

Academic development support for implementing CDIO

Kase, Kärt; Kasuk, Tiina; Rüütmann, Tiia; Sonk, Kaimo; Sell, Raivo; Annus, Ivar 18th CDIO : International Conference : proceedings - full papers 2022 / p. 634-646 https://en.ru.is/media/cdio2022/CDIO_2022_Proceedings.pdf

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>

Advanced autonomous vehicle's functions for safety improvements in urban mobility context = Täiustatud autonoomsete sõidukite funktsioonid ohutuse parandamiseks linnaliikluse kontekstis

Malayjerdi, Ehsan 2022 <https://doi.org/10.23658/taltech.46/2022> https://www.ester.ee/record=b5511689*est
<https://digikogu.taltech.ee/et/Item/b7da5652-066b-408c-81b4-d15cb6e46fca>

Advanced e-curriculum and mobile tools for interdisciplinary modular study

Sell, Raivo; Otto, Tauno 8th International Workshop on Research and Education in Mechatronics 2007 : 14-15 June 2007, Tallinn, Estonia 2007 / p. 246-248 : ill

Advancement in perception capabilities for autonomous vehicles : from dataset collection to scene interpretation = Autonoomsete sõidukite tajuvõimekuse täiustamine : andmekogumisest stseeni tõlgendamiseni

Gu, Junyi 2024 https://www.ester.ee/record=b5703761*est <https://digikogu.taltech.ee/et/Item/a1d10aec-0115-4574-8548-356884ec5e86>
<https://doi.org/10.23658/taltech.60/2024>

Algoritm õpetab isejuhtiva auto möödasõite tegema

Imeline Teadus 2022 / lk. 21 : fot https://www.ester.ee/record=b2747925*est

An environment friendly autonomous ATV - practical mechatronic project

Sell, Raivo; Tamre, Mart 8th International Workshop on Research and Education in Mechatronics 2007 : 14-15 June 2007, Tallinn, Estonia 2007 / p. 309-311 : ill

An IoT course program to foster the adoption of IoT driven food and agriculture in Sub-Saharan Africa (SSA)

Kuaban, Godlove Suila; Nowak, Mateusz; Czekalski, Piotr; Tokarz, Krzysztof; Tangka, ulius Kewir; Siggursson, Kjartan; Nikitenko, Agris; Berkolds, Karlis; Sell, Raivo 2022 International Conference on Electrical, Computer and Energy Technologies (ICECET) 2022 / p. 1-7 <https://doi.org/10.1109/ICECET55527.2022.9872825>

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>

Approaches to use semantic web technologies in real applications

Seiler, Sven; Sell, Raivo Annals of DAAAM for 2009 & proceedings of the 20th International DAAAM Symposium "Intelligent Manufacturing & Automation : Focus on Theory, Practice and Education" : 25-28th November 2009, Vienna, Austria 2009 / p. 1741-1742 : ill

Arduino projektid alustajale

Sell, Raivo; Raid, Kaupo 2017 http://www.ester.ee/record=b4686444*est

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](#)

Autonomous driving validation and verification using digital twins

Pikner, Heiko; Malayjerdi, Mohsen; Bellone, Mauro; Baykara, Baris Cem; Sell, Raivo Proceedings of the 10th International Conference on Vehicle Technology and Intelligent Transport Systems - VEHITS ; Vol. 1 2024 / p. 204-211
<https://doi.org/10.5220/0012546400003702> [Conference Proceeding at Scopus](#) [Article at Scopus](#)

Autonomous last mile shuttle ISEAUTO for education and research

Sell, Raivo; Leier, Mairo; Rassõlkin, Anton; Ernits, Juhan-Peep International journal of artificial intelligence and machine learning 2020 / p. 18-30 <https://doi.org/10.4018/IJAIML.2020010102>

Autonomous vehicle for industry 5.0 : Digital twin for system safety validation

Sell, Raivo; Malayjerdi, Mohsen; Malayjerdi, Ehsan; Bellone, Mauro; Pikner, Heiko Proceedings of the 11th International Conference on Vehicle Technology and Intelligent Transport Systems VEHITS ; Vol. 1 2025 / p. 660-667

<https://doi.org/10.5220/0013476600003941>

Autonomous vehicle safety evaluation through a high-fidelity simulation approach

Malayjerdi, Mohsen; Baykara, Baris Cem; Sell, Raivo; Malayjerdi, Ehsan Proceedings of the Estonian Academy of Sciences 2021 / p. 413-421 : ill <https://doi.org/10.3176/proc.2021.4.07> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Autonomous vehicle shuttle in Smart City testbed

Sell, Raivo; Soe, Ralf-Martin; Wang, Ruxin; Rassõlkin, Anton Intelligent System Solutions for Auto Mobility and Beyond : Advanced Microsystems for Automotive Applications 2020 2021 / p. 143–157 https://doi.org/10.1007/978-3-030-65871-7_11

AVR mikrokontrollerid ja praktiline robotika

Sell, Raivo; Leini, Mikk; Ellermaa, Rain 2015 https://www.ester.ee/record=b4458438*est

Calculation of the traction effort of ISEAUTO self-driving vehicle

Rassõlkin, Anton; Gevorkov, Levon; Vaimann, Toomas; Kallaste, Ants; Sell, Raivo 2018 25th International Workshop on Electric Drives: Optimization in Control of Electric Drives (IWED) 2018 / p. 1-5 : ill <https://doi.org/10.1109/IWED.2018.8321397>

CLFT : camera-LiDAR fusion transformer for semantic segmentation in autonomous driving

Gu, Junyi; Bellone, Mauro; Pivonka, Tomas; Sell, Raivo IEEE Transactions on Intelligent Vehicles 2024 / 12 p <https://doi.org/10.1109/TIV.2024.3454971> [Journal metrics at Scopus](#) [Article at Scopus](#)

CLFT : camera-LiDAR fusion transformer for semantic segmentation in autonomous driving : preprint

Gu, Junyi; Bellone, Mauro; Pivonka, Tomas; Sell, Raivo arXiv.org 2024 / 12 p. : ill <https://doi.org/10.48550/arXiv.2404.17793>

Cognition through multy-domain practical project

Tamre, Mart; Kask, A.; Sell, Raivo; Leomar, Priit OST-03 Symposium on Machine Design 2003 / p. 278

Combined robotic platform for research and education

Sell, Raivo; Seiler, Sven Proceedings of SIMPAR 2010 Workshops : Intl. Conf. on Simulation, Modeling and Programming for Autonomous Robots : Darmstadt (Germany), November 15-16, 2010 2010 / p. 522-531 : ill https://www.academia.edu/14380265/Combined_Robotic_Platform_for_Research_and_Education

Component-based mechatronics modelling methodology

Sell, Raivo; Tamre, Mart ICOM2003 : International Conference on Mechatronics 2003 / p. 111-116 : ill

Comprehensive blended learning concept for teaching micro controller technology

Seiler, Sven; Sell, Raivo eLearning Baltics 2011. 4 2011 / p. 15-25

Comprehensive blended learning concept for teaching micro controller technology utilising HomeLab kits and remote labs in a virtual web environment

Seiler, Sven; Sell, Raivo Transactions on Edutainment. X 2013 / p. 161-177 : ill https://doi.org/10.1007/978-3-642-37919-2_9 [Article collection metrics at Scopus](#) [Article at Scopus](#)

COMSPECT : a compact model for green vegetation reflectance spectra in the 400–900 nm wavelength range

Udal, Andres; Jürise, Martin; Kaugerand, Jaanus; Sell, Raivo Proceedings of the Estonian Academy of Sciences 2020 / p. 277-286 : ill <https://doi.org/10.3176/proc.2020.4.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Conceptual design framework supported by dimensional analysis and System Modelling Language

Christophe, Francois; Sell, Raivo; Coatanea, Eric Estonian journal of engineering 2008 / 4, p. 303-316 : ill <https://www.semanticscholar.org/paper/Conceptual-design-framework-supported-by-analysis-Christophe-Sell/31bd3a8baf71159f4eb573fec39283598988310e>

A conceptual design method for the general electric vehicle

Sell, Raivo; Tamre, Mart; Lehtla, Madis; Rosin, Argo Estonian journal of engineering 2008 / 1, p. 3-16 : ill <https://doi.org/10.3176/eng.2008.1.01>

Curricula in IT oriented mechatronics for higher vocational education

Sell, Raivo; Tamre, Mart Proceedings of the 2nd European Workshop on Education in Mechatronics : the Baltic Sea Workshop under the theme : A new Approach to Engineering Education, Fachhochschule Kiel, Germany, University of Applied Sciences, 20-22 September 2001 2002 / p. 135-143 : ill

Cyber-physical control system for autonomous logistic robot

Pikner, Heiko; Sell, Raivo; Karjust, Kristo; Malayjerdi, Ehsan; Velsker, Tarmo 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. 699-704 : ill <https://doi.org/10.1109/PEMC48073.2021.9432526>

Cyber-physical control system for self-driving vehicles = Isejuhtivate sõidukite küberfüüsikaline juhtsüsteem

Pikner, Heiko 2024 https://www.ester.ee/record=b5695069*est <https://digikogu.taltech.ee/et/Item/15942b01-fddb-4938-a38f-877487151014>
<https://doi.org/10.23658/taltech.44/2024>

Cyber-physical universal safety and crash detection system for autonomous robot

Pikner, Heiko; Sell, Raivo; Malayjerdi, Mohsen The 16th International Conference "Mechatronic Systems and Materials" MSM 2021 July 1, 2021 – July 2, 2021 : abstract book 2021 / p. 16-17 http://msm.vgtu.lt/files/conferences/1/MSM2021Abstract_Book_04005.pdf

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>

Design templates for mobile robot conceptual design

Sell, Raivo; Tamre, Mart 2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics 2007 / [6] p <https://ieeexplore.ieee.org/document/4412593>

Development case study of the first Estonian self-driving car, ISEAUTO

Rassõlkin, Anton; Sell, Raivo; Leier, Mairo Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 81-88 : ill <https://doi.org/10.2478/ecce-2018-0009>

Development of a validation regime for an autonomous campus shuttle

Medrano-Berumen, Christopher; Malayjerdi, Mohsen; Ilhan Akbas, Mustafa; Sell, Raivo IEEE SoutheastCon 2020, Raleigh, NC, 28-29 March 2020 : IEEE Region 3's annual conference : virtual : proceedings 2020 / 8 p <https://doi.org/10.1109/SoutheastCon44009.2020.9249692>

Distance engineering system for robotic applications

Sell, Raivo Proceedings of International Conference Mechatronic Systems and Materials : Vilnius, Lithuania, 22-25 October 2009 2009 / p. 107-108 https://www.academia.edu/23892435/Distance_Engineering_System_for_Robotic_Applications

Doktorant: Raivo Sell : [intervjuu TTÜ mehhatroonikainstituudi doktorandi Raivo Selliga]

Sell, Raivo Avaja 2003 / 18. dets., lk. 5 : portr

Drop-out reduction of engineering curriculum by implementing CDIO principles to natural science studies

Petritšenko, Andres; Sell, Raivo; Kase, Kärt Futureproofing Engineering Education for Global Responsibility : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL 2024) ; vol. 2 2025 / p. 394–401 https://doi.org/10.1007/978-3-031-85649-5_38

Dynamic motion energy efficiency measurement of ground vehicles

Väljaots, Eero; Sell, Raivo Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 1 2012 / p. 367-372 : ill

Early design and simulation toolkit for mobile robot platforms

Sell, Raivo; Petritšenko, Andres International journal of product development 2013 / p. 168-192 <https://doi.org/10.1504/IJPD.2013.053499> [Journal metrics at Scopus](#) [Article at Scopus](#)

Easy to use empirical model for green vegetation reflection spectrum in VIS-NIR range

Udal, Andres; Jürise, Martin; Kaugerand, Jaanus; Sell, Raivo SPIE digital library 2020 / art. 115240H-1–14 <https://doi.org/10.1117/12.2570820> [Conference proceeding](#) [Article at Scopus](#) [Article at WOS](#)

Eessõna

Sell, Raivo Arduino projektid alustajale 2017 / lk. 2 http://www.ester.ee/record=b4686444*est

Eesti esimene isejuhtiv auto : kere Silberautost, tehnoloogia TTÜ-st

Einama, Kaido Director. Inseneeria 2017 / lk. 76-83 : ill https://artiklid.elnet.ee/record=b2824191*est

Eesti esimese autonoomse sõiduki Iseauto prototüüp on valmis

Sell, Raivo Mente et Manu 2018 / lk. 28-29 : fot http://www.ester.ee/record=b1242496*est <http://dea.digar.ee/publication/AKmenteetmanu> <https://taltech.ee/avalehekulg/?id=10641&category=128006#newsTabsMenu> https://artiklid.elnet.ee/record=b2866970*est

Eesti robotitarkvara tekitab kogu maailmas ahhaa-elamuse

Aljas, Riin; Sell, Raivo Eesti Päevaleht 2013 / lk. 2-3 <https://epl.delfi.ee/artikkel/67383412/eesti-robotitarkvara-tekitab-kogu-maailmas-ahhaa-elamuse>

Electric vehicle electric drive signal analysis and mapping of direct control possibilities

Rassõlkin, Anton; Sell, Raivo; Tihonov, Kirill Международная научно-техническая конференция : АВТОМАТИЧЕСКИЙ КОНТРОЛЬ И АВТОМАТИЗАЦИЯ ПРОИЗВОДСТВЕННЫХ ПРОЦЕССОВ, 3-6 октября, 2018 г. : ПРОГРАММА КОНФЕРЕНЦИИ 2018 / p. 9 <https://www.belstu.by/Portals/0/userfiles/37/000-PROGRAMMA-konf--APP-2018.pdf>

Elektriautode süttimisoht: kas müüt või tegelikkus?

accelerista.com 2025 <https://accelerista.com/a-ja-o/tarkusetera/elektriautode-suttimisoht-kas-muut-voi-tegelikkus/>

Embedded system and robotic education in a blended learning environment utilizing remote and virtual labs in the cloud, accompanied by "Robotic HomeLab Kit"

Sell, Raivo; Seiler, Sven; Ptasiak, Dennis International journal of emerging technologies in learning (iJET) 2012 / p. 26-33 : ill <https://online-journals.org/index.php/i-jet/article/view/2245>

End-to-end multimodal sensor dataset collection framework for autonomous vehicles

Gu, Junyi; Lind, Artjom; Chhetri, Tek Raj; **Bellone, Mauro; Sell, Raivo** Sensors 2023 / art. 6783, 25 p. : ill <https://doi.org/10.3390/s23156783> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Energy efficiency evaluation method for mobile robot platform design = Liikuv robotplatvormi energia efektiivsuse hindamise meetod

Väljaots, Eero 2017 <https://digi.lib.ttu.ee/i/?7414> https://www.ester.ee/record=b4665023*est

Energy efficiency monitoring system for technology mapping driven by FoF concept

Sarkans, Martinš; Pikner, Heiko; **Sell, Raivo; Sonk, Kaimo** Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 187-192 : ill

Energy efficiency profiles for unmanned ground vehicles

Väljaots, Eero; Sell, Raivo Proceedings of the Estonian Academy of Sciences 2019 / p. 55–65 : ill <https://doi.org/10.3176/proc.2019.1.04> http://www.kirj.ee/public/proceedings_pdf/2019/issue_1/proc-2019-1-55-65.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhancing mobility as a service with autonomous last-mile shuttles and data exchange layer for public transport

Kalda, Krister; Sell, Raivo; Kivimäe, Martin Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 020006 <https://doi.org/10.1063/5.0189880> [Article at Scopus](#) [Conference Proceedings at Scopus](#)

First-year dropout in ICT studies

Kori, Külli; Pedaste, Margus; **Sell, Raivo; Murtazin, Kristina; Rüütmann, Tiia** Proceedings of 2015 IEEE Global Engineering Education Conference (EDUCON) : 18-20 March 2015, Tallinn University of Technology (TUT), Tallinn, Estonia 2015 / p. 437-445 : ill <http://dx.doi.org/10.1109/EDUCON.2015.7096008>

Florida teadlase meelitas Eestisse isejuhtivate sõidukite tipptase ja e-residentsuse programm

postimees.ee 2025 [Florida teadlase meelitas Eestisse isejuhtivate sõidukite tipptase ja e-residentsuse programm](#)

Glass-box Automated Driving : Insights and Future Trends

Bellone, Mauro; Sell, Raivo; Soe, Ralf-Martin Proceedings of the 17th International Conference on Agents and Artificial Intelligence - (Volume 1) 2025 / p. 880-885 <https://doi.org/10.5220/0013384300003890>

Holistic web-based Virtual Micro Controller Framework for research and education

Seiler, Sven; Sell, Raivo; Ptasiak, Dennis; Bölter, Martin International journal of online engineering 2012 / p. 58-64 <https://online-journals.org/index.php/i-joe/article/view/2169>

"Huvitaja" : Isejuhtivad autod suudavad läbida juba tuhandeid kilomeetreid [Võrguväljaanne]

Rosin, Jakob; **Sell, Raivo** err.ee 2020 / fot ["Huvitaja": Isejuhtivad autod suudavad läbida juba tuhandeid kilomeetreid](#)

Hybrid locomotion of autonomous vehicle - UGV

Tamre, Mart; Sell, Raivo; Hiiemaa, Maido; Leitaru, Erki; Salong, Peeter 8th International Workshop on Research and Education in Mechatronics 2007 : 14-15 June 2007, Tallinn, Estonia 2007 / p. 305-308 : ill

Hyperspectral camera with polarized filter as modern supersensor device for cyber-physical systems [Online resource]

Jürise, Martin; Udal, Andres; Kaugerand, Jaanus; Sell, Raivo 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.2018.8600957>

Important aspects of early design in mechatronic

Sell, Raivo; Coatanee, Eric; Christophe, Francois Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [1] 2008 / p. 177-182 : ill https://www.academia.edu/18741665/Important_Aspects_of_Early_Design_in_Mechatronic

Inductive principles in engineering pedagogy on the example of remote labs

Sell, Raivo; Rütütmann, Tiia; Seiler, Sven Proceedings : 2013 2nd Experiment@International Conference (exp.at'13) : University of Coimbra, Coimbra, Portugal, 18-20 September, 2013 2013 / p. 68-71 : ill

Inductive teaching and learning in engineering pedagogy on the example of remote labs

Sell, Raivo; Rütütmann, Tiia International journal of engineering pedagogy 2014 / p. 12-15 : ill

Innovative study kit for advanced mechatronic experiments

Seiler, Sven; Köhn, Carsten; **Sell, Raivo; Otto, Tauno** 9th International Workshop on Research and Education in Mechatronics : Bergamo, Italy, 2008 2008 / [5] p. : ill

Integrated concept for embedded system study

Sell, Raivo; Seiler, Sven 7th International Conference Mechatronics Systems and Materials MSM 2011 : Kaunas, Lithuania, 7-9 July, 2011 : abstracts book and full papers CD 2011 / p. 14-15

https://www.researchgate.net/publication/257654723_Integrated_Concept_for_embedded_system_study

Integrated design framework : towards an approach for early design

Christophe, Francois; **Sell, Raivo;** Coatanea, Eric; Micaelli, Jean-Pierre International Conference on Engineering and Product Design Education : 4 & 5 September 2008, Barcelona, Spain 2008 / ? p

<https://www.designsociety.org/publication/28079/Integrated+Design+Framework%3A+Towards+an+Approach+for+Early+Design>

Integrated systems and design

2008 http://www.ester.ee/record=b2431612*est

Integration of autonomous vehicles and Industry 4.0

Sell, Raivo; Rassõlkin, Anton; Wang, Ruxin; Otto, Tauno Proceedings of the Estonian Academy of Sciences 2019 / p. 389–394 : ill <https://doi.org/10.3176/proc.2019.4.07> http://www.kirj.ee/32705/?tpl=1061&c_tpl=1064 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Integration of V-model and SysML for advanced mechatronics system design

Sell, Raivo; Tamre, Mart Proceedings of REM2005 : International Conference on Research & Education in Mechatronics 2005 / p. 43 https://www.researchgate.net/publication/259513345_Integration_of_V-model_and_SysML_for_advanced_mechatronics_system_design

Intelligent functions development on autonomous electric vehicle platform

Wang, Ruxin; Sell, Raivo; Rassõlkin, Anton; Otto, Tauno; Malayjerdi, Ehsan Journal of machine engineering 2020 / p. 114-125 <https://doi.org/10.36897/jme/117787> [Journal metrics at Scopus](#) [Article at Scopus](#)

An international hands-on IoT education platform towards Industry 5.0

Sell, Raivo; Czekalski, Piotr; Tokarz, Krzysztof; Kuaban, Godlove Suila; Nikitenko, Agris; Berkolds, Karlis; Lipka, Lukasz Proceedings of the Estonian Academy of Sciences 2025 / p. 198–204 <https://doi.org/10.3176/proc.2025.2.21>

Internet of Things network infrastructure for the educational purpose

Tokarz, Krzysztof; Czekalski, Piotr; Drabik, Gabriel; Paduch, Jaroslaw; Distefano, Salvatore; Di Pietro, Riccardo; Merlino, Giovanni; Scaffidi, Carlo; **Sell, Raivo** 2020 IEEE Frontiers in Education Conference (FIE) 2020 <https://doi.org/10.1109/FIE44824.2020.9274040> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Interstudy e-curriculum

Sell, Raivo 2008 https://www.ester.ee/record=b2415399*est

Interstudy, May 9, 2008

2008 http://www.ester.ee/record=b2415385*est

Introduction to the IOT

Sell, Raivo; Puks, Rim; Kingsepp, Mallor 2019

Introduction to the IoT : Practical project [Electronic resource]

Sell, Raivo; Puks, Rim; Kingsepp, Mallor 2019 <http://iot-open.eu/download/iot-open-eu-introduction-to-the-iot-practical-projects-in-english/>

Introduction to the IOT (Internet of Things) : coursebook

Sell, Raivo; Puks, Rim; Kingsepp, Mallor; Nikitenko, Agris; Berkolds, Karlis; Vagale, Anete; Rumba, Rudolfs; Czekalski, Piotr; Tokarz, Krzysztof; **Läll, Karl** 2025 <https://ebooks.rtu.lv/product/introduction-to-the-iot-second-edition/?lang=en#tab-id-1>

Iseauto ja tehisintellekt köidavad Euroopas tähelepanu

Sell, Raivo Mente et Manu 2019 / lk. 38-40 : fot https://www.ester.ee/record=b1242496*est <https://taltech.ee/avalehekuulg/?category=128006#newsTabsMenu> https://www.ttu.ee/public/m/mente-et-manu/MM_01_2019/mobile/index.html

Iseauto uusversioon on värske teo ja näoga

Imeline Teadus 2021 / lk. 20 : fot https://www.ester.ee/record=b2747925*est

Iseautost targa linnakuni : TalTechi tee

Sarv, Mari Öö; Sell, Raivo Mente et Manu 2020 / lk. 52-55 : fot https://www.ttu.ee/public/m/mente-et-manu/MM_02_2020/mobile/index.html
https://www.ester.ee/record=b1242496*est

Isejuhtivad autod - kas kauge unistus või homme reaalsus?

Sell, Raivo Digi 2017 / lk. 26-27 : portr http://www.ester.ee/record=b2040633*est https://artiklid.elnet.ee/record=b2817119*est

Isejuhtivad autod tulevad, ent dilemmad tahavad lahendamist

Ivask, Pille; **Sell, Raivo** Äripäev 2019 / lk. 10

Isejuhtivad autod võivad muuta meie liikluskorraldust, eetilisi tõekspidamisi ja arusaamu küberturvalisusest

Sell, Raivo arileht.delfi.ee 2024 [Isejuhtivad autod võivad muuta meie liikluskorraldust, eetilisi tõekspidamisi ja arusaamu küberturvalisusest](#)

Isejuhtivad sõidukid tulevad. Kas oleme selleks valmis?

Sell, Raivo Sirp 2019 / lk. 34-36 : fot https://www.ester.ee/record=b1072938*est <https://sirp.ee/s1-artiklid/c21-teadus/isejuhtivad-soidukid-tulevad-kas-oleme-selleks-valmis/>

Isejuhtivat autot saab 5G abil juhtida kas või välismaalt

Imeline Teadus 2020 / lk. 21 : fot https://www.ester.ee/record=b2747925*est

Kaheksa uut tennuriprofessorit

Sell, Raivo; Pikas, Ergo; Hints, Olle; Veski, Siim; Lahtvee, Petri-Jaan; Ottis, Rain; Kiviste, Mihkel; Ross, Peeter Mente et Manu 2021 / lk. 48-51 : portr [Mente et Manu 1/2021](#) https://www.ester.ee/record=b1242496*est

Kas Tesla fenomenist on Eestil midagi õppida?

Sell, Raivo Postimees 2018 / AK, lk. 6-7 <https://arvamus.postimees.ee/6437758/raivo-sell-kas-tesla-fenomenist-on-eestil-midagi-oppida>

Kinematics and dynamics of configurable wheel-leg

Sell, Raivo; Arjassov, Gennadi; Petritšenko, Andres; Kaeeli, Mati Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 1 2012 / p. 345-350 : ill

Kohvrid roboti ehitamiseks jõuavad kooli : [robotikakoolitusest õpetajatele TTÜs]

Sell, Raivo Postimees 2009 / 10. märts, Kasulik Tehnoloogia, lk. 5 <https://tehnika.postimees.ee/92065/kohvrid-roboti-ehitamiseks-jouavad-kooli>

Kuidas muudavad isejuhtivad autod ja bioringmajandus tuleviku rohelisemaks?

delfi.ee 2023 [Kuidas muudavad isejuhtivad autod ja bioringmajandus tuleviku rohelisemaks?](#)

Kuidas õpetada mehhatroonikat? : [robotiehitamisest TTÜ mehhatroonikainstituudis]

Sell, Raivo A & A 2005 / 5, lk. 10-12 : ill

Lab 3: Actuators : the actuator board. Lab 3a: Permanent-magnet DC motors. Lab 3b: Radio-controlled (RC) servo motors. Lab 3c: Stepper motors

Sell, Raivo; Hiiemaa, Mado Hands-on Lab exercises 2008 / p. 51-78 : ill

Lab 7a: Machine vision - CMUcam3 and PC. Lab 7b: Machine vision - CMUcam3 and ATmega128. Lab 7c: Object tracking

Christophe, Francois; Ernits, Margus; **Sell, Raivo** Hands-on Lab exercises 2008 / p. 107-126 : ill

Lab Description Language - a framework approach for describing and mediating remote and virtual labs

Seiler, Sven; Sell, Raivo; Ptasiak, Dennis Mecatronics REM 2012 : Supmeca Paris, November 21st-23rd : proceedings 2012 / p. 194-198 : ill https://www.researchgate.net/publication/256116663_Lab_Description_Language_-_A_framework_approach_for_describing_and_mediating_remote_and_virtual_labs

Laboratory as a service - a holistic framework for remote and virtual labs = Laboratoorium kui teenus - kaug- ja virtuaallaborite holistiline raamistik

Seiler, Sven 2012 https://www.ester.ee/record=b2889058*est

Language of driving for autonomous vehicles

Kalda, Krister; Pizzagalli, Simone Luca; Soe, Ralf-Martin; Sell, Raivo; Bellone, Mauro Applied sciences 2022 / art. 5406 <https://doi.org/10.3390/app12115406> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Learning situations and remote labs in embedded system education

Sell, Raivo; Seiler, Sven Proceedings of 14th International Workshop on Research and Education in Mechatronics 2013 / p. 97-101 : ill https://www.researchgate.net/publication/256116848_Learning_Situations_and_Remote_Labs_in_Embedded_System_Education

Learning situations in an embedded system : NetLab project

Kremer, Martina; Seiler, Sven; Kuvaja, Markus; Ptasik, Dennis; **Lehtla, Tõnu;** Ellermaa, Rain; Pähnapuu, Lembit; Randmaa, Riina; Pikner, Heiko; Heinaste, Urmas; Bernhard, Dirk; **Sell, Raivo** 2013 https://www.ester.ee/record=b3045839*est

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](#)

Lidar-camera semi-supervised learning for semantic segmentation

Caltagirone, Luka; **Bellone, Mauro;** Svensson, Lennart; Wahde, Mattias; **Sell, Raivo** Sensors 2021 / art. 4813
<https://doi.org/10.3390/s21144813> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Liiklus ilma juhtideta

Trialoog 2025 <https://trialoog.taltech.ee/liiklus-ilma-juhtideta/>

Measurement method and device for vehicle dynamics

Väljaots, Eero; Sell, Raivo Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [II] 2010 / p. 536-541 : ill

Mechatronics modeling methodology and semantic orientated knowledge base

Sell, Raivo; Seiler, Sven Annals of DAAAM for 2009 & proceedings of the 20th International DAAAM Symposium "Intelligent Manufacturing & Automation : Focus on Theory, Practice and Education" : 25-28th November 2009, Vienna, Austria 2009 / p. 1723-1724 : ill

Mechatronics system design in conceptual stage

Sell, Raivo Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 82-85 : ill

Mechatronics system design process and methodologies

Sell, Raivo; Tamre, Mart EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 6 of 7, Mechatronics, industrial drive systems, power electronics and drives in transport, EMC and design of PE systems 2004 / p. 6-20 - 6-25 : ill

Methodologies on the mechatronics domain

Sell, Raivo; Leomar, Priit OST-03 Symposium on Machine Design 2003 / p. 53-59 : ill
https://www.researchgate.net/publication/259519138_Methodologies_on_the_Mechatronics_Domain

Microcontroller based intelligent platform for research and education in mechatronics

Sell, Raivo; Seiler, Sven; Ptasik, Dennis Mecatronics REM 2012 : Supmecca Paris, November 21st-23rd : proceedings 2012 / p. 188-193 : ill <https://ieeexplore.ieee.org/document/6451007>

Micromobility and the next infrastructure wave : SAE Edge™ Research Report

Razdan, Rahul; Alsweiss, Suleiman; Akbas, Mustapha Ilhan; Lynn, Eric; Lynn, Greg; **Sell, Raivo;** Spellman, Lisa; Sturges, Daniel; Taylor, J. W.; Morgen, Dennis 2024 <https://doi.org/10.4271/EPR2024022>

Mikrokontrollerid ja praktiline robotika

Sell, Raivo; Leini, Mikk; Salong, Peeter 2010 http://www.ester.ee/record=b2583638*est

Mikrokontrollerplatvorm Arduino Uno

Sell, Raivo E-õppe uudiskiri 2014 / lk. 18 : ill

Millise küberohu toovad autonoomsetele sõidukitele kaasa 5G+ ja 6G?

am.ee 2025 <https://www.am.ee/node/9250>

Miniarvutid ja mikrokontrollerid koolitunnis

Sell, Raivo E-õppe uudiskiri 2014 / lk. 19 : ill

Model based mechatronic systems modeling methodology in conceptual design stage

Sell, Raivo 2007 https://www.ester.ee/record=b2298261*est

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 smart control system architecture for the mobile robot platform

Sell, Raivo; Väljaots, Eero; Pataraja, Tengiz; Malayjerdi, Ehsan Proceedings of the Estonian Academy of Sciences 2019 / p. 395-400 : ill http://www.kirj.ee/32713/?tpl=1061&c_tpl=1064 <https://doi.org/10.3176/proc.2019.4.08> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Motivation and overview

Sell, Raivo Integrated systems and design : interstudy, May 9, 2008 2008 / p. 11-12

Multi-layer cyber-physical control method for mobile robot safety systems

Pikner, Heiko; Sell, Raivo; Majak, Jüri; Karjust, Kristo Proceedings of the Estonian Academy of Sciences 2021 / p. 383-391 : ill
<https://doi.org/10.3176/proc.2021.4.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New concept and ICT based tools for raising the qualification level in mechatronics and related fields

Sell, Raivo; Seiler, Sven Proceedings of 10th International Workshop on Research and Education in Mechatronics : 10-11 September 2009, Glasgow, UK 2009 / p. 43-44
https://www.researchgate.net/publication/259503701_New_Concept_and_ICT_Based_Tools_for_Raising_the_Qualification_Level_in_Mechatronics_and_Related_Fields

New object-oriented approach of modelling mechatronics system in conceptual stage

Sell, Raivo; Tamre, Mart Proc. of 5th Int. Workshop on Research and Education in Mechatronics 2004 / p. 75-80

A Novel Vision Transformer for Camera-LiDAR Fusion based Traffic Object Segmentation

Tahves, Toomas; Gu, Junyi; Bellone, Mauro; Sell, Raivo Proceedings of the 17th International Conference on Agents and Artificial Intelligence : Volume 2 2025 / p. 566-573 <https://doi.org/10.5220/0013239000003890>

Object segmentation for autonomous driving using iseAuto data

Gu, Junyi; Bellone, Mauro; Sell, Raivo; Lind, Artjom Electronics (Switzerland) 2022 / Art. 1119
<https://doi.org/10.3390/electronics11071119> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Online engineering for future factory

Sell, Raivo; Otto, Tauno Annals of DAAAM for 2009 & proceedings of the 20th International DAAAM Symposium "Intelligent Manufacturing & Automation : Focus on Theory, Practice and Education" : 25-28th November 2009, Vienna, Austria 2009 / p. 1695-1696 : ill https://www.researchgate.net/publication/259503657_Online_Engineering_for_Future_Factory

Online tools and remote labs for making ICT more attractive for students to prevent dropout

Sell, Raivo; Rüttemann, Tiia; Murtazin, Kristina Proceedings of 2015 IEEE Global Engineering Education Conference (EDUCON) : 18-20 March 2015, Tallinn University of Technology (TUT), Tallinn, Estonia 2015 / p. 818-822 : ill
<http://dx.doi.org/10.1109/EDUCON.2015.7096066>

OPAS : ontology processing for assisted synthesis

Christophe, Francois; **Sell, Raivo**; Bernard, Alain; Coatanea, Eric Proceedings of the ASME 2009 International Design Engineering Technical Conferences & Design Automation Conference IDETC/DAC 2009, August 30-September 2, 2009, San Diego, USA 2009 / ? p https://www.researchgate.net/publication/259503578_OPAS_Ontology_Processing_For_Assisted_Synthesis

Open-source level 4 autonomous shuttle for last - mile mobility

Sell, Raivo; Malayjerdi, Mohsen; Pikner, Heiko; Razdan, Rahul; Malayjerdi, Ehsan; Bellone, Mauro 2024 IEEE 29th International Conference on Emerging Technologies and Factory Automation (ETFA) 2024 / 6 p
<https://doi.org/10.1109/ETFA61755.2024.10710975> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Overview and general definitions of the design process

Coatanea, Eric; **Sell, Raivo**; Christophe, Francois Integrated systems and design : interstudy, May 9, 2008 2008 / p. 83-97 : ill

Polyverif : an open-source environment for autonomous vehicle validation and verification research acceleration

Razdan, Rahul; Akbas, Mustafa Ilhan; **Sell, Raivo; Bellone, Mauro**; Menase, Mahesh; **Malayjerdi, Mohsen** IEEE Access 2023 / p. 28343-28354 <https://doi.org/10.1109/ACCESS.2023.3258681> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#)

Practical example of the development stages of a mechatronic product

Coatanea, Eric; **Sell, Raivo**; Christophe, Francois Integrated systems and design : interstudy, May 9, 2008 2008 / p. 99-115 : ill

Practical path planning techniques in overtaking for autonomous shuttles

Malayjerdi, Ehsan; Sell, Raivo; Malayjerdi, Mohsen; Udal, Andres; Bellone, Mauro Journal of field robotics 2022 / p. 410-425
<https://doi.org/10.1002/rob.22057> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Praktiline inseneriõpe käib tööl, kodus ja puhkehetkel

Sell, Raivo Inseneeria 2009 / 5(13), lk. 26-28 : ill https://artiklid.elnet.ee/record=b1451827*est

A predictive compact model of effective travel time considering the implementation of first-mile autonomous mini-buses in smart suburbs

Udal, Andres; Sell, Raivo; Kalda, Krister; Antov, Dago Smart Cities 2024 / p. 3914-3935 <https://doi.org/10.3390/smartcities7060151>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Product Assurance in the Age of Artificial Intelligence

2025 <https://doi.org/10.4271/EPR2025011> <https://saemobilus.sae.org/reports/product-assurance-age-artificial-intelligence-epr2025011>

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>

Rahvusvaheline koostöö robotiehitamise tudengiprojektides

Sell, Raivo A & A 2005 / 5, lk. 36-38 : ill

Real-life experiences in using open source for autonomy applications

Malayjerdi, Mohsen; Sell, Raivo; Malayjerdi, Ehsan; Akbas, Mustafa Ilhan; **Razdan, Rahul** Engineering Proceedings 2024 / art. 19
<https://doi.org/10.3390/engproc2024079019> [Journal metrics at Scopus](#) [Article at Scopus](#)

Real-time mechatronics measurement system in virtual environment

Sell, Raivo Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 58-61 : ill

Remote laboratory portal for robotic and embedded system experiments

Sell, Raivo International journal of online engineering 2013 / p. 23-26 : ill

A review of interventions to recruit and retain ICT students

Siiman, Leo A.; Pedaste, Margus; Tõnisson, Eno; **Sell, Raivo** International journal of modern education and computer science 2014 / p. 45-54 : ill

Robotika – seal, kus kohtuvad matemaatika ja tööõpetus

Lind, Kristjan; **Sell, Raivo** Õpetajate Leht 2013 / lk. 6 <https://dea.digar.ee/?a=d&d=opetajateleht20131115.1.6&e=-----ru-25--1--txt-txln%7ctxTI%7ctxAU%7ctxTA----->

Robot bus low-level control system transformation to an open-source solution

Pikner, Heiko; Sell, Raivo; Gu, Junyi Modern Materials and Manufacturing 2023 : Tallinn, Estonia, 2–4 May 2023 2024 / art. 020004 <https://doi.org/10.1063/5.0189277> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Robottibussit huristavat pian Euroopan kaduilla – Tallinna ja Helsinki ovat eturintamassa ilman kuljettajaa liikkuvien ajoneuvojen kehityksessä (Võrguväljaanne]

yle.fi 2019 / fot [Robottibussit huristavat pian Euroopan kaduilla – Tallinna ja Helsinki ovat eturintamassa ilman kuljettajaa liikkuvien ajoneuvojen kehityksessä](#)

The Role of AI Chatbots in Engineering Education: Experimental Findings and Implementation Strategies

Sell, Raivo; Razdan, Rahul; Kase, Kart; Rүүtmann, Tiia International Journal of Engineering Pedagogy 2025 / p. 4-19
<https://doi.org/10.3991/ijep.v15i5.56681> <https://online-journals.org/index.php/i-jep/article/view/56681>

Safety assessment and simulation of autonomous vehicle in urban environments

Malayjerdi, Mohsen; Baykara, Baris Cem; Sell, Raivo; Malayjerdi, Ehsan IOP conference series : materials science and engineering 2021 / art. 012032, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012032>

Safety system assessment case study of automated vehicle shuttle

Pikner, Heiko; Sell, Raivo; Majak, Jüri; Karjust, Kristo Electronics (Switzerland) 2022 / art. 1162

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 for Autonomous Vehicles with Different Fidelity Levels

Malayjerdi, Mohsen; Kaljavesi, Gemb; Diermeyer, Frank; **Sell, Raivo** 2023 IEEE Conference on Intelligent Transportation Systems (ITSC 2023) 2023 / 6 p <https://doi.org/10.1109/ITSC57777.2023.10422403>

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 tsükliisimulatsiooni 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

See on ro(bo)mantika...

Kipper, Kelly Anne & Stiil 2023 / Lk. 33-38 https://www.ester.ee/record=b2509019*est See on ro(bo)mantika...

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>

Self-driving shuttle bus use case in city of Tallinn

Kalda, Krister; Sell, Raivo; Soe, Ralf-Martin IOP conference series : materials science and engineering 2021 / art. 012047, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012047>

Self-evaluation of pedagogical competencies of academic staff in the context of career management

Rüütman, Tiia; Lõhmus, Merle; Sell, Raivo; Stõun, Ija; Pihel, Mare Teaching and Learning in a Digital World : proceedings of the 20th International Conference on Interactive Collaborative Learning. Volume 2 2018 / p. 436-446 https://link.springer.com/chapter/10.1007/978-3-319-73204-6_48 https://doi.org/10.1007/978-3-319-73204-6_48 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Semantics on mobile robot algorithms development

Seiler, Sven; Sell, Raivo 7th International Conference Mechatronics Systems and Materials MSM 2011 : Kaunas, Lithuania, 7-9 July, 2011 : abstracts book and full papers CD 2011 / p. 52-53 https://www.academia.edu/14380281/Semantics_on_Mobile_Robot_Algorithms_Development

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 (CINTH-MACRo) 2019 / p. 000105 - 000110 : ill

Single-Rate versus Three-Rate Neural Assisted Control Approaches for Coaxial Rotor Ducted Fan UAV 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>

Situational awareness in autonomous shuttle buses

Kalda, Krister; Koskinen, Kari M.; **Sarv, Lill; Sell, Raivo** Proceedings of the Estonian Academy of Sciences 2025 / p. 212-216 <https://doi.org/10.3176/proc.2025.2.23> https://kirj.ee/wp-content/plugins/kirj/pub/proc-2-2025-212-216_20250519131011.pdf?v=a57b8491d1d8

Smart sustainable agrivoltaics systems: The future of sustainable agricultural technology (Agri-tech) and green energy

Kuaban, Godlove Suila; Czekalski, Piotr; Nwobodo, Onyeka Josephine; **Sell, Raivo;** Nikitenko, Agris; Berkolds, Karlis; Tanko, Kenedy Tabah ICECCME 2023 : The 3rd International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME) 2023 / 6 p <https://doi.org/10.1109/ICECCME57830.2023.10253215>

Study modules for system engineering & automotive sector

Coatanea, Eric; Deniaud, Samuel; Köhn, Carsten; **Sell, Raivo; Seiler, Sven** 2010

System design and hands-on tools for automotive industry and study process

Sell, Raivo Creative and complex design seminar proceedings 2008 / p. 27-29 https://www.academia.edu/23892428/System_Design_and_Hands_On_Tools_for_Automotive_Industry_and_Study_Process

System modeling combined with dimensional analysis for conceptual design

Christophe, Francois; **Sell, Raivo**; Coatanea, Eric; **Tamre, Mart** 8th International Workshop on Research and Education in Mechatronics 2007 : 14-15 June 2007, Tallinn, Estonia 2007 / p. 229-234 : ill

Tallina külje all Järvekülas saab nüüd sõita isejuhtiva bussiga

Pau, Aivar forte.delfi.ee 2023 [Tallina külje all Järvekülas saab nüüd sõita isejuhtiva bussiga](#)

Tallinn hakkab järgmisel aastal isesõitvaid busse liinivõrgus katsetama

Tankler, Raivo; **Sell, Raivo** Eesti Päevaleht 2017 / lk. 2-3 <https://epi.delfi.ee/artikkel/80134066/tallinn-hakkab-jargmisel-aastal-isesoitvaid-busse-liinivorgus-katsetama>

Tallinn ja Rae vald testivad koostöös isejuhtivaid TalTechi busse

Fogel, Jürgen pealinn.ee 2023 [Tallinn ja Rae vald testivad koostöös isejuhtivaid TalTechi busse](#)

TalTech juhib isesõitvate autode küberohtude uurimist. “Üks kõige kriitilisemaid väljakutseid”

Kald, Indrek ituudised.ee 2025 <https://www.ituudised.ee/uudised/2025/06/26/taltech-juhib-isesoitvate-autode-kuberohtude-uurimist-uks-koige-kriitilisemaid-valjakutseid>

TalTech paneb Euroopa noored insenerid mõistma autonoomsete sõidukite ohutust ühtviisi

toostusuudised.ee 2025 <https://www.toostusuudised.ee/uudised/2025/07/10/taltech-paneb-euroopa-noored-insenerid-moistma-autonoomsete-soidukite-ohutust-uharviisi>

Tehnikaülikool viib robotika koolidesse : [robotikakoolitusest õpetajatele TTÜs]

Sell, Raivo Postimees 2009 / 6. märts, Koolituse Extra, lk. 8 <https://tehnika.postimees.ee/90611/tehnikaulikool-viib-robotika-koolidesse>

Tehnoloogiaalase kirjaoskuse kujundamine interdistsiplinaarsete tehnoloogiaalaste valikkursustega – praktiline rakendamine

Sell, Raivo Gümnaasiumi valdkonnaraamat loodusained [Võrguteavik] 2011 / [10] lk.: ill

The international cooperation on remote laboratories conducted with engineering didactics

Sell, Raivo; Rüttnann, Tiia Proceedings of 2014 11th International Conference on Remote Engineering and Virtual Instrumentation (REV) : 26-28 February 2014 in Porto, Portugal 2014 / p. 187-190 : ill

The international cooperation on remote laboratories in the framework of engineering didactics

Sell, Raivo; Rüttnann, Tiia International journal of engineering pedagogy 2015 / p. 8-11 <http://online-journals.org/index.php/ijep/article/view/3917>

TTÜ arengust Aaviksoo ajal

Ehala, Martin; Allik, Jüri; **Sell, Raivo** Postimees 2020 / Lk. 2-3 https://www.ester.ee/record=b1072778*esthttps://leht.postimees.ee/6974460/martin-ehala-ttu-arengust-aaviksoo-ajal

A Two-layered approach for the validation of an operational autonomous shuttle

Malajerdi, Mohsen; Goss, Quentin A.; Akbas, Mustafa Ilhan; **Sell, Raivo; Bellone, Mauro** IEEE Access 2023 / p. 89124–89137 <https://doi.org/10.1109/ACCESS.2023.3306602> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uncertainty in ground vehicle dynamic measurement system

Väljaots, Eero; Laaneots, Rein; Sell, Raivo Системи обробки інформації 2011 / p. 52-56 https://www.researchgate.net/publication/259503175_Uncertainty_in_ground_vehicle_dynamic_measurement_system

Unified remote and virtual lab solutions for engineering education

Sell, Raivo; Seiler, Sven; Rüttnann, Tiia Online experimentation : emerging technologies and IoT 2015 / p. 383-400 http://www.sensorsportal.com/HTML/BOOKSTORE/Online_Experimentation.htm

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

Universal navigation algorithm planning platform for unmanned systems

Sell, Raivo; Leomar, Priit Proceedings of International Conference Mechatronic Systems and Materials : Vilnius, Lithuania, 22-25 October 2009 2009 / p. 63-64 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 impacts of integrating automated electric vehicles into a mobility-as-a-service ecosystem and effects on traditional transportation and ownership

Taiber, Joachim; **Sell, Raivo** 2019 <https://doi.org/10.4271/EPR2019004>

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/>

Unsettled topics concerning autonomous public transportation systems

Razdan, Rahul 2020 <https://saemobilus.sae.org/content/epr2020020>

Use case of Autonomous Vehicle shuttle and passenger acceptance analysis

Kalda, Krister; Sell, Raivo; Soe, Ralf-Martin Proceedings of the Estonian Academy of Sciences 2021 / p. 429-436 : ill <https://doi.org/10.3176/proc.2021.4.09> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

USORA : unified solution of remote access in practical vocational engineering education

Seiler, Sven; **Sell, Raivo**; Köhn, Carsten; Böhrk, Vanessa 16th International Conference on Research and Education in Mechatronics REM2015 : Bochum, Germany, November 18-20, 2015 : proceedings 2015 / [6] p. : ill <http://dx.doi.org/10.1109/REM.2015.7380387>

Uus algoritm parandab isesõitva auto möödasõiduuskust

Horisont 2022 / lk. 6 : fot https://www.ester.ee/record=b1072243*est

Uus reaalsus: kas varsti seksime ja loome suhteid ultrarealistlike robotnukkudega?

Kipper, Kelly annestiil.delfi.ee 2000 [Uus reaalsus: kas varsti seksime ja loome suhteid ultrarealistlike robotnukkudega?](https://www.ester.ee/record=b1072243*est)

Wheel motion resistance and soil thrust traction of mobile robot

Petritšenko, Andres; Sell, Raivo Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 1 2012 / p. 332-337 : ill

Virtual academy platform supported by a semantic knowledge base

Seiler, Sven; **Sell, Raivo** Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [1] 2010 / p. 566-571 : ill

Virtual simulations environment development for autonomous vehicles interaction

Malayjerdi, Mohsen; Kuts, Vladimir; Sell, Raivo; Otto, Tauno; Baykara, Baris Cem ASME 2020 : International Mechanical Engineering Congress and Exposition, November 16–19, 2020 : Virtual, Online : proceedings 2020 / Paper No: IMECE2020-23362, V02BT02A009; 5 p <https://doi.org/10.1115/IMECE2020-23362>

Õpisiituatsioonid mehhatroonikas ja robotikas

Kremer, Martina; Seiler, Sven; Kuvaja, Markus; **Lehtla, Tõnu; Pikner, Heiko; Sell, Raivo** 2013 http://www.ester.ee/record=b3004886*est

В волости Раз тестируют беспилотные автобусы

Stolitsa.ee 2023 [В волости Раз тестируют беспилотные автобусы](https://www.ester.ee/record=b3004886*est)