

LIST OF PUBLICATIONS 2019-2024

STUDY AND RESEARCH FIELD OF ENGINEERING AND TECHNOLOGIES

2019

Articles (full text publications) in peer-reviewed scientific edited journals and conference proceedings included in Web of Science or SCOPUS databases

1. Steinberga, I., Sustere, L., **Bikse, J.**, Bikse Jr, J., & Kleperis, J. (2019). Traffic flow hypothetical modelling for air quality improvement and planning purposes. *ENVIRONMENT. TECHNOLOGY. RESOURCES. Proceedings of the International Scientific and Practical Conference*, 1, 283-286. <https://doi.org/10.17770/etr2019vol1.4155>
2. Steinberga, I., Sustere, L., **Bikse, J.**, Bikse Jr, J., & Kleperis, J. (2019). Traffic induced air pollution modeling: scenario analysis for air quality management in street canyon. *Procedia Computer Science*, 149, 384-389. <https://doi.org/10.1016/j.procs.2019.01.152>
3. **Boudhane, M., Balcers, O.**, & Nsiri, B. (2019). Underwater Exploration Issues, Deep Study on Optical Underwater Vision for an Effective Traditional Fishing. In *Proceedings of the 2nd International Conference on Watermarking and Image Processing (ICWIP 2019)*, 32–35. <https://doi.org/10.1145/3369973.3369981>
4. **Boudhane, M., & Balcers, O.** (2019). Underwater image enhancement method using color channel regularization and histogram distribution for underwater vehicles AUVs and ROVs. *International Journal of Circuits, Systems and Signal Processing*. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85073718298&origin=inward>
5. **Cakula, S.**, & Mirke, E. (2019). Adults' digital competence and readiness for online learning: Preliminary findings on latvian adult learners' readiness to study online. *International Journal of Advanced Trends in Computer Science and Engineering*, 8(1.1). <https://doi.org/10.30534/ijatcse/2019/0581.12019>
6. Mirke, E., Kašparová, E., & **Cakula, S.** (2019). Adults' readiness for online learning in the Czech Republic and Latvia (digital competence as a result of ICT education policy and information society development strategy). *Periodicals of Engineering and Natural Sciences*. <https://doi.org/10.21533/pen.v7i1.366>
7. **Cakula, S.**, & **Majore, G.** (2019). Future Generation Education Technological Model. *Ninth International Conference on Intelligent Computing and Information Systems (ICICIS)*. <https://doi.org/10.1109/ICICIS46948.2019.9014852>
8. Mirke, E., **Cakula, S.**, & Tzivian, L. (2019). Measuring Teachers-As-Learners' Digital Skills and Readiness to Study Online for Successful e-Learning Experience. *Journal of Teacher Education for Sustainability*, 21(2). <https://doi.org/10.2478/jtes-2019-0013>
9. **Cirulis, A.** (2019). Ultra Wideband Tracking Potential for Augmented Reality Environments. In: De Paolis, L., Bourdot, P. (eds) *Augmented Reality, Virtual Reality, and Computer Graphics. AVR 2019. Lecture Notes in Computer Science*, 11614. https://doi.org/10.1007/978-3-030-25999-0_11

10. **Pauga (Prata), & M., Cakula, S.** (2019). Technology-Based Communication in the Business Company. *IEEE Global Engineering Education Conference (EDUCON)*. <https://doi.org/10.1109/EDUCON.2019.8725240>

Interdisciplinary articles of engineering, information and communication technologies, and social sciences:

11. **Andersons, A., & Bushati, J.** (2019). Smart specialisation concept application in universities: E-business online studies model development. *ENVIRONMENT. TECHNOLOGY. RESOURCES. Proceedings of the International Scientific and Practical Conference*, 2, 190-194. <https://doi.org/10.17770/etr2019vol2.4115>
12. **Berzina, I., & Lauberte, I.** (2019). Tactical model for constructing a prototype of automatized assessment of tourism economic impact. *Research for Rural Development*. <https://doi.org/10.22616/rrd.25.2019.074>
13. **Gintere, I.** (2019). A New Digital Art Game: The Art of the Future. *SOCIETY. INTEGRATION. EDUCATION. Proceedings of the International Scientific Conference*, 4, 346-360. <https://doi.org/10.17770/sie2019vol4.3674>

Other significant publications in 2019

[SOCIETY. TECHNOLOGY. SOLUTIONS. Proceedings of the 2nd International Scientific Conference of Vidzeme University of Applied Sciences](#)



2020

Articles (full text publications) in peer-reviewed scientific edited journals and conference proceedings included in Web of Science or SCOPUS databases

1. Bersons, I., Veilande, R., & **Balcers, O.** (2020). Model of compact 3D electromagnetic solitons. *Physica Scripta*, (95)2. <https://doi.org/10.1088/1402-4896/ab4161>
2. Arhipova, I., Berzins, G., Erglis, A., Ansonska, E., **Binde, J.**, & Kovalcuks, A. (2020). Huff Model for Shopping Centre Assessment using Aggregated Mobile Phone Data. *Proceedings of the 2nd International Conference on Finance, Economics, Management and IT Business (FEMIB 2020)*. <https://doi.org/10.5220/0009361400910097>
3. Arhipova I, Berzins G, Brekis E, **Binde, J.**, et al. (2020). Mobile phone data statistics as a dynamic proxy indicator in assessing regional economic activity and human commuting patterns. *Expert Systems*. <https://doi.org/10.1111/exsy.12530>
4. **Boudhane, M.**, & **Balcers, O.** (2020). Underwater Optical Observation, How to Improve Visibility. *Baltic Journal of Modern Computing*, 8(1), 182–191. <https://doi.org/10.22364/bjmc.2020.8.1.09>
5. Romanovs, A., Sultanovs, E., **Buss, E.**, Merkuryev, Y., & **Majore, G.** (2020). Challenges and Solutions for Resilient Telemedicine Services. *IEEE 8th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*. <https://doi.org/10.1109/AIEEE51419.2021.9435776>
6. Mihailovs, N., & **Cakula, S.** (2020). Dynamic System Sustainability Simulation Modelling. *Baltic Journal of Modern Computing*, 8(1), 192-201. <https://doi.org/10.22364/bjmc.2020.8.1.12>
7. Krūmiņš, K., & **Cakula, S.** (2020). Input Determination for Models Used in Predicting Student Performance. *Baltic Journal of Modern Computing*, 8(1), 154-163. <https://doi.org/10.22364/bjmc.2020.8.1.08>
8. **Cīrulis, A.**, **Brigmanis-Brīģis, K.**, & Zvejnieks, G. (2020). Analysis of Suitable Natural Feature Computer Vision Algorithms for Augmented Reality Services. *Baltic Journal of Modern Computing* (8)1, 174-181 <https://doi.org/10.22364/bjmc.2020.8.1.10>
9. **Cīrulis, A.** (2020). Large Scale Augmented Reality for Collaborative Environments. In: Antona, M., Stephanidis, C. (eds) *Universal Access in Human-Computer Interaction. Design Approaches and Supporting Technologies. HCII 2020. Lecture Notes in Computer Science* (12188). https://doi.org/10.1007/978-3-030-49282-3_23
10. **Java, O.**, Kohv, M., & Lohmus, A. (2020). Hydrological Model for Decision-Making: Männikjärve Bog Case Study, Estonia. *Baltic Journal Modern Computing*, 8(3), 379-390. <https://doi.org/10.22364/bjmc.2020.8.3.01>
11. **Java, O.** (2020). The Specification of Hydrological Model Requirements for Bog Restoration. *Baltic Journal of Modern Computing*, (8)1, 164-173. <https://doi.org/10.22364/bjmc.2020.8.1.11>
12. **Pratt (Prata), M.**, & **Cakula, S.** (2020). The impact of using technology-based communication on quality of work relationships. *Baltic Journal of Modern Computing*, 8(1), 143-153. <https://doi.org/10.22364/BJMC.2020.8.1.07>
13. **Pratt (Prata), M.**, & **Cakula, S.** (2020). The impact of information and communication technologies on employees' motivation. *INTED2020 Proceedings*. <https://doi.org/10.21125/inted.2020.0516>

14. **Pratt (Prata), M., Cakula, S., Majore, G., & Buss, E.** (2020) Development of an Effective and Secure Communication System in a Quarantine Situation. *International Conference on Computational Science and Computational Intelligence (CSCI)*. <https://doi.org/10.1109/CSCI51800.2020.00030>
15. Jansevskis, M., & **Osis, K.** (2020). Knowledge discovery and framework for purchase behavior analysis in mobile gaming applications. *Proceedings of the 14th IADIS International Conference Computer Graphics, Visualization, Computer Vision and Image Processing 2020, CGVCVIP 2020 and Proceedings of the 5th IADIS International Conference Big Data Analytics, Data Mining and Computational Intelligence 2020, BigDaCI 2020 and Proceedings of the 9th IADIS International Conference Theory and Practice in Modern Computing 2020, TPMC 2020 – Part of the 14th Multi Conference on Computer Science and Information Systems, MCCSIS 2020*. <https://www.scopus.com/pages/publications/85101129252>
16. **Zake, M., Majore, G., Krūmiņš G., & Zakis, Z.** (2020). Methodology for Construction of Multi-approach Based Digital Twin in Strategic Communication, *IEEE 8th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*. <https://doi.org/10.1109/AIEEE51419.2021.9435626>

Interdisciplinary articles of engineering, information and communication technologies, and social sciences:

17. Prodani, R., Çobani, S., Bushati, J., & **Andersons, A.** (2020). An Assessment of the Factors that Influence the Use of Digital Technologies in Teaching: A Case Study. *Universal Journal of Educational Research*, 8(4), 1453 – 1460. <https://doi.org/10.13189/ujer.2020.080438>
18. **Berzina, I.**, & Balodis, E. (2020). Testing an operation of prototype for automated assessment: Case of visitor profile of Gauja National Park. *Research for Rural Development*. <https://doi.org/10.22616/rrd.26.2020.023>
19. **Gintere, I.** (2020). A Perspective on a New Digital Art Game: The Approach of Research and Knowledge Transfer. *Proceedings of the 12th International Conference on Computer Supported Education – Volume 1: CSEDU*. <https://doi.org/10.5220/0008920603110318>
20. **Gintere, I.** (2020). Art Space: An Experimental Digital Art Game. *SOCIETY. INTEGRATION. EDUCATION. Proceedings of the International Scientific Conference*, 5, 649-660. <https://doi.org/10.17770/sie2020vol5.4817>
21. **Gintere, I.** (2020). Signal and video processing: Developing the noise music trend in digital edugaming. *International Journal of Circuits, Systems and Signal Processing*. <https://doi.org/10.46300/9106.2020.14.145>
22. **Gintere, I.** (2020). The Inclusion of Research and Knowledge Transfer in Art Games. *New Challenges in Economic and Business Development – Economic Inequality and Well-Being*. <https://www.webofscience.com/wos/woscc/full-record/WOS:000632360900014>



2021

Articles (full text publications) in peer-reviewed scientific edited journals and conference proceedings included in Web of Science or SCOPUS databases

1. **Balcers, O.**, Miranda, U., & Veilande, R. (2021). Density functional theory calculated raman spectra of ergocalciferol (vitamin D2) and cholecalciferol (D3). *Optics InfoBase Conference Papers*.
<https://www.scopus.com/pages/publications/85119341810>
2. **Balcers, O.**, Miranda, U., & Veilande, R. (2021). Density Functional Theory Modelled Absorption and Raman Spectra Applicable to Ergocalciferol (Vitamin D2) and Cholecalciferol (D3). *Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC)*.
<https://doi.org/10.1109/CLEO/Europe-EQEC52157.2021.9541824>
3. Romanovs, A., Sultanovs, E., **Buss, E.**, Merkuryev, Y., & **Majore, G.** (2021). Challenges and Solutions for Resilient Telemedicine Services. *IEEE 8th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*. <https://doi.org/10.1109/AIEEE51419.2021.9435776>
4. Lapsins, J., & **Cakula, S.** (2021). Active Machine Learning in Regression Problems. *IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*.
<https://doi.org/10.1109/IEEM50564.2021.9673065>
5. **Cakula, S.**, & **Pratt (Prata), M.** (2021). Communication technologies in a remote workplace. *Baltic Journal of Modern Computing*, 9, 210-219. <https://doi.org/10.22364/BJMC.2021.9.2.05>
6. **Cunška, A.** (2021). Technology-based Interdisciplinary Approaches to Accelerated Learning of Mathematics. *Proceedings of the 13th International Conference on Computer Supported Education, 2: CSEDU*, 114-121.
<https://doi.org/10.5220/0010473901140121>
7. **Java, O.**, Sigajevs, A., **Binde, J.**, & Kepka, M. (2021). NB-IoT Sensor Network for Obtaining the Input Data for Hydrological Simulation Model. *AGRIS on-line Papers in Economics and Informatics*, 3(1), 59-69.
<https://doi.org/10.7160/aol.2021.130105>
8. **Java, O.**, Kohv, M., & Lõhmus, A. (2021). Performance of a Bog Hydrological System Dynamics Simulation Model in an Ecological Restoration Context: Soomaa Case Study, Estonia. *Water*, 13(16), 2217.
<https://doi.org/10.3390/w13162217>
9. **Java, O.** (2021). The Information Search Habits Investigated by an Eye Tracking Technique: How to Manage the Documentary Heritage of the National Library of Latvia. *Journal of Teacher Education for Sustainability*, 23(2), 2021. 62-76. <https://doi.org/10.2478/jtes-2021-0017>
10. **Lancere, L.** (2021). Technological Solutions for Low Back Pain Physical Therapy Real-time Monitoring with Feedback. *Baltic Journal of Modern Computing*, 9(4), 436-452. <https://doi.org/10.22364/bjmc.2021.9.4.04>
11. Kmytiuk, T., & **Majore, G.** (2021). Time series forecasting of agricultural product prices using Elman and Jordan recurrent neural networks. *Neuro-Fuzzy Modeling Techniques in Economics*, 10, 67-85.
<http://doi.org/10.33111/nfmte.2021.067>
12. **Pratt (Prata), M.**, **Boudhane, M.**, & **Cakula, S.** (2021). Employee Attrition Estimation Using Random Forest Algorithm. *Baltic Journal of Modern Computing*, 9(1), 49-66. <https://doi.org/10.22364/bjmc.2021.9.1.04>

13. **Pratt (Prata), M., & Cakula, S.** (2021). Motivation in a Business Company Using Technology-Based Communication. In: Dingli, A., Haddod, F., Klüver, C. (eds) *Artificial Intelligence in Industry 4.0. Studies in Computational Intelligence*, 928. https://doi.org/10.1007/978-3-030-61045-6_2
14. **Pratt (Prata), M., Boudhane, M., & Cakula, S.** (2021). Predictive Data Analysis Model for Employee Satisfaction Using ML Algorithms. In: Saeed, F., Al-Hadhrani, T., Mohammed, F., Mohammed, E. (eds) *Advances on Smart and Soft Computing. Advances in Intelligent Systems and Computing*, 1188. https://doi.org/10.1007/978-981-15-6048-4_13
15. **Pratt (Prata), M., Boudhane, M., Taskin, N., & Cakula, S.** (2021). Use of AI for Improving Employee Motivation and Satisfaction. In: Auer, M.E., Rüttemann, T. (eds) *Educating Engineers for Future Industrial Revolutions. ICL 2020. Advances in Intelligent Systems and Computing*, 1329. https://doi.org/10.1007/978-3-030-68201-9_30
16. **Zake, M., Majore, G., Krūmiņš, G., & Zakis, Z.** (2021). Methodology for Construction of Multi-approach Based Digital Twin in Strategic Communication. *IEEE 8th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*. <https://doi.org/10.1109/AIEEE51419.2021.9435626>

Interdisciplinary articles of engineering, information and communication technologies, and social sciences:

17. **Andersons, A., Ritter, S., Prodani, R., & Bushati, J.** (2021). Enhanced participants' registration model on open public events. *ENVIRONMENT. TECHNOLOGY. RESOURCES. Proceedings of the International Scientific and Practical Conference*, 2, 13-20. <https://doi.org/10.17770/etr2021vol2.6587>
18. **Gintere, I.** (2021). An Educational Digital Environment of Contemporary Aesthetics Focused on Slow Gaming. *Proceedings of the 13th International Conference on Computer Supported Education*, 2: CSEDU, 163-168. <https://doi.org/10.5220/0010403201630168>



2022

Articles (full text publications) in peer-reviewed scientific edited journals and conference proceedings included in Web of Science or SCOPUS databases

1. Bersons, I., Veilande, R., & **Balcers, O.** (2022). Reflection and refraction of photons. *Physica Scripta*, 97(3). <https://doi.org/10.1088/1402-4896/ac50c4>
2. **Balcers, O.**, Miranda, U., & Veilande, R. (2022). Study of ergocalciferol and cholecalciferol (Vitamin D): Modeled optical properties and optical detection using absorption and Raman spectroscopy. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, 269. <https://doi.org/10.1016/j.saa.2021.120725>
3. Azbeg., K., **Boudhane, M.**, Ouchetto, O., & Jai Andaloussi, S. (2022). Diabetes emergency cases identification based on a statistical predictive model. *Journal of Big Data*, 9. <https://doi.org/10.1186/s40537-022-00582-7>
4. **Cakula, S., & Prata, M.** (2022). Technological Solution for Remote Workplace Communication to Improve Employee Motivation and Satisfaction. *International Conference on Electrical, Computer, Communications and Mechatronics Engineering, ICECCME 2022*. <https://doi.org/10.1109/ICECCME55909.2022.9988407>
5. **Cīrulis, A., Taube, L., & Erics, Z.** (2022). Automated Generation of Digital Twin in Virtual Reality for Interaction with Specific Nature Ecosystem. *Lecture Notes in Computer Science*, 13309 LNCS, 187-202. https://doi.org/10.1007/978-3-031-05039-8_13
6. **Cunška, A.** (2022). Creation of a Teacher Support System for Technology-Enhanced Accelerated Learning of Math in Schools. *Communications in Computer and Information Science*, 1624 CCIS, 189-211. https://doi.org/10.1007/978-3-031-14756-2_10
7. **Cunška, A.** (2022). Prototype of Project AI4Math: Interdisciplinary and Innovative Technology for Accelerated Learning of Mathematics. *WSEAS Transactions on Business and Economics*, 19, 1839-1848, <https://doi.org/10.37394/23207.2022.19.165>
8. **Eric, Z., & Cīrulis, A.** (2022). A proposal for a computational framework architecture and design for massive virtual world generation and simulation. *Lecture Notes in Computer Science*, 13445 LNCS, 37-47. https://doi.org/10.1007/978-3-031-15546-8_3
9. **Java, O.**, Asprion, B., Priebe, T., Sarkozi, E., Madeira, R.N. (2022). Application of Digital Technology in Agriculture: Potential Support for Winegrowers. *TAE 2022 Proceeding of the 8th International Conference on Trends in Agricultural Engineering 2022*. [TAE2022-32-Oskars-JAVA.pdf](https://doi.org/10.1007/978-3-031-15546-8_3)
10. Madeira, R.N., Santos, P.A., **Java, O.**, Priebe, T., Graça, E., Sarközi, E., Asprion, B., & Pinto-Bello Gómez, R. (2022). Towards Digital Twins for Multi-Sensor Land and Plant Monitoring. *Procedia Computer Science*, 210, 45-52. <https://doi.org/10.1016/j.procs.2022.10.118>
11. Pirta-Dreimane, R., Brilingaitė, A., G. **Majore, G.**, Knox, B.J., Lapin, K., Parish, K., Sütterlin, S., & Lugo, R.G. (2022). Application of intervention mapping in cybersecurity education design. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.998335>
12. **Majore, G., & Majors, I.** (2022). Digital Twin Modelling for Eco-Cyber-Physical Systems: In the Case of A Smart Agriculture Living Lab. *CEUR Workshop Proceedings*. <https://ceur-ws.org/Vol-3327/paper09.pdf>

13. **Uljāns, A., & Blumbergs, B.** (2022). Industrial and Automation Control System Cyber Range Prototype for Offensive Capability Development. *Proceedings of the 8th International Conference on Information Systems Security and Privacy – ICISSP*, 478-490. <https://doi.org/10.5220/0010879500003120>
14. **Zaķe, M., Majore, G.** (2022). Application of Multi-perspective Modelling Approach for Building Digital Twin in Smart Agriculture. *2022 63rd International Scientific Conference on Information Technology and Management Science of Riga Technical University, ITMS 2022 - Proceedings*, <https://doi.org/10.1109/ITMS56974.2022.9937142>

Interdisciplinary articles of engineering, information and communication technologies, and social sciences:

15. Prodani, R., Çobani, S., **Andersons, A.**, Bushati, J. (2022). Digital technologies integration in the classroom. A teacher's perspective. *Cypriot Journal of Educational Sciences*, 17, 2823-2837. <https://doi.org/10.18844/cjes.v17i8.7781>

Other significant publications in 2022

[SOCIETY. TECHNOLOGY. SOLUTIONS. Proceedings of the 3rd International Scientific Conference of Vidzeme University of Applied Sciences](#)



2023

Articles (full text publications) in peer-reviewed scientific edited journals and conference proceedings included in Web of Science or SCOPUS databases

1. Bersons, I., Veilande, R., **Balcers, O.** (2023). Mathematical Models of Photons. *Foundations of Physics*, 53. <https://doi.org/10.1007/s10701-023-00708-8>
2. Ghoulami, M., Miyara, M., Messaoudi, N., Chiba, Z., Toulmi, H., **Boudhane, M.** (2023). A recent review of video anomaly detection for smart cities. In: Saeed, F., Mohammed, F., Mohammed, E., Al-Hadhrani, T., Al-Sarem, M. (Eds). *Advances on Intelligent Computing and Data Science. ICACIn 2022. Lecture Notes on Data Engineering and Communications Technologies*, 179, 255-264. https://doi.org/10.1007/978-3-031-36258-3_22
3. **Cīrulis, A., Taube, L.**, Amsons, T., **Sokolovs, A.** (2023). Data collection and feedback preparation in virtual reality training systems. In: Zaphiris, P., et al. *HCI International 2023 – Late Breaking Papers, HCII 2023. Lecture Notes in Computer Science* (Vol. 14060), 34-46. Springer. https://doi.org/10.1007/978-3-031-48060-7_3
4. **Felzenbergs, K.**, Bukauskas, L., **Majore, G.** (2023). Heartbeat Driven Network Health Assessment. *IEEE 64th International Scientific Conference on Information Technology and Management Science of Riga Technical University (ITMS)*, 1-6, <https://doi.org/10.1109/ITMS59786.2023.10317742>
5. **Lancere, L.**, Jürgen, M. & Gapeyeva, H. (2023). Mixed reality and sensor real-time feedback to increase muscle engagement during deep core exercising. *Virtual Reality*, 27, 3435–3449. <https://doi.org/10.1007/s10055-022-00726-3>
6. **Majore, G.**, Bukauskas, L., Sütterlin, S., Brilingaitė, A. (2023). Advancing human performance in cybersecurity, ADVANCES. *CEUR Workshop Proceedings*, 3413, 76-82.
7. Maennel, K., Brilingaitė, A., Bukauskas, L., Juozapavičius, A., Knox, B. J., Lugo, R. G., Maennel, O., **Majore, G.**, Sütterlin, S. (2023). A multidimensional cyber defense exercise: emphasis on emotional, social, and cognitive aspects. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440231156367>
8. Kodors, S., Zarembo, I., **Majore, G.**, Rubauskis, E., Litavniece, L. (2023). Digital twin modelling for smart fruit-growing: eco-cyber-physical system 4+1 architecture. *Engineering for Rural Development*, 22, 700-706. <https://doi.org/10.22616/ERDev.2023.22.TF140>
9. Jansevskis, M., **Osīs, K.** (2023). Knowledge Discovery Frameworks and Characteristics. *Baltic Journal of Modern Computing*, 11(4), 686-702. <https://doi.org/10.22364/bjmc.2023.11.4.08>
10. **Volkovičs, R.** (2023). Anomaly Detection - Review of Methods, Tools and Algorithms. *ENVIRONMENT. TECHNOLOGY. RESOURCES. Proceedings of the International Scientific and Practical Conference*, 2, 105-112. <https://doi.org/10.17770/etr2023vol2.7283>

2024

1. **Cakula, S.** (2024). Digital Learning Model. *Baltic Journal of Modern Computing*, 12(3), 248-258.
<https://doi.org/10.22364/bjmc.2024.12.3.02>
2. **Eric, Z., Ćirulis, A.** (2024). Provision of Multiuser Capabilities for Virtual Reality Environments. *2024 IEEE 11th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*, 1-6.
<https://doi.org/10.1109/AIEEE62837.2024.10586644>
3. Davidovica, A., Davidovics, S., Semjonova, G., Katashev, A., Oks, A., **Lancere, L.**, Tomsone, S., & Zolovs, M. (2024). Biomechanics of the Lower Extremity in Youth Football League: FIFA 11+ One Leg Squat Analysis. *Proceedings of the 12th International Conference on Sport Sciences Research and Technology Support – icSPORTS*, 131-139. <https://doi.org/10.5220/0012894900003828>
4. Totorean, A., **Lancere, L.** et al. (2024). Heart Rate and Surface Electromyography Analysis to Assess Physical Activity Using a Virtual-Reality Exergame. In: Herisanu, N., Marinca, V. (eds) *Acoustics and Vibration of Mechanical Structures*. AVMS 2023. Springer Proceedings in Physics, vol 302. Springer.
https://doi.org/10.1007/978-3-031-48087-4_15
5. Jansone, Z., Rendenieks, Z., **Lapāns, A.**, Tamm, I., Ingver, A., Gorash, A., Aleliūnas, A., Brazauskas, G., Shafiee, S., Mróz, T., Lillemo, M., Kollist, H., & Bleidere, M. (2024). Phenotypic Variation and Relationships between Grain Yield, Protein Content and Unmanned Aerial Vehicle-Derived Normalized Difference Vegetation Index in Spring Wheat in Nordic–Baltic Environments. *Agronomy*, 14(1), 51.
<https://doi.org/10.3390/agronomy14010051>
6. **Majore, G., Majors, I., Zaķis, K.** (2024). Conceptual Modelling of Digital Twin for Smart Agriculture. *Companion Proceedings of the 17th IFIP WG 8.1 Working Conference on the Practice of Enterprise Modeling Forum, M4S, FACETE, AEM, Tools and Demos co-located with PoEM 2024*. [Conceptual Modelling of Digital Twin for Smart Agriculture](https://doi.org/10.1145/3663741.3664786)
7. Volkovičs, R., Bambāns, V., **Majore, G.** (2024). Environmental Data and Digital Twins for Road Traffic Safety in Rural Areas. *ETR*, 2, 317–323. <https://doi.org/10.17770/etr2024vol2.8012>
8. Bimonte, S., Bellocchi, G., Pinet, F., Charrier, G., Sacharidis, D., Sakr, M., Tournier, R., Jakllari, G., Gerard Chalhoub, G., Kechadi, T., Benatallah, B., Marinello, F., Oberti, R., Bindelle, J., **Majore, G.**, Skrzypczyński, P. (2024). Technological and Research Challenges in Data Engineering for Sustainable Agriculture. *Proceedings of the International Workshop on Big Data in Emergent Distributed Environments (BiDEDE '24)*. Association for Computing Machinery, 1–6. <https://doi.org/10.1145/3663741.3664786>
9. Kmytiuk, T., **Majore, G.**, Bilyk, T. (2024). Time series forecasting of price of the agricultural products using data science. *Agricultural and Resource Economics: International Scientific E-Journal*, 10(3), 5–33.
<https://doi.org/10.51599/are.2024.10.03.01>
10. **Misjuns, A., Ćirulis, A.** (2024). Creation of Virtual Reality Experiences for the Web: Shader Programming for Artists. *2024 IEEE 11th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*, 1-3. <https://doi.org/10.1109/AIEEE62837.2024.10586603>
11. Jansevskis, M., **Osīs, K.** (2024). User Interaction and Response-Based Knowledge Discovery Framework. In: Lopata, A., Gudonienė, D., Butkienė, R. (eds) *Information and Software Technologies*. ICIST 2023. *Communications in Computer and Information Science*, vol 1979. Springer. https://doi.org/10.1007/978-3-031-48981-5_8



12. Jansevskis, M., **Osis, K.** (2024). Securing the Future: The Role of Knowledge Discovery Frameworks. In: Sipola, T., Alatalo, J., Wolfmayr, M., Kokkonen, T. (eds) *Artificial Intelligence for Security: Enhancing Protection in a Changing World*. https://doi.org/10.1007/978-3-031-57452-8_5

Interdisciplinary articles of engineering, information and communication technologies, and social sciences:

13. **Gintere, I.**, Rovithis, E., Bakk, Á. K., **Misjuns, A.** (2024). ImGame Project: A Comprehensive Theory of Immersive Aesthetics and Innovation in Serious Gaming. *International Journal of Game-Based Learning (IJGBL)*, 14(1), 1-18. <http://doi.org/10.4018/IJGBL.338218>
14. **Gintere, I.**, Rovithis, E., Bakk, Á., **Misjuns, A.** (2024). ImGame: An Immersive Educational Environment to Teach Contemporary Art. *Proceedings of the 16th International Conference on Computer Supported Education, Volume 1*, 338-346. ISBN 978-989-758-697-2; ISSN 2184-5026; <https://doi.org/10.5220/0012600000003693>

