)

### **Comparative analysis of intelligent braking controllers for electric vehicles**

**Vodovozov, Valery**; **Raud, Zoja**; **Petlenkov, Eduard** Renewable energy and power quality journal 2022 / p. 55-60 <https://doi.org/10.24084/repqj20.217> [Journal metrics at Scopus](#) [Article at Scopus](#)

### **Data-driven approaches based microwave filter tuning - a review**

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

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

**Aksjonov, Andrei**; Nedoma, Pavel; **Vodovozov, Valery**; **Petlenkov, Eduard**; Hermann, 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](#)

### **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 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 <https://doi.org/10.1007/s12555-012-0006-4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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/>

### **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>

### **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**; Hermann, 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 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 <https://doi.org/10.2478/eletel-2013-0018> [Journal metrics at Scopus](#) [Article at Scopus](#)

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

Shirokova, Veroonika; Kudelina, Karolina; Raja, Hadi Ashraf; Rjabtsikov, Viktor; Baraškova, 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](#)

**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>

**Review on Braking Energy Management in Electric Vehicles**

Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard Energies 2021 / art. 4477 <https://doi.org/10.3390/en14154477> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 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

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

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

**Torque control in blended antilock braking systems of electric vehicles [Online resource]**

Vodovozov, Valery; Petlenkov, Eduard; Raud, Zoja; Aksjonov, Andrei 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.2018.8600978>

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

Vansovitš, Vitali; Tepļakov, 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>

**Utilizing the fuzzy logic algorithm for cartesian robot control system in conditions of mechanical damage transmission**

Dunaeva, Olga; Autsou, Siarhei; Kudelina, Karolina; Roosileht, Mare IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society IECON Proceedings (Industrial Electronics Conference) 2024 / 5 p <https://doi.org/10.1109/IECON55916.2024.10905445> [Conference proceedings at Scopus](#) [Article at Scopus](#)