

An efficient method for post analysis of patterns

Kuusik, Rein, inform.; **Liiv, Innar; Lind, Grete** Proceedings of the IASTED International Conference on Artificial Intelligence and Applications : Innsbruck, Austria, February 14-16, 2005 2005 / p. 101-105
https://www.researchgate.net/publication/221173660_An_Efficient_Method_for_Post_Analysis_of_Patterns

An analysis of community structure detection for educational coopetition

Übi, Jaan; Liiv, Innar; Übi, Evald; Võhandu, Leo 2013 Second International Conference on e-Learning and e-Technologies in Education (ICEEE 2013) : proceedings of a meeting held 23-25 September 2013, Lodz, Poland 2013 / p. 104-109 : ill

Analytical CRM with conformity analysis

Liiv, Innar; Kuusik, Rein, inform.; **Võhandu, Leo** WSEAS transactions on systems and control 2007 / 2, p. 155-161

Andmekaevandamine

Liiv, Innar A & A 2005 / 6, lk. 28-43 : ill

Autonoomsete intelligentsete tehnoloogiate kasutamise seotud küsimuste reguleerimiseks vajalike õigusloome probleemide tuvastamine ja lahendustepanekute tegemine : II etapi aruanne

Kerikmäe, Tanel; Nyman-Metcalf, Katrin Merike; Tehver, Jaanus; Hoffmann, Thomas; Taveter, Kuldar; Liiv, Innar; Pärn-Lee, Evelin; Salumaa-Lepik, Kärt vt. ka Salumaa, Kärt; Antonov, Aleksander; Rozeik, Helena 2019

Business process mining in warehouses : a case study

Lepik, Ott; Liiv, Innar Technical report [Online publication] 2012 / 14 p. : ill

Business process mining in warehouses : a case study

Liiv, Innar; Lepik, Ott Databases and Information Systems : proceedings of the 11th International Baltic Conference, Baltic DB&IS 2014 : Tallinn, Estonia, 8-11 June, 2014 2014 / p. 387-394 : ill

Capacity building in government : towards developing a standard for a functional specialist in AI for public services

Labanava, Alena; Dreyling, Richard Michael; Mortati, Marzia; Liiv, Innar; Pappel, Ingrid Future Data and Security Engineering : Big Data, Security and Privacy, Smart City and Industry 4.0 Applications : 9th International Conference, FDSE 2022, Ho Chi Minh City, Vietnam, November 23-25, 2022 : proceedings 2022 / p. 503-516 https://doi.org/10.1007/978-981-19-8069-5_34 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Classification of supply chain practices according to customer values in automotive industry

Maleki, Meysam; Liiv, Innar; Ševtšenko, Eduard; Cruz-Machado, V. Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 542-547 : ill

Concept of Estonian government cloud and data embassies

Kotka, Taavi; Liiv, Innar Electronic Government and the Information Systems Perspective : 4th International Conference, EGOVIS 2015, Valencia, Spain, September 1-3, 2015 : proceedings 2015 / p. 149-162 : ill http://dx.doi.org/10.1007/978-3-319-22389-6_11

Conformity analysis with structured query language

Liiv, Innar; Kuusik, Rein, inform.; **Võhandu, Leo** 6th WSEAS International Conference on Artificial Intelligence, Knowledge Engineering and Data Bases : Corfu Island, Greece, February 16-19, 2007 2007 / p. 187-189
https://www.academia.edu/3807457/Conformity_analysis_with_structured_query_language

Creating an information architecture for an enterprise large-scale websites using a card sorting method

Järv, Natalia; Liiv, Innar; Ivask, Jekaterina; Merkulova, Maria Databases and Information Systems : proceedings of the 11th International Baltic Conference, Baltic DB&IS 2014 : Tallinn, Estonia, 8-11 June, 2014 2014 / p. 459-464

Czekanowski-Bertin learning paradigm : a discussion

Liiv, Innar Proceedings of the 2007 International Conference on Artificial Intelligence : ICAI 2007 : Las Vegas, June 25-28, 2007 2007 / p. 90-95

Data science techniques for cryptocurrency blockchains

Liiv, Innar 2021 <https://doi.org/10.1007/978-981-16-2418-6>

Developing autonomous robotic transport systems for hospitals and medical facilities : legal challenges

Kerikmäe, Tanel; Kajander, Aleks Oskar Johannes; Hamulak, Ondrej; Mesarčik, Matuš; Andraško, Jozef; Liiv, Innar Icon 2023 / p. 88-104 <https://www.icohtec.org/icon/volume-28-issue-2-2023/>

A Digital ecosystem for personal manufacturing : an architecture for cloud-based distributed manufacturing operating systems

Vedešin, Anton; Dogru, John Mehmet Ulgar; Liiv, Innar; Draheim, Dirk; Ben Yahia, Sadok MEDES '19 : A Digital Ecosystem for Personal Manufacturing : An Architecture for Cloud-based Distributed Manufacturing Operating Systems : proceedings 2019 / p.

Digital social work: tools for practice with individuals, organizations, and communities

Liiv, Innar European journal of social work 2020 / p. 175-176 <https://doi.org/10.1080/13691457.2020.1767943>

Domain engineering for cyber defense: a case study and implications

Tepandi, Jaak; Piho, Gunnar; Liiv, Innar Conference on Cyber Conflict : proceedings 2010 2010 / p. 59-77

Eesti elektrisüsteemi laiseiresüsteemi arendamine ja analüüs (WAMPAC) : uurimustöö 1.1-4/13/232 / Lep13118 II etapi aruanne [Võrguväljaanne]

Palu, Ivo; Meldorf, Mati; Šuvalova, Jelena; Liiv, Innar; Tuttelberg, Kaur; Kangro, Triin; Astapov, Victor; Sarnet, Tanel; Šlenduhhov, Vadim; Kilter, Jako; Ülavere, Eero; Reinson, Andrus 2014

E-government services migration to the public cloud : experiments and technical findings

Kotka, Taavi; Johnson, Bruce; Cebul, Tomaz; Lovosevic, Luka; Liiv, Innar Electronic Government and the Information Systems Perspective : 5th International Conference, EGOVIS 2016, Porto, Portugal, September 5-8, 2016 : proceedings 2016 / p. 62-76 : ill http://dx.doi.org/10.1007/978-3-319-44159-7_5 http://www.ester.ee/record=b4645628*est

Entrepreneurial competence and the personal traits of an entrepreneur : analysis on the basis of students' self-evaluation

Venesaar, Urve; Liiv, Signe; Liiv, Innar; Pihlak, Merle 5th International Scientific Conference : Business and Management' 2008 : conference proceedings 2008 / p. 156-157

Entrepreneurial competence and the personal traits of an entrepreneur : analysis on the basis of students' self-evaluation

Venesaar, Urve; Liiv, Signe; Liiv, Innar; Pihlak, Merle 5th International Scientific Conference : Business and Management' 2008 : May 16-17, 2008, Vilnius, Lithuania : selected papers 2008 / p. 320-326

Estonia como país líder en gobierno electrónico : enfoque legal para regular la inteligencia artificial

Kerikmäe, Tanel; Nyman-Metcalf, Katrin Merike; Tehver, Jaanus; Hoffmann, Thomas; Taveter, Kuldar; Liiv, Innar; Pärn-Lee, Evelin; Salumaa-Lepik, Kärt; Shumilo, Olga; Ramiro Troitino, David Inteligencia artificial : de la discrepancia regional a las reglas universales 2020 <https://www.marcialpons.es/libros/inteligencia-artificial-de-la-discrepancia-regional-a-las-reglas-universales/9788413468358/>

Ettevõtlusalane kompetentsus ja ettevõtja isikuomadused: analüüs üliõpilaste enesehinnangu alusel

Venesaar, Urve; Liiv, Signe; Liiv, Innar IV ettevõtte majanduse konverents : konverentsi ettekanded-artiklid (Pärnu, 20.-21. jaanuar 2006) 2006 / p. 190-206

Euroopa oma tehismõistus

Tammet, Tanel; Liiv, Innar Sirp 2020 / lk. 33-34 : ill <https://www.sirp.ee/s1-artiklid/c21-teadus/euroopa-oma-tehismoistus/> https://www.ester.ee/record=b1072938*est

Evaluation of matrix seriation algorithms

Liiv, Innar Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kolmanda aastakonverentsi artiklite kogumik : 25.-26. aprill 2008, Voore külalistemaja 2008 / p. 33-34

An experiment to find the deep structure of Estonian legislation

Täks, Ermo; Võhandu, Leo; Lohk, Ahti; Liiv, Innar Legal Knowledge and Information Systems : JURIX 2011 : the twenty-fourth annual conference 2011 / p. 93-102

Heat loss characteristics of typology-based apartment building external walls for a digital twin-based renovation strategy tool

Iliste, Elisa; Lomp, Siim; Pikas, Ergo; Arumägi, Endrik; Hallik, Jaanus; Öiger, Karl; Kisel, Einari; Liiv, Innar; Kalamees, Targo Journal of Physics: Conference Series 2023 / 8 p <https://doi.org/10.1088/1742-6596/2654/1/012125>

Inventory classification enhancement with demand associations

Liiv, Innar 2006 IEEE International Conference on Service Operations and Logistics and Informatics : Shanghai, China, June 21-23, 2006 2006 / p. 18-22 <https://ieeexplore.ieee.org/document/4125544>

Kogukondlik haldus ja kohalik omavalitsus – side ajalooga teel tulevikku

Lääne, Sulev; Lepik, Katri-Liis; Liiv, Innar; Mäeltsemees, Sulev; Lõhmus, Mikk; Trei, Jan; Ratas, Jüri Riigikogu Toimetised 2023 / lk. 29-64 : ill <https://rito.riigikogu.ee/wordpress/wp-content/uploads/2023/12/RiTo-48-1.pdf>

Kuidas viia Eestis sujuvalt läbi renoveerimislaine?

Kisel, Einari; Kalamees, Targo; Pikas, Ergo; Liiv, Innar; Arumägi, Endrik Mente et Manu 2023 / lk. 40-41 : fot https://www.ester.ee/record=b1242496*est

Matrix reordering with monotonic systems : background, formulation, motivation and extensions

Liiv, Innar Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK teise aastakonverentsi artiklite kogumik : 11.-12. mai 2007, Viinistu kunstimuuseum 2007 / lk. 13-16 : ill

Megatrend and intervention impact analyzer for jobs : a visualization method for labor market intelligence

Õpik, Rain; Kirt, Toomas; Liiv, Innar Journal of official statistics 2018 / p. 961-979 : ill <https://doi.org/10.2478/jos-2018-0047>
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Mida õppida Stanfordi ja Oxfordi ülikoolide näitel?

Liiv, Innar Mente et Manu 2016 / lk. 28-29 : fot https://artiklid.elnet.ee/record=b2767551*est

Mining and visualizing power in social network analysis

Liiv, Innar Proceedings of the International Conference on Artificial Intelligence (ICAI'05) : Las Vegas, Nevada, June 27-30, 2005 2005 / p. 754-759

MIT ja TTÜ kompasid Tallinnas teineteist : [Tallinnas toimus MIT Global Startup Workshop : ka Alar Kolgi ja Innar Liivi kommentaaridega]

Kalev, Raul; Kolk, Alar; Liiv, Innar Mente et Manu 2013 / lk. 10 https://artiklid.elnet.ee/record=b2612185*est

MIT Tallinna Tehnikaülikool : kas on mõistlik arendada oma brändi või tippülikoolilt teenus sisse osta?

Liiv, Innar Sirp 2016 / lk. 32 : fot <http://www.sirp.ee/s1-artiklid/c21-teadus/mit-tallinna-tehnikaukool/>

Mobile phone usage data for credit scoring

Ots, Henri; Liiv, Innar; Tur, Diana Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings 2020 / p. 82-95 https://doi.org/10.1007/978-3-030-57672-1_7 [Conference proceeding at Scopus](#) [Article at Scopus](#)

MORec: At the crossroads of context-aware and multi-criteria decision making for online music recommendation

Ben Sassi, Imen; Ben Yahia, Sadok; Liiv, Innar Expert systems with applications 2021 / art. 115375, 20 p. : ill <https://doi.org/10.1016/j.eswa.2021.115375>

Mustrite avastamine kasutades järjestamist ning maatriksi ümberkorramist : unifitseeritud vaade, edasiarendused ning rakendus ladude juhtimises : kommentaar Rahvusvahelise Klassifitseerimise Ühingu parima interdistsiplinaarse väitekirja auhinna pälvinud tööle

Liiv, Innar Tallinna Tehnikaülikooli aastaraamat 2009 2010 / lk. 205-207

Negotiation framework for Baltic fisheries management : striking the balance of interest

Aps, Robert; Kell, Laurence T.; Lassen, Hans; **Liiv, Innar** ICES journal of marine science 2007 / 4, p. 858-861

Pattern based software architecture for predictive maintenance

Torim, Ants; Liiv, Innar; Ounoughi, Chahinez; Ben Yahia, Sadok Nordic Artificial Intelligence Research and Development : 4th Symposium of the Norwegian AI Society, NAIS 2022, Oslo, Norway, May 31 - June 1, 2022 : revised selected papers 2022 / p. 26-38 https://doi.org/10.1007/978-3-031-17030-0_3 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Pattern discovery using seriation and matrix reordering : a unified view, extensions and an application to inventory management = Mustrite avastamine kasutades järjestamist ning maatriksi ümberkorramist: unifitseeritud vaade, edasiarendused ning rakendus ladude juhtimises

Liiv, Innar; Kuusik, Rein, inform. 2008 https://www.ester.ee/record=b2402187*est

Personalized context-aware recommendations in SMARTMUSEUM : combining semantics with statistics

Liiv, Innar; Tammet, Tanel; Ruotsalo, Tuukka; **Kuusik, Alar** Proceedings of the Third International Conference on Advances in Semantic Processing (SEMAYRO 2009) : Sliema, Malta, October 2009 2009 / p. 50-55 <https://ieeexplore.ieee.org/document/5291537>

Policy and legal environment analysis for e-Government services migration to the public cloud

Kotka, Taavi; Kask, Laura; Raudsepp, Karoliina; Storch, Tyson; Radloff, Rebecca; **Liiv, Innar** ICEGOV '15-16 : proceedings of the 9th International Conference on Theory and Practice of Electronic Governance : Montevideo, Uruguay, March 1-3, 2016 2016 / p. 103-108 : ill <https://doi.org/10.1145/2910019.2910056>

Predicting student retention by comparing histograms of bootstrapping for Charnes-Cooper transformation-linear programming discriminant analysis

Übi, Jaan; Übi, Evald; Liiv, Innar; Võhandu, Leo 2013 Second International Conference on e-Learning and e-Technologies in Education (ICEEE 2013) : proceedings of a meeting held 23-25 September 2013, Lodz, Poland 2013 / p. 110-114 : ill

Predicting student retention by linear programming discriminant analysis

Übi, Jaan; Übi, Evald; Liiv, Innar; Murtazin, Kristina International journal of technology and educational marketing 2014 / p. 43-53 : ill

Quality and accuracy of digital twin models for the neighbourhood level building energy performance calculations
Parts, Egert-Ronald; Pikas, Ergo; Parts, Tuule Mall; Arumägi, Endrik; Liiv, Innar E3S Web of Conferences : 11th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, IAQVEC2023 2023 / art. 04021
<https://doi.org/10.1051/e3sconf/202339604021>

Quantification of building envelope heat losses on a district level for comparative renovation strategies assessment
Arumägi, Endrik; Hallik, Jaanus; Pikas, Ergo; Kalamees, Targo; Liiv, Innar; Kisel, Einari Journal of Physics: Conference Series 2023 / 10 p <https://doi.org/10.1088/1742-6596/2654/1/012003>

SARS-CoV-2 Coronavirus data compression benchmark
Liiv, Innar arXiv.org 2020 / 6 p. <https://arxiv.org/abs/2012.12013>

A secure data infrastructure for personal manufacturing based on a novel key-less, byte-less encryption method
Vedešin, Anton; Dogru, John Mehmet Ulgar; Liiv, Innar; Ben Yahia, Sadok; Draheim, Dirk IEEE Access 2020 / p. 40039-40056 : ill <https://doi.org/10.1109/ACCESS.2019.2946730> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Self-organizing map, matrix reordering and multidimensional scaling as alternative and complementary methods in a semantic study
Kirt, Toomas; Liiv, Innar; Vainik, Ene Proceedings of the 2007 International Conference on Artificial Intelligence : ICAI 2007. Volume 1 2007 / p. 385-390 https://www.researchgate.net/publication/220835093_Self-Organizing_Map_Matrix_Reordering_and_Multidimensional_Scaling_as_Alternative_and_Complementary_Methods_in_a_Semantic_Study

Seriation and matrix reordering methods : an historical overview
Liiv, Innar Statistical analysis and data mining 2010 / 2, p. 70-91 : ill

Seriation and matrix reordering methods for asymmetric one-mode two-way datasets
Liiv, Innar; Võhandu, Leo Advanced studies in behaviormetrics and data science : Essays in Honor of Akinori Okada 2020 / p. 159-175 https://doi.org/10.1007/978-981-15-2700-5_10

Smart cyber-physical system for pattern recognition of illegal 3D designs in 3D printing
Vedešin, Anton; Dogru, John Mehmet Ulgar; Liiv, Innar; Ben Yahia, Sadok; Draheim, Dirk Smart Applications and Data Analysis : Third International Conference, SADASC 2020, Marrakesh, Morocco, June 25-26, 2020 : proceedings 2020 / p. 74-85
https://doi.org/10.1007/978-3-030-45183-7_6 [Conference proceeding at Scopus](#) [Article at Scopus](#)

Sotsiaälvõrgustike analüüs
Liiv, Innar Kuidas mõista andmestunud maailma? : metodoloogiline teejuht 2020 / lk. 178-209
https://www.ester.ee/record=b5388794*est

Tehnikaülikooli suurim ambitsioon
Liiv, Innar Sirp 2020 / lk. 25 <https://www.sirp.ee/s1-artiklid/c21-teadus/tehnikaülikooli-suurim-ambitsioon/>
https://www.ester.ee/record=b1072938*est

Towards information-theoretic visualization evaluation measure: a practical example for Bertin's matrices
Liiv, Innar Proceedings of the ACM CHI (ACM Conference on Human Factors in Computing Systems) 2010 Conference : April 10-11, 2010, Atlanta, GA, US 2010

Uued inimesed ja positsioonid
Tammet, Tanel; Uska, Riina; Laanearu, Janek; Tabri, Kristjan; Vendelin, Marko; Margus, Madis; Kindsigo, Merit; Talpsepp, Tõnn; Tähemaa, Toivo; Laos, Katrin; Liiv, Innar; Rüütmann, Tiia; Sarapuu, Külli; Kikkas, Kaido; Pachel, Karin Mente et Manu 2022 / lk. 40-49 : fot https://www.ester.ee/record=b1242496*est

Uute mustrite avastamine järjestamise ja maatriksi ümberkorraldamisega : [autori doktoritööst]
Liiv, Innar Inseneeria 2009 / 8(9), lk. 44-46 : ill https://artiklid.elnet.ee/record=b1140684*est

Valitsemine 2030 : riigivalitsemise ja e-riigi stsenaariumid
Terk, Erik; Liiv, Innar; Sarapuu, Külli; Danilov, Tea 2018 https://www.ester.ee/record=b5181431*est

Visual matrix explorer for collaborative seriation
Liiv, Innar; Öpik, Rain; Übi, Jaan; Stasko, John Wiley interdisciplinary reviews : computational statistics 2012 / p. 85-97
<https://www.deepdyve.com/lp/wiley/visual-matrix-explorer-for-collaborative-seriation-Mc5ryKrGod>

Visualization and data mining method for inventory classification
Liiv, Innar 2007 IEEE International Conference on Service Operations and Logistics, and Informatics : Philadelphia, USA, August 27-29, 2007 2007 / p. 472-477 <https://ieeexplore.ieee.org/document/4383909>

Visualization and structure analysis of legislative acts : a case study on the law of obligations

