

A quasi-static approach to optimize the motion of an UGV depending on the track profile

Corral, Eduardo; **Arjassov, Gennadi**; Meneses, Jesus The 9th International Conference Mechatronics Systems and Materials : MSM-2013 : abstracts 2013 / p. 41-42 : ill

ADSecData platform: an open-source data platform for autonomous driving cybersecurity

Roberts, Andrew James; Malayjerdi, Mohsen; Bellone, Mauro; Sell, Raivo; Maennel, Olaf Manuel; Hamad, Mohammad; Steinhorst, Sebastian 2025 IEEE 101st Vehicular Technology Conference, VTC2025-Spring, 17-20 June 2025, Oslo, Norway 2025 / 7 p <https://www.etis.ee/Portal/Publications/Display/d6c0e7e7-c789-4c27-ae91-aabd943e3e7f>

ADSecLang: a domain-specific language for cybersecurity testing of autonomous vehicles

Roberts, Andrew James; Cheng, Jingyue; Maennel, Olaf Manuel; Hamad, Mohammad; Steinhorst, Sebastian 2025 IEEE 101st Vehicular Technology Conference, VTC2025-Spring, 17-20 June 2025, Oslo, Norway 2025 / 6 p <https://www.etis.ee/Portal/Publications/Display/a8bb1234-4dfd-46f5-aae6-19bf25b2f222>

Aerial imagery based long-range path planning for unmanned ground vehicle

Hudjakov, Robert; Tamre, Mart 7th International Conference Mechatronics Systems and Materials MSM 2011 : Kaunas, Lithuania, 7-9 July, 2011 : abstracts book and full papers CD 2011 / [7] p

AL – A prototype autonomous ship model for navigating in ice conditions

Bolbot, Victor; Sandru, Andrei; Saarniemi, Ture; Freter, Jan Hendrik; Puolakka, Otto; **Kujala, Pentti**; Valdez Banda, Osiris A. Proceedings of ASME 2024 43rd International Conference on Ocean, Offshore and Arctic Engineering (OMAE2024) June 9-14, 2024, Singapore, Singapore Volume 5 Ocean engineering A 2024 / art. v05at06a049, 10 p. <https://doi.org/10.1115/OMAE2024-127465>
[Conference proceedings at Scopus](#) [Article at Scopus](#)

Allveerobotid ja arheoloogia

Lätti, Priit Tutulus : Eesti arheoloogia aastakiri 2016 / lk. 4-7 : fot https://artiklid.elnet.ee/record=b2755973*est

An enhanced situational awareness of AUV's mission by multirate neural control

Astrov, Igor; Pikkov, Mihhail World Academy of Science, Engineering and Technology 2012 / p. 91-97 : ill <https://zenodo.org/records/1335220>

An enhanced situational awareness of AUV's mission by multirate neural control [Electronic resource]

Astrov, Igor; Pikkov, Mihhail ICMOS 2012 CD-ROM Proceedings : [International Conference on Modelling, Optimization and Simulation (ICMOS 2012), Berlin, Germany, September 19-20, 2012] 2012 / [7 p.] : ill [CD-ROM] <https://zenodo.org/records/1335220>

An investigation of image processing techniques for substrate classification based on dominant grain size using RGB images from UAV

Arif, Mohammad Shafi M.; Gülch, Eberhard; **Tuhtan, Jeffrey Andrew**; Thumser, Philipp; Haas, Christian International journal of remote sensing 2017 / p. 2639-2661 : ill <https://doi.org/10.1080/01431161.2016.1249309> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

Analysis and study of the influence of the geometrical parameters of mini unmanned quad-rotor helicopters to optimise energy saving

Penkov, Igor; Aleksandrov, Dmitri International journal of automotive and mechanical engineering 2017 / p. 4730-4746 : ill <https://doi.org/10.15282/ijame.14.4.2017.11.0372> [Journal metrics at Scopus](#) [Article at Scopus](#)

Analysis of autonomous driving software to low-level sensor cyber attacks

Roberts, Andrew James; Malayjerdi, Mohsen; Bellone, Mauro; Sell, Raivo; Maennel, Olaf Manuel; Hamad, Mohammad; Steinhorst, Sebastian 20th International Conference on Software Engineering for Adaptive and Self-Managing Systems, SEAMS 2025, 28-29 April 2025, Ottawa, Ontario, Canada 2025 / 11 p <https://www.etis.ee/Portal/Publications/Display/c612b9a7-7a51-4621-b2d2-76ec03764667>

Applying RIS-based communication for collaborative computing in a swarm of drones

Rahbari, Dadmehr; Alam, Muhammad Mahtab; Le Moullec, Yannick; Jenihhin, Maksim IEEE Access 2023 / p. 70093-70109 <https://doi.org/10.1109/ACCESS.2023.3293737> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assessing the Equal Opportunities for Seafarers : Preparation for Unmanned Vessels in the Baltic Sea Region

Kerem, Kristin; Otsason, Riina; Tapaninen, Ulla Pirita 2025 International Conference "Advancing The Blue Economy Through Gender Equality" : Book of Abstracts 2025 / p. 20 https://commons.wmu.se/cgi/viewcontent.cgi?article=1012&context=lib_papers

Automated fault diagnosis for an autonomous underwater vehicle

Dearden, Richard; **Ernits, Juhan-Peep** IEEE journal of oceanic engineering 2013 / p. 484-499 : ill <https://doi.org/10.1109/JOE.2012.2227540> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Autonomous driving in the real-world : the weather challenge in the Sohjoa Baltic Project

Bellone, Mauro; Ismailogullari, Azat; **Müür, Jaanus**; Nissin, Oscar; **Sell, Raivo**; **Soe, Ralf-Martin** Towards connected and

autonomous vehicle highways : technical, security and social challenges 2021 / p. 229–255 https://doi.org/10.1007/978-3-030-66042-0_9
[Article collection metrics at Scopus](#) [Article at Scopus](#)

Autonoomsete ja kaugjuhitavate laevade võimalused ja murekohad

Paat & Meremees 2016 / lk. 94 http://www.ester.ee/record=b4471304*est

Centimetre-range deformations of built environment revealed by drone-based photogrammetry

Varbla, Sander; Ellmann, Artur; Puust, Raido Automation in Construction 2021 / art. 103787

<https://doi.org/10.1016/j.autcon.2021.103787> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CITYAM empowers responsible urban air mobility : deliverable of activity 1.5 - setting up the evaluation framework

Müür, Jaanus 2024 <https://interreg-baltic.eu/wp-content/uploads/2024/02/D1.5-Setting-up-the-evaluation-framework-final.pdf>

Combined safety and cybersecurity testing methodology for autonomous driving algorithms

Roberts, Andrew James; Malayjerd, Mohsen; Malayjerd, Ehsan; Maennel, Olaf Manuel CSCS '22 : Proceedings of the 6th ACM Computer Science in Cars Symposium 2022 / art. 12, 10 p <https://doi.org/10.1145/3568160.3570235>

Comparison of single-rate and two-rate neural control approaches for coaxial rotor/ducted-fan UAV for situational awareness applications

Pedai, Andrus; Astrov, Igor; Udai, Andres 2018 IEEE 16th International Symposium on Intelligent Systems and Informatics (SISY), 13-15 Sept. 2018 : proceedings 2018 / p. 63–68 : ill <http://dx.doi.org/10.1109/SISY.2018.8524720>

A comprehensive survey on revolutionizing connectivity through artificial intelligence-enabled digital twin network in 6G

Sheraz, Muhammad; Chuah, Teong Chee; Lee, Ying Loong; Alam, Muhammad Mahtab; Al-Habashna, Ala'a; Han, Zhu IEEE Access 2024 / p. 49184-49215 <https://doi.org/10.1109/ACCESS.2024.3384272> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Conceptual test bench for small class unmanned autonomous vehicle performance estimation

Pütsep, Kristjan; Rassõlkin, Anton; Vaimann, Toomas 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 695-698 : ill <https://doi.org/10.1109/PEMC48073.2021.9432509>

Cybersecurity test range for autonomous vehicle shuttles

Roberts, Andrew James; Snetkov, Nikita; Maennel, Olaf Manuel 2021 IEEE European Symposium on Security and Privacy Workshops EuroS&PW 2021 : Virtual Conference, 6-10 September 2021 : proceedings 2021 / p. 239-248 : ill <https://doi.org/10.1109/EuroSPW54576.2021.00031>

Cybersecurity testing and attack propagation analysis of autonomous driving software = Autonoomse sõiduki juhtimistarkvara küberturvalisuse testimine ja rünnakute leviku analüüs

Roberts, Andrew James 2025 https://www.ester.ee/record=b5750527*est <https://digikogu.taltech.ee/et/Item/fbecd0b1-252c-4a7d-b06c-588683fd4640> <https://doi.org/10.23658/taltech.41/2025>

Depth control of the biomimetic U-CAT turtle-like AUV with experiments in real operating conditions

Chemori, Ahmed; Kuusmik, Keijo; Salumäe, Taavi; Kruusmaa, Maarja 2016 IEEE International Conference on Robotics and Automation : Stockholm, Sweden, May 16th-21st 2016 / p. 4750-4755 : ill <https://doi.org/10.1109/ICRA.2016.7487677> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Design and testing of an universal autonomous surface vehicle

Roasto, Indrek; Jalakas, Tanel; Mölder, Heigo; Möller, Taavi; Tabri, Kristjan; Enok, Mart 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 705-710 : ill <https://doi.org/10.1109/PEMC48073.2021.9432567>

Design principle of a biomimetic underwater robot U-CAT

Salumäe, Taavi; Raag, Rasmus; Rebane, Jaan; Ernits, Andres; Toming, Gert; Ratas, Mart; Kruusmaa, Maarja OCEANS '14 MTS/IEEE St. John's : St. Johns, Newfoundland, Canada, 14-19 September 2014 2014 / [5] p. : ill

Differential pressure sensor speedometer for autonomous underwater vehicle velocity estimation

Meurer, Christian; Francisco Fuentes-Perez, Juan; Palomeras, Narcis; Carreras, Marc; Kruusmaa, Maarja IEEE Journal of Oceanic Engineering 2020 / p. 946 - 978 <https://doi.org/10.1109/JOE.2019.2907822> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Droonimured ja nende lahendused

Strandberg, Marek Inseneeria 2016 / lk. [6] : fot https://artiklid.elnet.ee/record=b2796762*est

Efficiency optimization of mini unmanned multicopter

Penkov, Igor; Aleksandrov, Dmitri International review of aerospace engineering 2017 / p. 277-281 : ill

Enhanced situational awareness for autonomous underwater vehicles

Astrov, Igor 2013

Enhancement of Unmanned Aerial Vehicle photogrammetry by high-resolution airborne laser scanning data [Electronic resource]

Julge, Kalev; Ellmann, Artu 26th IUGG General Assembly 2015 : Prague, Czech Republic, Prague Congress Centre, June 22-July 02, 2015 2015 / [1] p

Evaluating the accuracy of orthophotos and 3D models from UAV photogrammetry

Julge, Kalev; Ellmann, Artu Geophysical research abstracts 2015 / p. EGU2015-655

Experimentally adjusted modelling and simulation technique for a catamaran autonomous surface vessel

Astrov, Igor; Udal, Andres; Mölder, Heigo; Jalakas, Tanel; Möller, Taavi International Conference on Electrical, Computer, and Energy Technologies, ICECET 2022, Prague, Czech Republic, July 20-22, 2022 2022 / 7 p. : ill

<https://doi.org/10.1109/ICECET55527.2022.9873069>

Exterior-rotor permanent magnet synchronous machine with toroidal windings for unmanned aerial vehicles

Nukki, Rene; Kilk, Aleksander; Kallaste, Ants; Vaimann, Toomas; Tiimus, Kristjan PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 215-220 : ill

Feasible path planning for autonomous vehicles

Vu, Trieu Minh; Pumwa, John Mathematical problems in engineering 2014 / p. 1-12 : ill <https://doi.org/10.1155/2014/317494> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Flight control of unmanned rotorcrafts for enhanced situational awareness

Astrov, Igor 2014 https://www.ester.ee/record=b4528435*est

Flight control of vectored thrust aerial vehicle by neural network predictive controller for enhanced situational awareness

Astrov, Igor; Pikkov, Mihhail; Paluoja, Rein World Academy of Science, Engineering and Technology 2013 / p. 77-81 : ill

Formal verification of maritime autonomous systems using UPPAAL STRatego

Shokri-Manninen, Fatima; Vain, Jüri; Walden, Marina 31st Nordic Workshop on Programming Theory, NWPT 2019, Tallinn, Estonia, 13-15 November 2019 : abstracts 2019 / p. 58-61 : ill <https://doi.org/10.23658/taltech.nwpt/2019>

FuzzSense : Towards A Modular Fuzzing Framework for Autonomous Driving Software

Roberts, Andrew James; Teply, Lorenz; Pese, Mert D.; Maennel, Olaf Manuel; Hamad, Mohammad; Steinhorst, Sebastian arXiv.org 2025 / arXiv:2504.10717, 6 p. : ill <https://doi.org/10.48550/arXiv.2504.10717>

Fuzzy logic control of three-rate decentralized optimal control submodels of the Lockheed L1011 Tristar aircraft

Astrov, Igor; Pedai, Andrus Proceedings of the 5th IEEE International Conference on Intelligent Engineering Systems : Helsinki, 2001 2001 / p. 41-46

Generator mode analysis of exterior-rotor PM synchronous machine with Gramme's winding

Nukki, Rene; Kilk, Aleksander; Kallaste, Ants; Vaimann, Toomas; Tiimus, Kristjan 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 347-352 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266341>

A geometric approach to position tracking control of a nonholonomic planar rigid body : case study of an underwater vehicle

Simha, Ashutosh; Kotta, Ülle Proceedings of the Estonian Academy of Sciences 2020 / p. 215-227 : ill

<https://doi.org/10.3176/proc.2020.3.05> https://kirj.ee/public/proceedings_pdf/2020/issue_3/proc-2020-3-215-227.pdf Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

High resolution TSM mapping of dredging operations using automated UAV activated by online in situ measurements : proof on concept

Rikka, Sander; Kõuts, Tarmo; Pärt, Siim; Vahter, Kaimo The 11th Baltic Sea Science Congress "Living Along Gradients : Past, Present, Future" : June 12-16, 2017 : abstracts 2017 / p. 83 https://www.io-warnemuende.de/tl_files/conference/bssc2017/bssc2017-abstract-book.pdf

High-efficiency internal combustion engine for unmanned aircraft use

Tiimus, Kristjan; Murumäe, Mikk; Väljaots, Eero; Tamre, Mart The 9th International Conference Mechatronics Systems and Materials : MSM-2013 : abstracts 2013 / p. 244-245 : ill

High-efficiency internal combustion engine used in the unmanned aircraft

Tiimus, Kristjan; Murumäe, Mikk; **Väljaots, Eero; Tamre, Mart** Mechatronic systems and materials VI 2015 / p. 928-933 : ill
<https://doi.org/10.4028/www.scientific.net/SSP.220-221.928> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Integrating Cyber Threat Intelligence into Threat Modeling for Autonomous Ships Using PASTA and MISP
Erbas, Muhammed; Vanharanta, Jani; Paavola, Jarkko; **Tsiopoulos, Leonidas; Vaarandi, Risto** 2025 IEEE International Conference on Cyber Security and Resilience (CSR) 2025 / p. 133-139 <https://ieeexplore.ieee.org/document/11130108>
<http://doi.org/10.1109/CSR64739.2025.11130108>

ITS safety ensuring through situational management methods

Makarova, Irina; Shubenkova, Ksenia; Mukhametdinov, Eduard; Mavrin, Vadim; **Antov, Dago; Pashkevich, Anton** Intelligent Transport Systems – From Research and Development to the Market Uptake : First International Conference, INTSYS 2017, Hyvinkää, Finland, November 29-30, 2017, Proceedings 2018 / p. 133 - 143 https://doi.org/10.1007/978-3-319-93710-6_15 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Jamming of UAV remote control systems using software defined radio

Pärilin, Karel; **Alam, Muhammad Mahtab; Le Moullec, Yannick** 2018 International Conference on Military Communications and Information Systems (ICMCIS), 22-23 May 2018 : proceedings 2018 / p. 173-178 <http://dx.doi.org/10.1109/ICMCIS.2018.8398711>

Level 4 commercial autonomous vehicle control system transition to an open-source solution

Pikner, Heiko; Sell, Raivo; Malayjerdi, Ehsan Proceedings of the Estonian Academy of Sciences 2024 / p. 124-133
<https://doi.org/10.3176/proc.2024.2.05> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Light-weight multicopter structural design for energy saving = Kerglassi multikopteri energiatarbe vähendamise konstruktsioonilised lahendused

Aleksandrov, Dmitri 2013 http://www.ester.ee/record=b2994326*est

Long-range navigation for unmanned off-road ground vehicle = Kaugmaa navigatsioonisüsteem maastikuvõimekusega autonoomsetele liikuritega

Hudjakov, Robert 2012 https://www.ester.ee/record=b2906409*est

LQG flight control of VTAV for enhanced situational awareness

Astrov, Igor; Pikkov, Mihhail; Paluoja, Rein World Academy of Science, Engineering and Technology. International journal of mechanical, industrial science and engineering 2013 / p. 981-986 : ill

Mobility in smart cities : will automated vehicles take it over?

Soe, Ralf-Martin Smart governance for cities : perspectives and experiences 2020 / p. 189-216 https://doi.org/10.1007/978-3-030-22070-9_10

A model-based adaptive control of turning maneuver for catamaran autonomous surface vessel

Astrov, Igor; Astrova, Irina WSEAS Transactions on Systems and Control 2024 / p. 135-142
<https://doi.org/10.37394/23203.2024.19.14> [Journal metrics at Scopus](#) [Article at Scopus](#)

A model-based PID control of turning maneuver for catamaran autonomous surface vessel

Astrov, Igor 2023 International Conference on Engineering and Emerging Technologies (ICEET), Istanbul, Turkiye, 2023 2023 / 6 p
<https://doi.org/10.1109/ICEET60227.2023.10526157>

Modeling the trajectory tracking accuracy of an autonomous catamaran patrol vessel under different positional data disturbance conditions

Udal, Andres; Kaugerand, Jaanus; Mölder, Heigo; Astrov, Igor; Bauk, Sanja MT '24 : 10th International Conference on Maritime Transport : Barcelona, Spain, 5-7 June, 2024 2024 / p. 1-15 : ill <https://doi.org/10.5821/mt.13165> <http://hdl.handle.net/2117/409463>

Modelling and simulation of autonomous vehicles and systems and their advanced control methods = Autonoomsete sõidukite ja süsteemide ning nende täiustatud juhtimismetoodikate modelleerimine ja simuleerimine

Pedai, Andrus 2021 https://www.ester.ee/record=b5391357*est <https://digikogu.taltech.ee/et/Item/654ccb12-0d81-4ae2-ae07-11248063913c>
<https://doi.org/10.23658/taltech.9/2021>

Modular multi-rotor helicopter platforms

Tiimus, Kristjan; Tamre, Mart Mechatronic systems and materials VI 2015 / p. 110-115 : ill
<https://doi.org/10.4028/www.scientific.net/SSP.220-221.110> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Modular multi-rotor helicopter platforms

Tiimus, Kristjan; Tamre, Mart The 9th International Conference Mechatronics Systems and Materials : MSM-2013 : abstracts 2013 / p. 242-243 : ill

Motion and energy efficiency parameters of the unmanned ground vehicle

Väljaots, Eero; Sell, Raivo; Kaeeli, Mati Mechatronic systems and materials VI 2015 / p. 934-939 : ill

Motion and energy efficiency parameters of unmanned ground vehicle

Väljaots, Eero; Sell, Raivo; Kaeeli, Mati The 9th International Conference Mechatronics Systems and Materials : MSM-2013 : abstracts 2013 / p. 247-248 : ill

Motion control architecture of a 4-fin U-CAT AUV using DOF prioritization

Salumäe, Taavi; Chemori, Ahmed; Kruusmaa, Maarja IROS 2016 : 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems : October 9-14, 2016, Daejeon Convention Center, Daejeon, Korea 2016 / p. 1321-1327 : ill
<https://doi.org/10.1109/IROS.2016.7759218> Conference Proceedings at Scopus Article at Scopus Article at WOS

Motion control of an autonomous surface vessel for enhanced situational awareness

Astrov, Igor; Pikkov, Mihhail; Paluoja, Rein World Academy of Science, Engineering and Technology. International journal of mechanical, industrial science and engineering 2013 / p. 1203-1208 : ill

Motion control of vectored thrust aerial vehicle for enhanced situational awareness

Astrov, Igor; Pikkov, Mihhail; Paluoja, Rein Mathematical applications in science and mechanics : [proceedings of the conferences : Dubrovnik, Croatia, June 25-27, 2013] 2013 / p. 59-64 : ill

Motion planner for skid-steer unmanned ground vehicle = Liikumise plaanija külisrõõlimisega mehitamata maasõidukile

Hiiemaa, Maido 2013 https://www.ester.ee/record=b2992371*est

Multirate depth control of an AUV by neural network model reference controller for enhanced situational awareness

Astrov, Igor; Gordon, Boris Recent researches in applied information science : proceedings of the 5th WSEAS World Congress on Applied Computing Conference (ACC '12) : proceedings of the 1st International Conference on Biologically Inspired Computation (BIC '12) : University of Algarve, Faro, Portugal, May 2-4, 2012 2012 / p. 32-37 : ill <http://www.wseas.us/e-library/conferences/2012/Algarve/BICA/BICA-04.pdf>

Neural network control of vehicles : modeling and simulation

Astrov, Igor 2022 <https://doi.org/10.52305/GXGD6357> https://www.ester.ee/record=b5642329*est

Neural network motion control of VTAV by NARMA-L2 controller for enhanced situational awareness

Astrov, Igor; Berezovski, Natalya International journal of computer, electrical, automation, control and information engineering 2015 / p. 1784-1788 : ill <http://scholar.waset.org/1999.4/10001781>

Nonlinear orientation controller for a compliant robotic fish based on asymmetric actuation

Meurer, Christian; Simha, Ashutosh; Kotta, Ülle; Kruusmaa, Maarja 2019 International Conference on Robotics and Automation : ICRA 2019, Palais des Congres de Montreal, Canada, 20-24 May, 2019 2019 / Art. 8793892 ; p. 4688-4694
<https://doi.org/10.1109/ICRA.2019.8793892> Conference proceeding at Scopus Article at Scopus Article at WOS

On the legal and economic implications of tele-driving

Hoffmann, Thomas; Prause, Gunnar Klaus Machines 2023 / art. 331, 16 p. : ill <https://doi.org/10.3390/machines11030331> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

An optimal control method for an autonomous surface vessel for environment monitoring and cargo transportation applications

Astrov, Igor; Udal, Andres; Mölder, Heigo 2021 25th International Conference Electronics : Proceedings of the 25th International Conference : ELECTRONICS 2021, Kaunas University of Technology, 14th–16th June, 2021, Palanga, Lithuania 2021 / 6 p
<https://doi.org/10.1109/IEEECONF52705.2021.9467483>

Optimization of lift force of mini quadrotor helicopter by changing of gap size between rotors

Aleksandrov, Dmitri; Penkov, Igor Mechatronic systems and materials IV 2013 / p. 226-231 : ill
<https://doi.org/10.4028/www.scientific.net/SSP.198.226> Article collection metrics at Scopus Article at Scopus Article collection metrics at WOS Article at WOS

OTA-C realization of PI λ brake and throttle controllers for autonomous vehicles

Dimeas, Ilias; Psychalinos, Costas; Elwakil, Ahmed; Tepljakov, Aleksei 2017 European Conference on Circuit Theory and Design (ECCTD 2017) : Catania, Italy, 4 - 6 September, 2017 2017 / p. 39-40 : ill <http://dx.doi.org/10.1109/ECCTD.2017.8093229>

PASTA threat modeling for cyber resilience and COLREG compliance in autonomous ship systems

Erbas, Muhammed; Visky, Gabor; Maennel, Olaf Manuel; Tsiopoulos, Leonidas; Vaarandi, Risto 2025 IEEE International Conference on Cyber Security and Resilience (CSR) 2025 / p. 358-365 <https://ieeexplore.ieee.org/document/11130142>
<http://doi.org/10.1109/CSR64739.2025.11130142>

PHA-based feedback control of a biomimetic AUV for diver following : design, simulations and real-time experiments

Ratas, Mart; Chemori, Ahmed; Kruusmaa, Maarja European Control Conference (ECC) 2022 / p. 503-509

<https://doi.org/10.23919/ECC55457.2022.9838054>

Possibility to Use Gartner Hype Cycle Approach for Autonomous Shipping

Senčila, V.; **Alop, Anatoli** Transport Means 2019. Sustainability: Research and Solutions: Proceedings of the 23rd International Scientific Conference, Part II 2019 / p. 574-577 : ill., phot [Transport Means 2019: Proceedings of the 23rd](#)

Potential for an underwater glider component as part of the Global Ocean Observing System

Liblik, Taavi; Karstensen, Johannes; Testor, P. Methods in oceanography 2016 / p. 50-82 : ill <https://doi.org/10.1016/j.mio.2016.05.001>
[Journal metrics at Scopus](#) [Article at Scopus](#)

Potential impacts of the deployment of maritime autonomous surface ships on the maritime freight transport process

Alop, Anatoli; Koit, Katre 10th International Conference on Maritime Transport 2024 / 9 p <https://doi.org/10.5821/mt.13182>

Preliminary sensors selection for reconfigurable continuous track robot obstacle detection

Valme, Daniil; Kudelina, Karolina; Rassõlkin, Anton 2021 IEEE Open Conference of Electrical, Electronic and Information Sciences (eStream): proceedings of the conference, April 22, 2021, Vilnius, Lithuania 2021 / 5 p. : ill
<https://doi.org/10.1109/eStream53087.2021.9431394>

Propeller shrouding influence on lift force of mini unmanned quadcopter

Penkov, Igor; Aleksandrov, Dmitri International journal of automotive and mechanical engineering 2017 / p. 4486-4495 : ill
<https://doi.org/10.15282/ijame.14.3.2017.7.0354> [Journal metrics at Scopus](#) [Article at Scopus](#)

Propulsion motor drive topology selection for further development of ISEAUTO self-driving car

Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants; Sell, Raivo 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 5 p. : ill
<https://doi.org/10.1109/RTUCON.2018.8659887>

A quasi-static approach to optimize the motion of an UGV depending on the track profile

Corral, Eduardo; **Arjassov, Gennadi**; Meneses, Jesus Mechatronic systems and materials VI 2015 / p. 774-780
<https://doi.org/10.4028/www.scientific.net/SSP.220-221.774> [Conference proceedings at Scopus](#) [Article at Scopus](#)

REACT: Autonomous intrusion response system for intelligent vehicles

Hamad, Mohammad; Finkenzeller, Andreas; Kühr, Michael; **Roberts, Andrew James; Maennel, Olaf Manuel**; Steinhorst, Sebastian; **Prevelakis, Vassilis** Computers and security 2024 / art. 104008, 17 p. : ill <https://doi.org/10.1016/j.cose.2024.104008>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Safety toolkit for automated vehicle shuttle - practical implementation of digital twin

Sell, Raivo; Malayjerdi, Ehsan; Malayjerdi, Mohsen; Baykara, Baris Cem 2022 International Conference on Connected Vehicle and Expo (ICCVE) 2022 / 6 p <https://doi.org/10.1109/ICCVE52871.2022.9742881>

Scenario-based validation of safety and performance of an autonomous vehicle by a software in loop simulation method

= Autonomse sõiduki ohutuse ja jõudluse stsenaariumipõhine valideerimine tsüklisimulatsiooni meetodi abil
Malayjerdi, Mohsen 2023 <https://doi.org/10.23658/taltech.43/2023> <https://digikogu.taltech.ee/et/Item/5d3435ba-8ce1-4da6-8d16-4b279e88c861> https://www.ester.ee/record=b5574240*est

Self-driving car ISEAUTO for research and education

Sell, Raivo; Leier, Mairo; Rassõlkin, Anton; Ernits, Juhan-Peep Proceedings of the 2018 19th International Conference on Research and Education in Mechatronics : (REM 2018), Delft, The Netherlands, June 7-8, 2018 2018 / p. 111-116 : ill
<https://doi.org/10.1109/REM.2018.8421793>

Simulating a cyber-attack on the mass thruster controllers at low-speed motion

Astrov, Igor; Bauk, Sanja Promet - Traffic and Transportation 2024 / p. 1006 - 1021 <https://doi.org/10.7307/ptt.v36i6.797> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Simulink/MATLAB based comparison of neural and basic tracking control for an autonomous surface vessel for situation awareness applications

Astrov, Igor; Udal, Andres; Pedai, Andrus; Sell, Raivo 2019 IEEE 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics (CINT-MACRo) 2019 / p. 000105 - 000110 : ill

Single-Rate versus Three-Rate Neural Assisted Control Approaches for Coaxial Rotor Ducted Fan TUAV for Situation Awareness Applications

Pedai, Andrus; Astrov, Igor; Udal, Andres; Sell, Raivo 2019 IEEE International Systems Conference (SysCon 2019), Orlando, FL, USA, April 8-11, 2019 2019 / p. 457-463 : ill <https://doi.org/10.1109/SYSCON.2019.8836871>

Small unmanned surface vessels — a review and critical analysis of relations to safety and safety assurance of larger

autonomous ships

Bolbot, Victor; Sandru, Andrei; Saarniemi, Ture; Puolakka, Otto; **Kujala, Pentti Jouko Sakari**; Valdez Banda, Osiris A. Journal of marine science and engineering 2023 / art. 2387, 38 p. : ill <https://doi.org/10.3390/jmse11122387> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Starship Technologies ja TTÜ sõlmisid tehnoloogiaalase koostöölepingu

Reinsaar, Liina Mente et Manu 2017 / lk. 30 : fot https://www.ttu.ee/public/m/mente-et-manu/MM_02_2017/index.html
https://artiklid.elnet.ee/record=b2816031*est

Starship Technologies liigub ühelt võidult teisele

Inseneeria 2017 / lk. 68-69 : fot http://www.ester.ee/record=b2336521*est https://artiklid.elnet.ee/record=b2816437*est

Sustainable data governance for cooperative, connected and automated mobility in the European Union

Andraško, Jozef; **Hamulak, Ondrej**; Mesarčik, Matuš; **Kerikmäe, Tanel**; **Kajander, Aleks Oskar Johannes** Sustainability 2021 / art. 10610, 25 p <https://doi.org/10.3390/su131910610> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A system of systems solution for perimeter control : combining unmanned aerial system with unattended ground sensor network

Kaugerand, Jaanus; **Preden, Jürjo-Sören**; **Suurjaak, Erki**; **Astapov, Sergei**; **Mõtus, Leo**; **Pahtma, Raido** 9th Annual IEEE International Systems Conference : April 13-16, 2015, Vancouver, British Columbia, Canada : proceedings 2015 / p. 317-323 : ill <https://doi.org/10.1109/SYSCON.2015.7116770>

TalTech arendab masinate kaugjuhtimist: kraana töötab Virumaal, juht asub Hiiumaal [Võrguväljaanne]

ituedised.ee 2022 [TalTech arendab masinate kaugjuhtimist: kraana töötab Virumaal, juht asub Hiiumaal](#)

TalTech researchers developing a digital twin for propulsion drive of autonomous electric vehicle

Rassõlkin, Anton researchinestonia.eu 2021 [TalTech researchers developing a digital twin for propulsion drive of autonomous electric vehicle](#)

Target tracking by neural predictive control of autonomous surface vessel for environment monitoring and cargo transportation applications

Astrov, Igor; **Udal, Andres**; **Roasto, Indrek**; **Mölder, Heigo** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p <https://doi.org/10.1109/BEC49624.2020.9277115>

The ARROWS project : adapting and developing robotics technologies for underwater archaeology

Allotta, Benedetto; Costanzi, Riccardo; **Kruusmaa, Maarja**; **Salumäe, Taavi** IFAC-PapersOnLine 2015 / p. 194-199 : ill <https://doi.org/10.1016/j.ifacol.2015.06.032> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

The digital development of the European Union : data governance aspects of cooperative, connected and automated mobility

Andraško, Jozef; Mesarčik, Matuš; **Hamulak, Ondrej** IDP: Revista d'Internet, Dret i Política 2021 / p. 1-16
<https://doi.org/10.7238/idp.v0i34.387494>

3DLaneNAS : neural architecture search for accurate and light-weight 3D lane detection

Zoljodi, Ali; Loni, Mohammad; Abadijoui, Sadegh; Alibeigi, Mina; **Daneshtalab, Masoud** Artificial Neural Networks and Machine Learning - ICANN 2022 : proceedings. Part I 2022 / p. 404-415 https://doi.org/10.1007/978-3-031-15919-0_34 [Conference Proceedings at scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Time-Sensitive Networking in automotive embedded systems : state of the art and research opportunities

Ashjaei, Mohammad; Bello, Lucia Lo; **Daneshtalab, Masoud**; Patti, Gaetano; Saponara, Sergio; Mubeen, Saad Journal of Systems Architecture : the EUROMICRO Journal 2021 <https://doi.org/10.1016/j.sysarc.2021.102137>

Tudengite isesõitja : [R.Hudjakovi doktoritööst]

Ringvee, Silver Tehnikamaailm 2013 / lk. 86-87 : fot https://artiklid.elnet.ee/record=b2649761*est

Two-rate LQG control of VTAV for enhanced situational awareness

Astrov, Igor Recent advances in circuits, systems, signal processing and communications : proceedings of the 8th WSEAS International Conference on Circuits, Systems, Signal and Telecommunications (CSST '14) : Tenerife, Spain, January 10-12, 2014 2014 / p. 163-168 : ill

Two-rate motion control of VTAV by NARMA-L2 controller for enhanced situational awareness [Electronic resource]

Astrov, Igor 2016 39th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO) : May 30-June 3, 2016, Opatija, Croatia : proceedings 2016 / p. 1126-1131 : ill. [CD-ROM]
<https://doi.org/10.1109/MIPRO.2016.7522309>

Two-rate neural predictive control of coaxial rotor/ducted-fan TUAV for enhanced situational awareness

Astrov, Igor; Berezovski, Natalya; Pikkov, Mihhail; Kimlaychuk, Vadim International Conference on Information Society (i-Society 2015) : London, UK, November 9-11, 2015 2015 / p. 127-132 : ill <http://dx.doi.org/10.1109/i-Society.2015.7366873>

U-CAT for underwater archaeology : turtle-inspired robot operates in tethered and autonomous modes
Kruusmaa, Maarja; Salumäe, Taavi Sea technology 2016 / p. 37-40 : ill [https://www.proquest.com/docview/1784047942?](https://www.proquest.com/docview/1784047942?sourcetype=Trade%20Journals)
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

UGV-type robot motion control simulation

Hiiemaa, Mairo; Tamre, Mart 7th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Narva-Jõesuu, Estonia, 16.06-19.06.2009] 2009 / p. 43-46 : ill

Underwater vehicle speedometry using differential pressure sensors : preliminary results [Online resource]

Fuentes-Pérez, Juan Francisco; Kalev, Kaia; Tuhtan, Jeffrey Andrew; Kruusmaa, Maarja Autonomous Underwater Vehicles 2016 : AUV 2016 : 6-9 November 2016 : IIS, the University of Tokyo, Tokyo, Japan 2016 / p. 156-160 : ill
<https://doi.org/10.1109/AUV.2016.7778664>

Universal navigation algorithm planning platform for unmanned systems

Sell, Raivo; Leomar, Priit Mechatronic systems and materials : mechatronic systems and robotics 2010 / p. 405-410 : ill
https://www.researchgate.net/publication/243762582_Universal_Navigation_Algorithm_Planning_Platform_for_Unmanned_Systems

Unmanned ground vehicle energy efficiency validation in territory surveillance mission

Väljaots, Eero; Sell, Raivo; Rimasauskas, Marius Mechatronic Systems and Materials VII 2016 / p. 164-170
<https://doi.org/10.4028/www.scientific.net/SSP.251.164> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Unmanned ground vehicle SysML navigation model conducted by energy efficiency

Väljaots, Eero; Sell, Raivo Advances in applied materials and electronics engineering III 2014 / p. 443-447
<https://doi.org/10.4028/www.scientific.net/AMR.905.443> [Article at Scopus](#)

Unsettled technology areas in autonomous vehicle test and validation

Razdan, Rahul; Akbas, Mustafa Ilhan; Sargolzaei, Arman; Alanser, Ala Jamil 2019 <https://doi.org/10.4271/EPR2019001> <https://rancis-lab.com/our-research-report-on-autonomous-vehicles-is-published-by-sae/>

Using UAV generated data for the characterisation of riverine systems - case study in the headwaters of the Volga River

Haas, Christian; Thumser, Philipp; **Tuhtan, Jeffrey Andrew;** Kuzovlev, Vyacheslav V.; Zhenikov, Yuri N.; Schletterer, Martin
International Geographical Union Regional Conference "Geography, Culture and Society for our Future Earth" : 17-21 August 2015, Moscow, Russia : book of abstracts 2015 / p. 1594

[Uudne robotlaev Nymo]

Horisont 2020 / lk. 4 : fot https://www.ester.ee/record=b1072243*est

Vesinikdroonid said tuule tiibadesse äriinkubaatoris

Reineberg, Lisete Tartu Postimees 2021 / Lk. 4 : fot <https://dea.digar.ee/article/tartupostimees/2021/05/27/7.13>

5G abil saab laseautot kaugjuhtida ükskõik kust

Mente et Manu 2020 / lk. 12 : fot https://www.ester.ee/record=b1242496*est

Wind force model and adaptive control of catamaran model sailboat

Astrov, Igor; Udal, Andres; Mölder, Heigo; Jalakas, Tanel; Möller, Taavi 2022 8th International Conference on Automation, Robotics and Applications, ICARA 2022 2022 / p. 202-208 : ill <https://doi.org/10.1109/ICARA55094.2022.9738524>

эффективное средство защиты от дронов-камикадзе еще только предстоит найти [Online resources]

rus.err.ee 2022 [AK.Nädal: эффективное средство защиты от дронов-камикадзе еще только предстоит найти](#)