

Accuracy analysis of selected time series and machine learning methods for smart cities based on Estonian electricity consumption forecast

Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo; Korõtko, Tarmo; Biechl, Helmuth 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 425-428 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161690>

Application of power line communication technology in street lighting control

Farkas, Tekla D.; Kiraly, Tamás; Pardy, Tamas; Rang, Toomas; Rang, Galina International journal of design and nature and ecodynamics 2018 / p. 176–186 : ill <https://doi.org/10.2495/DNE-V13-N2-176-186> [Journal metrics at Scopus](#) [Article at Scopus](#) [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

Beyond technology. Local authorities' perspectives on smart sustainable cities in Porto Alegre

Schuch de Azambuja, Luiza; Soe, Ralf-Martin dg.o 25 : The 26th Annual International Conference on Digital Government Research (dg.o 2025) : Digital Government Fostering Social Cohesion for Reducing Inequalities, Porto Alegre, Brazil 9 -12 June 2025 : proceedings 2025 <https://doi.org/10.59490/dgo.2025.935>

Cities4ZERO approach to foresight for fostering smart energy transition on municipal level

Tatar, Merit; Kalvet, Tarmo; Tiits, Marek Energies 2020 / art. 3533 <https://doi.org/10.3390/en13143533> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Combined model of smart cities and electronic payments

Soe, Ralf-Martin; Mikheeva, Olga Proceedings of the 7th International Conference for E-Democracy and Open Government CeDEM17 : Danube University Krems, Krems, Austria, 17-19 May 2017 2017 / p. 194-205 : ill <https://doi.org/10.1109/CeDEM.2017.11>

Contrasting “Smart Mobility” and “Sustainable Mobility” in transport governance : The case of municipalities in Estonia

Kirejev, Mihhail; Gerstlberger, Wolfgang Dieter; Niine, Tarvo Scientific Papers of the University of Pardubice, Series D : Faculty of Economics and Administration 2024 / art. 1891 <https://doi.org/10.46585/sp32011891> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Drivers and barriers for the development of smart sustainable cities : a systematic literature review

Schuch de Azambuja, Luiza ICEGOV '21: Proceedings of the 14th International Conference on Theory and Practice of Electronic Governance 2021 / p. 422 - 428 <https://doi.org/10.1145/3494193.3494250> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Extending the “Smart City” concept to small-to-medium sized Estonian municipalities: initiatives and challenges faced

Fröhlich, K. A.; Soe, Ralf-Martin; Maoneke, P.B.; Jain, K.; Pinomaa, A.; Nieminen, M. Information Systems : 19th European, Mediterranean, and Middle Eastern Conference, EMCIS 2022, Virtual Event, December 21–22, 2022 : proceedings 2023 / p. 264–276 https://doi.org/10.1007/978-3-031-30694-5_20 [Conference proceedings at Scopus](#) [Article at Scopus](#)

FINEST Twins : platform for cross-border smart city solutions

Soe, Ralf-Martin dg.o 2017 : the proceedings of the 18th Annual International Conference on Digital Government Research : Innovations and Transformations in Government : June 7-9, 2017, Staten Island, NY, USA 2017 / p. 352-357 : ill <https://doi.org/10.1145/3085228.3085287> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

How do academic smart city centres operate in complex environments? A business model perspective

Ghanbari, Hadi; Soe, Ralf-Martin; Toiskallio, Kalle; Mora, Luca Cities 2024 / art. 105211 <https://doi.org/10.1016/j.cities.2024.105211> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improving the city's transport system sustainability by making an justified choice of the optimal infrastructure solution

Makarova, Irina; Mavrin, Vadim; Buyvol, Polina; Pashkevich, Anton; Mukhametdinov, Eduard 2020 21th International Carpathian Control Conference (ICCC) 2020 / 6 p <https://doi.org/10.1109/ICCC49264.2020.9257283>

Insights gained from stormwater e-monitoring in Viimsi, Estonia

Suits, Kristjan; Rajarao, Gunaratna K.; Kändler, Nils; Vassiljev, Anatoli; Annus, Ivar CEST Proceedings 2023 / 4 p <https://doi.org/10.30955/gnc2023.00303>

Institutionalising smart city research and innovation : from fuzzy definitions to real-life experiments

Soe, Ralf-Martin; Schuch de Azambuja, Luiza; Toiskallio, Kalle; Nieminen, Marko; Batty, Michael Urban Research & Practice 2021 / p. 112-154 <https://doi.org/10.1080/17535069.2021.1998592> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Introducing a taxonomy of the "smart city" : towards a commons-oriented approach?

Niaros, Vasileios TripleC 2016 / p. 51-61 : ill <https://doi.org/10.31269/triplec.v14i1.718> [Journal metrics at Scopus](#) [Article at Scopus](#)

Legal perspectives on smart city data as a commons

Kajander, Aleksi Oskar Johannes International and comparative law review 2022 / p. 7-26 <https://doi.org/10.2478/iclr-2022-0012>
[Journal metrics at Scopus](#) [Article at Scopus](#)

Leveraging data for better bike sharing : a methodology for terminal availability prediction

Manai, Meriem; **Sellami, Bassem; Ben Yahia, Sadok** Procedia Computer Science 2024 / p. 971 - 980
<https://doi.org/10.1016/j.procs.2024.09.516> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Machine learning approach for flexibility characterisation of residential space heating

Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo; Biechl, Helmuth IECON 2021 - 47th Annual Conference of the IEEE Industrial Electronics Society, Toronto, Canada, Oct. 13-16, 2021 2021 / 6 p. : ill <https://doi.org/10.1109/IECON48115.2021.9589216>
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Making (in) the smart city : the emergence of makerspaces

Niaros, Vasileios; Kostakis, Vasileios; Drechsler, Wolfgang Telematics and informatics 2017 / p. 1143-1152 : ill
<https://doi.org/10.1016/j.tele.2017.05.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microgrid oriented modeling of space heating system based on neural networks

Häring, Tobias; Kull, Tuule Mall; Ahmadihangar, Roya; Rosin, Argo; Thalfeldt, Martin; Biechl, Helmuth Journal of building engineering 2021 / art. 103150, 12 p. : ill <https://doi.org/10.1016/j.jobe.2021.103150> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A model-based adaptive control of an autonomous driving car for lane change maneuver

Astrov, Igor; Udal, Andres; Jaanus, Martin 2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO), September 27 - October 1, 2021, Opatija, Croatia : proceedings 2021 / p. 1330-1335 : ill
<http://www.mipro.hr/LinkClick.aspx?fileticket=RAMnkK6T5UQ%3d&tabid=196&language=hr-HR>
<https://doi.org/10.23919/MIPRO52101.2021.9597195>

A model-based control of self-driving car trajectory for lanes change maneuver in a smart city

Astrov, Igor WSEAS transactions on systems and control 2023 / art. 36, p. 346-353 : ill <https://doi.org/10.37394/23203.2023.18.36>
[Journal metrics at Scopus](#) [Article at Scopus](#)

A model-based LQR control of an obstacle avoidance maneuver of a self-driving car

Astrov, Igor; Udal, Andres; Pikner, Heiko; Malayjerdi, Ehsan 2022 IEEE 20th Jubilee World Symposium on Applied Machine Intelligence and Informatics (SAMI) : Poprad, Slovakia, 2-5 March 2022 2022 / p. 473-478 : ill
<https://doi.org/10.1109/SAMI54271.2022.9780755>

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>

Optimal tracking control of catamaran sailboat model in a smart city

Astrov, Igor Automation, Robotics & Communications for Industry 4.0/5.0 : proceedings of the 4th Winter IFSA Conference on Automation, Robotics & Communications for Industry 4.0/5.0 (ARCI' 2024), 7-9 February 2024, Innsbruck, Austria 2024 / p. 78–83 : ill
<https://doi.org/10.13140/RG.2.2.20923.18722>

Optimizing suburban public transport through smart city logistics: a study on information flow and passenger management

Prokopenko, Olha; **Järvis, Marina**; Prause, Gunnar Klaus; Omelyanenko, Vitaliy; Kara, Inna Acta logistica 2025 / p. 291-299
<https://doi.org/10.22306/al.v12i2.621> <https://www.actalogistica.eu/index.php?stranka=current>

People-centric and inclusive approach to planning of smart cities

Jakonen, Olli Ilmari CSID Journal of infrastructure development 2023 / p. 124-137 <https://doi.org/10.7454/jid.v6.i1.1087>

Pitfalls of machine learning methods in smart grids : a legal perspective

Antonov, Alexander; Häring, Tobias; Korōtko, Tarmo; Rosin, Argo; Kerikmäe, Tanel; Biechl, Helmuth 2021 International Symposium on Computer Science and Intelligent Controls : (ISCSIC 2021), 12-14 November 2021, Rome, Italy : proceedings 2021 / p. 248-256 <https://doi.org/10.1109/ISCSIC54682.2021.00053>

Power smoothing in smart buildings using flywheel energy storage

Plaum, Freddy; Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 / p. 473-477 <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161458>

Reclaiming data for improved city governance : Barcelona's new data deal

Fernandez-Monge, Fernando; Barns, Sarah; Kattel, Rainer; Bria, Francesca Urban Studies 2024 / p. 1291-1307 <https://doi.org/10.1177/00420980231204835>

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>

Seamlessness as disenfranchisement : the digital state of pigs and how to resist

Drechsler, Wolfgang Acta Baltica historiae et philosophiae scientiarum 2020 / p. 38-53 : ill https://www.ies.ee/bahps/acta-baltica/abhps-8-2/03_Drechsler-2020-2-03.pdf <https://doi.org/10.11590/abhps.2020.2.03> [Journal metrics at Scopus](#) [Article at Scopus](#)

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>

Smart City data commons and EU competition law – A conflict in the making?

Kajander, Aleks Oskar Johannes; Hoffmann, Thomas Scientific Papers of the University of Pardubice, Series D : Faculty of Economics and Administration 2024 / art. 2092, 10 p <https://doi.org/10.46585/sp32022092> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Smart governance in urban mobility process

Soe, Ralf-Martin Science and Technologies for Smart Cities : 6th EAI International Conference, SmartCity360°, Virtual Event, December 2-4, 2020 : proceedings 2021 / p. 542-552 https://doi.org/10.1007/978-3-030-76063-2_36 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Smart twin cities via urban operating system

Soe, Ralf-Martin ICEGOV '17 : proceedings of the 10th International Conference on Theory and Practice of Electronic Governance : New Delhi AA, India, March 7-9, 2017 / p. 391-400 : ill <https://doi.org/10.1145/3047273.3047322> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Smart urban futures: outlining the smart city planning project

Partanen, Jenni Vilhelmiina Geography research forum 2020 / p. 19-34 : ill <https://grf.bgu.ac.il/index.php/GRF/article/view/597>

A smart-contract-based adaptive security governance architecture for smart city service interoperations

Siddiqui, Shahbaz; Hameed, Sufian; Shah, Syed Attique; Arshad, Junaid; Ahmed, Yussuf; Draheim, Dirk Sustainable Cities and Society 2024 / art. 105717 <https://doi.org/10.1016/j.scs.2024.105717> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sustainable logistics and passenger transport in smart cities

Prokopenko, Olha; Prause, Gunnar Klaus; Bielialov, Talia; Järvis, Marina; Holovanenko, Mykola; Kara, Inna Acta logistica 2024 / p. 47-56 <https://doi.org/10.22306/al.v11i1.448> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Systematic mapping of long-term urban challenges

Soe, Ralf-Martin; Sarv, Lill; Gasco-Hernandez, Mila Sustainability 2022 / art. 817 <https://doi.org/10.3390/su14020817> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The role of demographics in cities

Soe, Ralf-Martin dg.o 2017 : the proceedings of the 18th Annual International Conference on Digital Government Research : Innovations and Transformations in Government : June 7-9, 2017, Staten Island, NY, USA 2017 / p. 446-451 : ill <https://doi.org/10.1145/3085228.3085274> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Thermal modelling of a control center for flexibility analysis in nZEB nanogrids

Häring, Tobias; Rosin, Argo; Kull, Tuule Mall; Helguero Cruz, Jorge Luis; Biechl, Helmuth 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316568>

Towards a typology of data-enabled co-creation platforms in smart cities and mapping of practices in OECD countries

Fadmastuti, Mahardika; Karo, Erkki; Soe, Ralf-Martin Journal of urban technology 2024 / p. 29-52 <https://doi.org/10.1080/10630732.2024.2390795> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Towards disaster resilient smart cities : can internet of things and big data analytics be the game changers?

Shah, Syed Attique; Seker, Dursun Zafer; Rathore, M. Mazhar; Hameed, Sufian; **Ben Yahia, Sadok; Draheim, Dirk** IEEE Access 2019 / art. 8759905, p. 91885–91903 <https://doi.org/10.1109/ACCESS.2019.2928233> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

A trajectory control method for a strongly underactuated spherical underwater surveillance robot

Astrov, Igor; Udal, Andres; Mölder, Heigo 2021 IEEE 25th International conference on intelligent engineering systems (INES), 7-9 July 2021 : conference proceedings 2021 / p. 43–48 <https://doi.org/10.1109/INES52918.2021.9512931>

Transition towards Smart City : the case of Tallinn

Sarv, Lill; Soe, Ralf-Martin Sustainability 2021 / art. 4143, 18 p <https://doi.org/10.3390/su13084143> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Urban open platform for borderless smart cities

Soe, Ralf-Martin; Ruohomäki, Timo; Patzig, Henry Applied sciences 2022 / art. 700 <https://doi.org/10.3390/app12020700> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)