

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

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, Artu; 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; Malayjerdi, Mohsen; Malayjerdi, 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; Udal, 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>

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 = Autonomoose sõiduki juhtimistarkvara küberturvalisuse testimine ja rünnakute leviku analüüs

Roberts, Andrew James 2025 https://www.eester.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 <https://doi.org/10.15866/irease.v10i5.12132> [Journal metrics at Scopus](#) [Article at Scopus](#)

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](#)

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](#)

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>

Light-weight multicopter structural design for energy saving = Kergklassi 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

<https://doi.org/10.4028/www.scientific.net/SSP.220-221.934> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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 külisroolimisega mehitamata maasõidukile
Hiimaa, Mairo 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>

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; Kühn, 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>

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 (CINTI-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; Saarniniemi, 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 tehnoloogialase 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

Inseneria 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 UAV 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)
[sourcetype=Trade%20Journals](#) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

UGV-type robot motion control simulation

Hiismaa, Maito; 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://rancs-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 lseautot 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](#)