

### **Addressing scalability issues in semantics-driven recommender systems**

Bendouch, Mounir M.; Frasinca, Flavius; **Robal, Tarmo** WI-IAT '21: IEEE/WIC/ACM International Conference on Web Intelligence 2021 / p. 56-63 <https://doi.org/10.1145/3486622.3493963> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Administration of the state information system of the Estonian eGovernment [Electronic resource]**

**Kalja, Ahto; Robal, Tarmo**; Gailan, Triin PICMET '17 : Portland International Conference on Management of Engineering and Technology : Technology Management for the Interconnected World : proceedings 2017 / p. 1-7 : ill. [USB] <https://doi.org/10.23919/PICMET.2017.8125312>

### **An ontology-based intelligent learning object for teaching the basics of digital logic**

**Robal, Tarmo; Kann, Taavi; Kalja, Ahto** 2011 IEEE International Conference on Microelectronic Systems Education (MSE) : 5-6 June 2011, San Diego, CA, USA 2011 / p. 106-107

### **Analysing the web log to determine the efficiency of web systems**

**Robal, Tarmo; Kalja, Ahto**; Põld, Janari Databases and information systems : Seventh International Baltic Conference on Databases and Information Systems. Communications : Vilnius, Lithuania, July 3-6, 2006 2006 / p. 264-275

### **Applying e-environments in teaching the basics of digital logic**

**Robal, Tarmo; Kalja, Ahto** Proceedings MSE 2007 : 2007 IEEE International Conference on Microelectronic Systems Education : 3-4 June 2007, San Diego, CA 2007 / p. 41-42 : ill <https://ieeexplore.ieee.org/document/4231440/keywords#keywords>

### **Applying ICT for improving the study process [Electronic resource]**

**Robal, Tarmo; Kalja, Ahto** Proceedings of the 18th EAEEIE Annual Conference : Praha, Czech Republic, 02-04.07.2007 2007 / ? p. [CD-ROM]

### **Applying user domain model to improve Web recommendations**

**Robal, Tarmo; Kalja, Ahto** Databases and information systems : tenth international Baltic conference on databases and information systems : local proceedings, materials of doctoral consortium : Vilnius, Lithuania, July 8-11, 2012 2012 / p. 182 <https://ebooks.iospress.nl/volumearticle/7673>

### **Applying user domain model to improve Web recommendations**

**Robal, Tarmo; Kalja, Ahto** Databases and information systems VII : selected papers from the tenth International Baltic Conference, DB&IS 2012 2013 / p. 118-131 <https://doi.org/10.3233/978-1-61499-161-8-118> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Applying user profile ontology for mining web site adaptation recommendations**

**Robal, Tarmo** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK teise aastakonverentsi artiklite kogumik : 11.-12. mai 2007, Viinistu kunstimuseum 2007 / lk. 125-128 : ill

### **Applying user profile ontology for mining web site adaption recommendations**

**Robal, Tarmo; Kalja, Ahto** Local Proceedings of the 11th East-European Conference on Advances in Databases and Information Systems (ADBIS 2007) 2007 / p. 126-135 [https://www.researchgate.net/publication/221651686\\_Applying\\_User\\_Profile\\_Ontology\\_for\\_Mining\\_Web\\_Site\\_Adaptation\\_Recommendations](https://www.researchgate.net/publication/221651686_Applying_User_Profile_Ontology_for_Mining_Web_Site_Adaptation_Recommendations)

### **Attendance check of students via robot assistant in higher education classes**

**Budagov, Fuad; Leoste, Janika; Meeran, Mohammad Tariq; Robal, Tarmo; Leoste, Leo Benjamin** Futureproofing Engineering Education for Global Responsibility : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL 2024) ; vol. 1 2025 / p. 305-316 [https://doi.org/10.1007/978-3-031-85652-5\\_31](https://doi.org/10.1007/978-3-031-85652-5_31)

### **Automatic implementation-time usability evaluation for web user interfaces = Veebi kasutajaliidese kasutatavuse automaatne hindamine realiseerimisfaasis**

**Marenkov, Jevgeni** 2019 [https://www.ester.ee/record=b5231048\\*est](https://www.ester.ee/record=b5231048*est)

**Baltic DB&IS 2020 Conference Forum and Doctoral Consortium co-located with the 14th International Baltic Conference on Databases and Information Systems (BalticDB&IS 2020)** Tallinn, Estonia, June 16-19, 2020 : proceedings 2020 <http://ceur-ws.org/Vol-2620/xpreface.pdf> <http://ceur-ws.org/Vol-2620/>

### **Baltic Journal of Modern Computing**

### **Selected Papers from the 14th International Baltic Conference on Databases and Information Systems**

2020 [https://www.bjmc.lu.lv/fileadmin/user\\_upload/lu\\_portal/projekti/bjmc/Contents/8\\_4\\_07a\\_DB\\_IS.pdf](https://www.bjmc.lu.lv/fileadmin/user_upload/lu_portal/projekti/bjmc/Contents/8_4_07a_DB_IS.pdf)

**Baltic-DB&IS-Forum-DC 2024 and Baltic DB&IS Conference Forum and Doctoral Consortium 2024 : Joint Proceedings of Baltic DB&IS Conference Forum and Doctoral Consortium 2024 co-located with 16th International Baltic Conference on Digital Business and Intelligent Systems (Baltic DB&IS 2024)**, Vilnius, Lithuania, June 30-July 3, 2024

2024 <https://ceur-ws.org/Vol-3698/>

### **Bing-CF-IDF+ : a semantics-driven news recommender system**

Brocken, Emma; Hartveld, Aron; Koning, Emma de; Hogenboom, Frederik; Frasinca, Flavius; **Robal, Tarmo** Advanced Information Systems Engineering 31st International Conference, CAiSE 2019, Rome, Italy, June 3–7, 2019, Proceedings 2019 / p. 32-47  
[https://doi.org/10.1007/978-3-030-21290-2\\_3](https://doi.org/10.1007/978-3-030-21290-2_3) [Conference proceeding at Scopus](#) [Article at Scopus](#) [Conference proceeding at WOS](#) [Article at WOS](#)

### **Bing-CSF-IDF+: a semantics-driven recommender system for news**

Huijsduijnen, Lies Hooft van; Hoogmoed, Thom; Keulers, Geertje; Langendoen, Edmar; Langendoen, Sanne; Vos, Tim; Hogenboom, Frederik; Frasinca, Flavius; **Robal, Tarmo** New trends in databases and information systems : ADBIS 2020 short papers, Lyon, France, August 25–27, 2020 : proceedings 2020 / p. 143–153 [https://doi.org/10.1007/978-3-030-54623-6\\_13](https://doi.org/10.1007/978-3-030-54623-6_13) [Conference proceeding at Scopus](#) [Article at Scopus](#)

### **BIR-WS 2025 : BIR 2025 Workshops and Doctoral Consortium : Joint Proceedings of the BIR 2025 Workshops and Doctoral Consortium co-located with 24th International Conference on Perspectives in Business Informatics Research, Riga, Latvia, September 17-19, 2025**

2025 <https://ceur-ws.org/Vol-4034>

### **Can I have a Mooc2Go, please? On the viability of mobile vs. stationary learning**

Zhao, Yue; **Robal, Tarmo**; Lofi, Christoph; Hauff, Claudia Lifelong Technology-Enhanced Learning : 13th European Conference on Technology Enhanced Learning : EC-TEL 2018, Leeds, UK, September 3-5, 2018 : proceedings 2018 / p. 101-115 : ill  
[https://doi.org/10.1007/978-3-319-98572-5\\_8](https://doi.org/10.1007/978-3-319-98572-5_8) [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

### **Comparing domain expert and machine learning data enrichment of building registry**

Torim, Ants; Iliste, Elisa; Pikas, Ergo; Liiv, Innar; **Robal, Tarmo**; Kalamees, Targo Buildings 2025 / art. 1798  
<https://doi.org/10.3390/buildings15111798>

### **Complementing ICT studies with learning objects on domain ontologies**

**Robal, Tarmo**; Kruus, Helena; Kalja, Ahto Proceedings of the 24th International Conference on European Association for Education in Electrical and Information Engineering : 30-31 May 2013, Chania, Greece 2013 / p. 92-96 : ill

### **Complex systems informatics and modeling quarterly**

2023 <https://csimq-journals.rtu.lv/issue/view/299>

### **Conceptual web users' actions prediction for ontology-based browsing recommendations**

**Robal, Tarmo**; Kalja, Ahto Information systems development : towards a service provision society 2009 / p. 121-129  
[https://link.springer.com/chapter/10.1007/b137171\\_13](https://link.springer.com/chapter/10.1007/b137171_13)

### **Creating interactive learning objects with web services**

**Robal, Tarmo**; Kalja, Ahto 2009 EAEEIE annual conference : 20th Annual Conference of the European Association for Education in Electrical and Information Engineering : Valencia, Spain, June 22-24, 2009 2009 / [6] p

### **Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings**

2020 <https://doi.org/10.1007/978-3-030-57672-1>

### **Databases and Information Systems : proceedings of the 11th International Baltic Conference, Baltic DB&IS 2014 : Tallinn, Estonia, 8-11 June, 2014**

2014 [http://www.ester.ee/record=b3088507\\*est](http://www.ester.ee/record=b3088507*est)

### **Databases and information systems VIII : selected papers from the Eleventh International Baltic Conference, DB&IS 2014**

2014 [https://www.ester.ee/record=b4447206\\*est](https://www.ester.ee/record=b4447206*est)

### **Design-time web usability evaluation with guideliner**

Makarencov, Jevgeni; **Robal, Tarmo**; Kalja, Ahto Complex Systems Informatics and Modeling Quarterly (CSIMQ) 2018 / art. 90, p. 90–109 : ill <https://doi.org/10.7250/csimq.2018-15.05>

### **e-Bibliotheca - a virtual library service**

**Robal, Tarmo**; Kruus, Helena Proceedings of the Thirteenth International Conference on Information Systems Development : Advances in Theory, Practice and Education : Vilnius, Lithuania 2004 / p. 139-148

### **Editorial message : Special track on Intelligent Systems for Digital Era (ISDE)**

**Robal, Tarmo**; Liiv, Innar; Kalibatiene, Diana SAC '23: Proceedings of the 38th ACM/SIGAPP Symposium on Applied Computing 2023 / p. 824-825 <https://doi.org/10.1145/3555776>

#### **e-EDU - an information system for e-learning services**

**Robal, Tarmo; Kalja, Ahto** Proceedings of the Sixth International Baltic Conference : BalticDBAMPIS 2004 : Riga, June 3-6, 2004. Vol. 2 2004 / p. 143-154

#### **e-EDU - an information system for e-learning services**

**Robal, Tarmo; Kalja, Ahto** Databases and information systems 2005 / p. 288-298

#### **eGovernment services : How to develop them, how to manage them?**

**Kalja, Ahto; Kindel, Kristiina;** Kivi, Riina; **Robal, Tarmo** Proceedings of PICMET'07 : Management of Converging Technologies : Portland, OR, USA, 5-9. August 2007 2007 / p. 2795-2798 <https://ieeexplore.ieee.org/document/4349620>

#### **E-learning of digital logic**

**Robal, Tarmo; Brik, Marina; Aarna, Margit** EWME 2006 proceedings : 6th International Workshop on Microelectronics Education : 8-9 June, 2006, Stockholm, Sweden 2006 / p. 120-123 : ill

#### **Elevator passenger in-cabin behaviour – a study on Smart-Elevator Platform**

**Basov, Kevin; Robal, Tarmo; Reinsalu, Uljana; Leier, Mairo** Digital Business and Intelligent Systems : 15th International Baltic Conference, Baltic DB&IS 2022, Riga, Latvia, July 4-6, 2022 : proceedings 2022 / p. 3-18 : ill [https://doi.org/10.1007/978-3-031-09850-5\\_1](https://doi.org/10.1007/978-3-031-09850-5_1) [Conference proceedings at Scopus](#) [Article at Scopus](#)

#### **Enhancing semantics-driven recommender systems with visual features**

Bendouch, Mounir M.; Frasinca, Flavius; **Robal, Tarmo** Advanced Information Systems Engineering 34th International Conference, CAiSE 2022, Leuven, Belgium, June 6-10, 2022, Proceedings 2022 / p. 443–459 [https://doi.org/10.1007/978-3-031-07472-1\\_26](https://doi.org/10.1007/978-3-031-07472-1_26) [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

#### **Enhancing the aspect robustness score of the HAABSA++ model using adversarial training**

Agha, Milad; Frasinca, Flavius; Zhu, Beilly; **Robal, Tarmo** Web Engineering : 25th International Conference, ICWE 2025, Delft, The Netherlands, June 30 – July 3, 2025 : Proceedings 2026 / p. 89-103 [https://doi.org/10.1007/978-3-031-97207-2\\_7](https://doi.org/10.1007/978-3-031-97207-2_7) [https://link.springer.com/chapter/10.1007/978-3-031-97207-2\\_7](https://link.springer.com/chapter/10.1007/978-3-031-97207-2_7)

#### **Estonian eGovernment services : lesson learned**

**Kalja, Ahto; Põld, Janari; Robal, Tarmo;** Vallner, Uuno; **Viies, Vladimir** Proceedings of PICMET'13 : Technology Management in the IT-Driven Services : [July 28-August 1, 2013, San Jose, California, USA] 2013 / p. 562-568 : ill

#### **Evaluating Web systems on the basis of users' behavior modeling**

**Robal, Tarmo; Kalja, Ahto** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kolmanda aastakonverentsi artiklite kogumik : 25.-26. aprill 2008, Voore külalistemaja 2008 / p. 64-67 : ill

#### **Evaluations for improving web systems on the basis of users behaviour modelling**

**Robal, Tarmo; Kalja, Ahto** Databases and information systems : proceedings of the Eighth International Baltic Conference, Baltic DBAMPIS 2008 : Tallinn, June 2-5, 2008 2008 / p. 229-240 : ill

#### **Expectations of software development practitioners for non-technical clients**

**Ojastu, Deniss; Robal, Tarmo; Kalja, Ahto** Databases and information systems VIII : selected papers from the Eleventh International Baltic Conference, DB&IS 2014 2014 / p. 317-330 : ill <https://doi.org/10.3233/978-1-61499-458-9-317> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

#### **An experimental study on re-ranking web shop search results using semantic segmentation of user profiles**

Poppink, Bram; Frasinca, Flavius; **Robal, Tarmo** Electronic commerce research and applications 2023 / art. 101310 <https://doi.org/10.1016/j.elerap.2023.101310> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Fair and individualized project teamwork evaluation for an engineering course**

**Robal, Tarmo** EAEEIE 2018 : 28th EAEEIE Annual Conference (EAEEIE), September 26th to 28th, 2018 2018 / 9 p. : ill <http://doi.org/10.1109/EAEEIE.2018.8534256>

#### **A five step refactoring process : improving software design properly**

**Põld, Janari; Kalja, Ahto; Robal, Tarmo** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kolmanda aastakonverentsi artiklite kogumik : 25.-26. aprill 2008, Voore külalistemaja 2008 / p. 93-96 : ill

#### **A five step refactoring process : improving software design properly**

**Põld, Janari; Kalja, Ahto; Robal, Tarmo** Databases and information systems : proceedings of the Eighth International Baltic Conference, Baltic DBAMPIS 2008 : Tallinn, June 2-5, 2008 2008 / p. 37-48 : ill

#### **Floor selection proposal for automated travel with smart elevator**

**Reinsalu, Uljana; Robal, Tarmo; Leier, Mairo** Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings 2020 [https://doi.org/10.1007/978-3-030-57672-1\\_4](https://doi.org/10.1007/978-3-030-57672-1_4) [Conference proceeding at](#)

**A framework for improving web application user interfaces through immediate evaluation**

**Marenkov, Jevgeni; Robal, Tarmo; Kalja, Ahto** Databases and information systems IX : selected papers from the twelfth International Baltic Conference, DB&IS 2016 2016 / p. 283-296 : ill <https://doi.org/10.3233/978-1-61499-714-6-283> [Article collection metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Guideliner : a tool to improve Web UI development for better usability**

**Marenkov, Jevgeni; Robal, Tarmo; Kalja, Ahto** WIMS 2018 : 8th International Conference on Web Intelligence, Mining and Semantics, June 25–27 2018, Novi Sad, Serbia : proceedings 2018 / art. 17, 9 p. : ill <https://doi.org/10.1145/3227609.3227667> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**How do You ride an elevator? Passenger in-cabin behavior analysis on a smart-elevator platform**

**Robal, Tarmo; Reinsalu, Uljana** Smart Life and Smart Life Engineering : Current State and Future Vision 2025 / p. 209 - 236 [https://doi.org/10.1007/978-3-031-75887-4\\_10](https://doi.org/10.1007/978-3-031-75887-4_10)

**Improving sophisticated self-service portal user interfaces : a study on user click behaviour**

**Marenkov, Jevgeni; Robal, Tarmo; Kalja, Ahto** Databases and Information Systems : proceedings of the 11th International Baltic Conference, Baltic DB&IS 2014 : Tallinn, Estonia, 8-11 June, 2014 2014 / p. 159-170 : ill

**In memoriam : Prof. Ahto Kalja : 24.05.1950 - 22.10.2018**

Bubenko, Janis; Solvberg, Arne; Amicans, Guntis; Borzovs, Juris; Čaplinskis, Albertas; Grundspenķis, Janis; **Haav, Hele-Mai**; Kirikova, Marite; Lupeikiene, Audrone; Matulevičius, Raimundas; **Robal, Tarmo**; Vasilecas, Olegas; Lupeikiene, Audrone Databases and information systems X : selected papers from the thirteenth International Baltic Conference, DB&IS 2018 2019 / p. v–vi : phot [https://www.eester.ee/record=b5203991\\*est](https://www.eester.ee/record=b5203991*est) <http://ebooks.iospress.nl/volume/databases-and-information-systems-x-selected-papers-from-the-thirteenth-international-baltic-conference-dbis-2018>

**Integration of Artificial Intelligence in higher education programming courses : insights from student perspectives and practices**

**Leoste, Janika; Pöial, Jaanus; Kivisalu, Einar; Robal, Tarmo; Marjanovic, Ugljesa; Rakić, Slavko** Futureproofing Engineering Education for Global Responsibility : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL 2024) ; vol. 1 2024 / p. 1067-1077 [https://doi.org/10.1007/978-3-031-85652-5\\_42](https://doi.org/10.1007/978-3-031-85652-5_42)

**IntelliEye: enhancing MOOC learners' video watching experience through real-time attention tracking**

**Robal, Tarmo; Zhao, Yue; Lofi, Christoph; Hauff, Claudia** HT '18 : 29th ACM Conference on Hypertext & SocialMedia, July 9–12, 2018, Baltimore, MD, USA : proceedings of the 29th on Hypertext and Social Media 2018 / p. 106-114 : ill <https://doi.org/10.1145/3209542.3209547>

**Interactive hands-on tools as learning objects on web services**

**Robal, Tarmo; Kalja, Ahto** 2009 International Conference on Microelectronic Systems Education : San Francisco, CA, USA, 25-27 July, 2009 2009 / p. 73-76

**Introducing rapid web application development with Oracle APEX to students of higher education**

**Robal, Tarmo; Reinsalu, Uljana; Jürimägi, Lembit; Heinsar, Risto** New trends in computer sciences 2024 / p. 69-80 <https://doi.org/10.3846/ntcs.2024.21227>

**Investigating defects in digital circuits by Boolean differential equations**

**Kruus, Helena; Orasson, Elmet; Robal, Tarmo; Ubar, Raimund-Johannes** The 4th International Conference "Distance Learning - Educational Sphere of XXI Century" (DLESC'04) 2004 / p. 432-435

**Involving students in teaching process — encouraging student-generated content in ICT studies**

**Kruus, Helena; Ellervee, Peeter; Robal, Tarmo; Ruberg, Priit; Kruus, Margus** Proceedings of the 24th International Conference on European Association for Education in Electrical and Information Engineering : 30-31 May 2013, Chania, Greece 2013 / p. 76-81 : ill

**Joint Proceedings of Baltic DB&IS 2022 Doctoral Consortium and Forum co-located with 15th International Baltic Conference on Digital Business and Intelligent Systems (Baltic DB&IS 2022)**

2022 <https://ceur-ws.org/Vol-3158/>

**Kergprogrammeerimine on jõukohane kõigile**

**Robal, Tarmo** Trialoog 2024 <https://trialoog.taltech.ee/kergprogrammeerimine-on-joukohane-koigile/>

**Learning from users for a better and personalized web experience**

**Robal, Tarmo; Kalja, Ahto** 2012 Proceedings of PICMET '12 : Technology Management for Emerging Technologies 2012 / p. 2179-2188 : ill

### **Learning from users for personalized web experience**

**Robal, Tarmo** Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK viienda aastakonverentsi artiklite kogumik : 25.-26. novembril 2011, Nelijärve 2011 / p. 169-172 : ill

### **Making use of personalized web services in the study process**

**Robal, Tarmo; Kalja, Ahto** BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 211-212 : ill

### **Making web users' domain models explicit by applying ontologies**

**Robal, Tarmo; Haav, Hele-Mai; Kalja, Ahto** Advances in Conceptual Modeling - Foundations and Applications : ER 2007 Workshops CMLSA, FP-UML, ONISW, QoIS, RIGIM, SeCoGIS : Auckland, New Zealand, November 5-9, 2007 : proceedings 2007 / p. 170-179 [https://link.springer.com/content/pdf/10.1007/978-3-540-76292-8\\_20.pdf](https://link.springer.com/content/pdf/10.1007/978-3-540-76292-8_20.pdf)

### **Managing knowledge in Web portals for improved customer loyalty and satisfaction**

**Robal, Tarmo; Kalja, Ahto** Proceedings of PICMET'13 : Technology Management in the IT-Driven Services : [July 28-August 1, 2013, San Jose, California, USA] 2013 / p. 1207-1216 : ill

### **Managing software engineering competences with domain ontology for customer and team profiling and training**

**Robal, Tarmo; Ojastu, Deniss; Kalja, Ahto; Jaakkola, Hannu** PICMET '15 : proceedings : Management of the Technology Age 2015 / p. 1369-1376 : ill <http://dx.doi.org/10.1109/PICMET.2015.7273171>

### **Managing software engineering competences with domain ontology for customer and team profiling and training**

**Robal, Tarmo; Ojastu, Deniss; Kalja, Ahto; Jaakkola, Hannu** PICMET '15 Conference : Management of the Technology Age : August 2-6, 2015, Portland, Oregon, USA : conference bulletin 2015 / p. 62

### **Mining and modelling web user engagement : a survey on academic sites for framework establishment [Electronic resource]**

**Robal, Tarmo; Kalja, Ahto** PICMET '16 : Portland International Conference on Management of Engineering and Technology : proceedings. Technology Management for Social Innovation 2016 / p. 1942-1952 : ill. [USB] <https://doi.org/10.1109/PICMET.2016.7806759>

### **A model for users' action prediction based on locality profiles**

**Robal, Tarmo; Kalja, Ahto** Information systems development : challenges in practice, theory and education. Volume 1 2009 / p. 169-182 [https://link.springer.com/chapter/10.1007/978-0-387-68772-8\\_14](https://link.springer.com/chapter/10.1007/978-0-387-68772-8_14)

### **Modernization of the e-government in Estonia**

**Kalja, Ahto; Põld, Janari; Robal, Tarmo; Vallner, Uno** Proceedings of PICMET '11 : Technology Management in the Energy Smart World (PICMET) : July 31 - August 4, 2011, Portland, Oregon USA 2011 / p. 3151-3157 : ill

### **Moving studies to e-environments - the approach of e-EDU**

**Robal, Tarmo** BEC 2004 : Baltic Electronics Conference : Post-Graduate Student Session : Tallinn University of Technology, October 3-6, 2004, Tallinn, Estonia 2004 / p. 7 : ill

### **Moving studies to e-environments : a case study**

**Robal, Tarmo; Kalja, Ahto** Current Developments in Technology-Assisted Education : Badajoz, Spain. Vol. II 2006 / p. 936-940

### **New generations of Estonian eGovernment components**

**Kalja, Ahto; Robal, Tarmo; Vallner, Uno** PICMET '15 : proceedings : Management of the Technology Age 2015 / p. 625-631 : ill <http://dx.doi.org/10.1109/PICMET.2015.7273002>

### **New generations of Estonian eGovernment components**

**Kalja, Ahto; Robal, Tarmo; Vallner, Uno** PICMET '15 Conference : Management of the Technology Age : August 2-6, 2015, Portland, Oregon, USA : conference bulletin 2015 / p. 93

### **On proving the concept of an ontology aided software refactoring tool**

**Põld, Janari; Robal, Tarmo; Kalja, Ahto** Databases and information systems VII : selected papers from the tenth International Baltic Conference, DB&IS 2012 2013 / p. 84-94 <https://doi.org/10.3233/978-1-61499-161-8-84> [Article collection metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **On proving the concept of an ontology aided software refactoring tool**

**Põld, Janari; Robal, Tarmo; Kalja, Ahto** Databases and information systems : tenth international Baltic conference on databases and information systems : local proceedings, materials of doctoral consortium : Vilnius, Lithuania, July 8-11, 2012 2012 / p. 179 [https://www.researchgate.net/publication/287294774\\_On\\_proving\\_the\\_concept\\_of\\_an\\_ontology\\_aided\\_software\\_refactoring\\_tool](https://www.researchgate.net/publication/287294774_On_proving_the_concept_of_an_ontology_aided_software_refactoring_tool)

### **Ontology design for automatic evaluation of web user interface usability [Electronic resource]**

**Robal, Tarmo; Marenkov, Jevgeni; Kalja, Ahto** PICMET '17 : Portland International Conference on Management of Engineering

and Technology : Technology Management for the Interconnected World : proceedings 2017 / p. 1-8 : ill. [USB]  
<https://doi.org/10.23919/PICMET.2017.8125425>

### **Ontology requirements specification for an EU DPP core ontology proposal**

**Maigre, Riina; Haav, Hele-Mai; Robal, Tarmo;** Wolf, Marc-Andree; Danash, Fatima 2025 <https://doi.org/10.5281/zenodo.14892666>

### **Overcoming system complexity using models and knowledge structures. Editorial introduction to issue 36 of CSIMQ**

Nazaruka, Erika; **Robal, Tarmo** Complex systems informatics and modeling quarterly (CSIMQ) 2023 / p. I-II

<https://doi.org/10.7250/csimq.2023-36.00> [Journal metrics at Scopus](#) [Article at Scopus](#)

### **Perceptions of software development practitioners on client learning**

**Ojastu, Deniss; Robal, Tarmo; Kalja, Ahto** Databases and Information Systems : proceedings of the 11th International Baltic Conference, Baltic DB&IS 2014 : Tallinn, Estonia, 8-11 June, 2014 2014 / p. 397-406

### **Preface**

**Haav, Hele-Mai; Kalja, Ahto; Robal, Tarmo** Databases and information systems VIII : selected papers from the Eleventh International Baltic Conference, DB&IS 2014 2014 / p. v

### **Preface**

Lupeikienė, Audronė; Ralytė, Jolita; Kalibatiene, Diana; **Robal, Tarmo;** Dzemyda, Gintautas Joint Proceedings of Baltic DB&IS Conference Forum and Doctoral Consortium 2024 co-located with 16th International Baltic Conference on Digital Business and Intelligent Systems (Baltic DB&IS 2024) 2024 / p. 2 <https://ceur-ws.org/Vol-3698/preface.pdf> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Preface**

The 16th International Baltic Conference on Digital Business and Intelligent Systems : Baltic DB&IS Conference Forum and Doctoral Consortium 2024, 30 June – 03 July, Vilnius, Lithuania : proceedings 2024 / 1 p <https://ceur-ws.org/Vol-3698/preface.pdf>

### **Preface**

**Robal, Tarmo;** Kalibatiene, Diana; Karnitis, Girts; Ivanovic, Mirjana; Kirikova, Marite; Niedrite, Laila; Borzovs, Juris Joint Proceedings of Baltic DB&IS 2022 Doctoral Consortium and Forum co-located with 15th International Baltic Conference on Digital Business and Intelligent Systems (Baltic DB&IS 2022) 2022 / p. ii <https://ceur-ws.org/Vol-3158/xpreface.pdf>

### **Preface**

**Robal, Tarmo; Haav, Hele-Mai; Penjam, Jaan;** Matulevičius, Raimundas Databases and Information Systems : 14th International Baltic Conference, DB&IS 2020, Tallinn, Estonia, June 16-19, 2020 : Proceedings 2020 / p. v-vi <https://doi.org/10.1007/978-3-030-57672-1> [Conference proceeding at Scopus](#) [Article at Scopus](#)

### **Preface : Doctoral Consortium**

**Robal, Tarmo;** Kalibatiene, Diana; Grundspenkis, Janis BIR-WS 2025 : BIR 2025 Workshops and Doctoral Consortium : Joint Proceedings of the BIR 2025 Workshops and Doctoral Consortium co-located with 24th International Conference on Perspectives in Business Informatics Research, Riga, Latvia, September 17-19, 2025 2025 / p. 11 <https://ceur-ws.org/Vol-4034/preface.pdf>

### **Refactoring - key to success for constantly developed projects**

**Pöld, Janari; Kalja, Ahto; Robal, Tarmo** Information modelling and knowledge bases XXVIII 2017 / p. 13-22  
<https://doi.org/10.3233/978-1-61499-720-7-13> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Refactoring - key to success for constantly developed projects [Electronic resource]**

**Pöld, Janari; Kalja, Ahto; Robal, Tarmo** Proceedings of the 26th International Conference on Information Modelling and Knowledge Bases - EJC 2016 : June 6-10, 2016, Tampere, Finland 2016 / p. 15-24. [USB]

### **SC-Block++: A blocking algorithm based on adaptive flood regularization**

Ning, Arthur; Frasinca, Flavius; **Robal, Tarmo** SAC '25 : Proceedings of the 40th ACM/SIGAPP Symposium on Applied Computing 2025 / p. 1258-1266 <https://dl.acm.org/doi/10.1145/3672608.3707946> <https://doi.org/10.1145/3672608.3707946>

### **Special track on Intelligent Systems for Digital Era (ISDE)**

SAC '25: Proceedings of the 40th ACM/SIGAPP Symposium on Applied Computing 2025 / p. 864-915  
<https://dl.acm.org/doi/proceedings/10.1145/3672608>

### **Special track on Intelligent Systems for Digital Era (ISDE)**

2024 <https://doi.org/10.1145/3605098>

### **Special track on Intelligent Systems for Digital Era (ISDE) : editorial message**

**Robal, Tarmo; Liiv, Innar;** Kalibatiene, Diana; Matulevičius, Raimundas SAC '24 : Proceedings of the 39th ACM/SIGAPP Symposium on Applied Computing, Avila, Spain, April 8-12, 2024 2024 / p. 652-653 <https://dl.acm.org/action/showFmPdf?doi=10.1145%2F3605098> [Article at Scopus](#)

### **Spontaneous webcam instance for user attention tracking**

**Robal, Tarmo** PICMET19 : Portland International Conference on management of engineering and technology : Technology and Management in the World of Intelligent Systems : proceedings 2019 / 8 p. : ill <https://doi.org/10.23919/PICMET.2019.8893798>

### **Stationary vs. non-stationary mobile learning in MOOCs**

Zhao, Yue; **Robal, Tarmo**; Lofi, Christoph; Hauff, Claudia UMAP '18 : Adjunct Publication of the 26th Conference on User Modeling, Adaptation and Personalization, Singapore, July 08-11, 2018 : proceedings 2018 / p. 299-303 <https://doi.org/10.1145/3213586.3225241>

### **A study into elevator passenger in-cabin behaviour on a smart-elevator platform**

**Robal, Tarmo**; Basov, Kevin; Reinsalu, Uljana; Leier, Mairo Baltic Journal of Modern Computing 2022 / p. 665-688 : ill <https://doi.org/10.22364/bjmc.2022.10.4.05> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A study on effective knowledge reuse in multi-platform web applications user interfaces**

**Marenkov, Jevgeni**; **Robal, Tarmo**; **Kalja, Ahto** PICMET '15 Conference : Management of the Technology Age : August 2-6, 2015, Portland, Oregon, USA : conference bulletin 2015 / p. 68

### **A study on effective knowledge reuse in multi-platform web applications user interfaces**

**Marenkov, Jevgeni**; **Robal, Tarmo**; **Kalja, Ahto** PICMET '15 : proceedings : Management of the Technology Age 2015 / p. 1351-1361 : ill <https://doi.org/10.1109/PICMET.2015.7273083>

### **A study on immediate automatic usability evaluation of web application user interfaces**

**Marenkov, Jevgeni**; **Robal, Tarmo**; **Kalja, Ahto** Databases and Information Systems : 12th International Baltic Conference, DB&IS 2016, Riga, Latvia, July 4-6, 2016 : proceedings 2016 / p. 257-271 : ill [https://doi.org/10.1007/978-3-319-40180-5\\_18](https://doi.org/10.1007/978-3-319-40180-5_18) [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **A study on user click behaviour for WIS user interface improvements**

**Marenkov, Jevgeni**; **Robal, Tarmo**; **Kalja, Ahto** Databases and information systems VIII : selected papers from the Eleventh International Baltic Conference, DB&IS 2014 2014 / p. 173-186 : ill <https://doi.org/10.3233/978-1-61499-458-9-173> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Studying the incorrect user behaviour in sophisticated self-service portal user interfaces**

**Marenkov, Jevgeni**; **Robal, Tarmo**; **Kalja, Ahto** Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 71-74 : ill

### **Surviving the unforeseen - teaching IT and engineering students during COVID-19 outbreak**

**Ruberg, Priit**; Ellervee, Peeter; Tammemäe, Kalle; Reinsalu, Uljana; Rähni, Andres; **Robal, Tarmo** Proceedings - Frontiers in Education Conference, FIE 2022 / Code 184790 <https://doi.org/10.1109/FIE56618.2022.9962383> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **SysML in systems engineering course**

**Kruus, Helena**; **Robal, Tarmo**; **Jervan, Gert** 10th European Workshop on Microelectronics Education : EWME 2014 : May 14-16, 2014, Tallinn, Estonia 2014 / p. 177-181 : ill

### **A systematic literature review on applicability of robot assistants in higher education**

**Budagov, Fuad**; **Leoste, Janika**; **Meeran, Mohammad Tariq**; **Robal, Tarmo** Methodologies and Intelligent Systems for Technology Enhanced Learning : MIS4TEL 2024 2024 / p. 21-32 [https://doi.org/10.1007/978-3-031-73538-7\\_3](https://doi.org/10.1007/978-3-031-73538-7_3) [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Teaching modeling in SysML/UML and problems encountered**

**Kruus, Helena**; **Robal, Tarmo**; **Jervan, Gert** Proceedings of the 25th International Conference on European Association for Education in Electrical and Information Engineering : 30 May-June 2014, Cesme, Türkiye 2014 / p. 33-36 : ill

### **Teaching rapid application development skills for digitalisation challenges**

**Robal, Tarmo**; **Reinsalu, Uljana**; **Leoste, Janika**; **Jürimägi, Lembit**; **Heinsar, Risto** Digital Business and Intelligent Systems : 16th International Baltic Conference, Baltic DB&IS 2024, Vilnius, Lithuania, June 30 – July 3, 2024, Proceedings 2024 / p. 177-192 : ill [https://doi.org/10.1007/978-3-031-63543-4\\_12](https://doi.org/10.1007/978-3-031-63543-4_12) [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Testing scenarios for using telepresence robots in healthcare settings**

**Leoste, Janika**; Strömberg-Järvis, Kadri; **Robal, Tarmo**; **Marmor, Kristel**; **Kangur, Katrin**; Rebane, Anne-Mari Computational and structural biotechnology journal 2024 / p. 105-114 <https://doi.org/10.1016/j.csbj.2024.01.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The most prominent software development concepts cited in IT professionals' blogs**

**Ojastu, Deniss**; **Robal, Tarmo**; **Kalja, Ahto** Perspectives in business informatics research : 14th International Conference, BIR 2015, Tartu, Estonia, August 26-28, 2015 : proceedings 2015 / p. 197-212 [https://doi.org/10.1007/978-3-319-21915-8\\_13](https://doi.org/10.1007/978-3-319-21915-8_13) [Conference](#)

[proceedings at Scopus](#) [Article at Scopus](#)

**The rational unified process with the "4+1" view model of software architecture - a way for modeling Web applications**  
**Robal, Tarmo; Viies, Vladimir; Kruus, Margus** Databases and information systems : proceedings of the Fifth International Baltic Conference : Baltic DB & IS 2002 : Tallinn, June 3-6, 2002. Vol. 2 2002 / p. 119-132

**A tool for design-time usability evaluation of web user interfaces**

**Marenkov, Jevgeni; Robal, Tarmo; Kalja, Ahto** Advances in databases and information systems 21st European Conference, ADBIS 2017 Nicosia, Cyprus, September 24-27, 2017 : proceedings 2017 / p. 394-407 : ill [https://doi.org/10.1007/978-3-319-66917-5\\_26](https://doi.org/10.1007/978-3-319-66917-5_26) [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**A touch-free service button for Smart Elevator Operation with dynamic QR-code generation**

**Reinsalu, Uljana; Robal, Tarmo** 2023 12th Mediterranean Conference on Embedded Computing (MECO) : 6-10 June 2023, Budva, Montenegro : proceedings 2023 / 4 p. : ill <https://doi.org/10.1109/MECO58584.2023.10155102>

**Towards adaptive web - analysing and recommending web users' behaviour = Veebikasutajate käitumise analüüs ja soovitud adaptiivse veebi loomiseks**

**Robal, Tarmo** 2012 [https://www.ester.ee/record=b2862251\\*est](https://www.ester.ee/record=b2862251*est)

**Towards information society : Estonian case study**

**Kalja, Ahto; Robal, Tarmo; Vallner, Uno** Proceedings of PICMET'09 : Portland International Conference on Management of Engineering & Technology, 2009 : Portland, Oregon, USA, August 2-6, 2009 2009 / p. 3218-3225 : ill

**Towards personalized elevator travel with smart elevator system**

**Robal, Tarmo; Reinsalu, Uljana; Leier, Mairo** Baltic journal of modern computing 2020 / p. 675-697

<https://doi.org/10.22364/bjmc.2020.8.4.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Uuring: inimesed eelistavad liftis seista alati sama koha peal**

Harrik, Airika novaator.err.ee 2025 [Uuring: inimesed eelistavad liftis seista alati sama koha peal](#) [Uuring: inimesed eelistavad liftis seista alati sama koha peal](#) [https://doi.org/10.1007/978-3-031-75887-4\\_10](https://doi.org/10.1007/978-3-031-75887-4_10)

**Web systems evaluation on users' behaviour modelling**

**Robal, Tarmo; Kalja, Ahto** Databases and information systems V : selected papers from the Eighth International Baltic Conference, DBAMPIS 2008 2009 / p. 41-52 : ill

**A web-based economic decision tool for abatement investments for shipping industry**

**Bakkar, Yassine; Robal, Tarmo; Prause, Gunnar Klaus** Reliability and statistics in transportation and communication : Selected Papers from the 19th International Conference on Reliability and Statistics in Transportation and Communication, RelStat'19, 16-19 October 2019, Riga, Latvia 2020 / p. 363-373 [https://doi.org/10.1007/978-3-030-44610-9\\_36](https://doi.org/10.1007/978-3-030-44610-9_36) [Article collection metrics at Scopus](#) [Article at Scopus](#)

**Webcam-based attention tracking in online learning: a feasibility study**

**Robal, Tarmo; Zhao, Yue; Lofi, Christoph; Hauff, Claudia** IUI '18 : Proceedings of the 2018 Conference on Intelligent User Interface, Tokyo, Japan, March 07-11, 2018 2018 / p. 189-197 : ill <https://doi.org/10.1145/3172944.3172987>

**WebTT - digitaalskeemide testimine ja diagnostikaalaste õppelaborite e-keskkond : [TÜ arvutitehnika instituut esitles e-Ülikooli konverentsil kolme õppetöös kasutatavat süsteemi]**

**Robal, Tarmo; Orasson, Elmet** Mente et Manu 2005 / 5. mai, lk. 5 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

**Veebilehekülg kui firma visiitkaart Internetis**

**Robal, Tarmo** Arvutikasutaja 2003 / 2, lk. 9

**Veebirakenduste loomine karkassmetoodika Rational Unified Process abil**

**Robal, Tarmo** A & A 2002 / 1, lk. 7-18 : ill

**Veebirakenduste modelleerimine 4+1 arhitektuurivaate mudeliga**

**Robal, Tarmo** A & A 2002 / 2, lk. 20-30 : ill

**A visual-semantic approach for building content-based recommender systems**

Bendouch, Mounir M.; Frasinicar, Flavius; **Robal, Tarmo** Information systems 2023 / art. 102243, 12 p. : ill

<https://doi.org/10.1016/j.is.2023.102243> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)