

Advanced ICT solutions in a distance vocational education and training in the field of robotics

Pilat, Zbigniew; Arapi, Polyxeni; Pappas, Nikos; Omieljanowicz, Mirosław; Prokopiuk, Norbert; Tamre, Mart The 16th International Conference "Mechatronic Systems and Materials" : MSM 2021 July 1, 2021 - July 2, 2021 : abstract book 2021 / p. 62-63
<https://vb.vgtu.lt/object/elaba:100810507/100810507.pdf>

Development of virtual reality interface for remote robot control

Lees, Ülari; Hudjakov, Robert; Tamre, Mart Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 247-250 : ill

Digital Twin : concept of hybrid programming for industrial robots - use case

Kuts, Vladimir; Sarkans, Martinš; Otto, Tauno; Tähemaa, Toivo; Bondarenko, Yevhen ASME 2019 International Mechanical Engineering Congress and Exposition : conference proceedings 2019 / Paper No: IMECE2019-10583, V02BT02A005; 8 pages
<https://doi.org/10.1115/IMECE2019-10583>

Digital Twin : industrial robot kinematic model integration to the virtual reality environment

Kuts, Vladimir; Cherezova, Natalia; Sarkans, Martinš; Otto, Tauno Journal of machine engineering 2020 / p. 53–64
<https://doi.org/10.36897/jme/120182> [Journal metrics at Scopus](#) [Article at Scopus](#)

Digital twin as industrial robots manipulation validation tool

Kuts, Vladimir; Marvel, Jeremy A.; Aksu, Murat; Pizzagalli, Simone Luca; Sarkans, Martinš; Bondarenko, Yevhen; Otto, Tauno Robotics 2022 / art. 113 <https://doi.org/10.3390/robotics11050113> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Digital twin based synchronised control and simulation of the industrial robotic cell using virtual reality

Kuts, Vladimir; Otto, Tauno; Tähemaa, Toivo; Bondarenko, Yevhen Journal of machine engineering 2019 / p. 128–145 : ill
<https://doi.org/10.5604/01.3001.0013.0464> [Journal metrics at Scopus](#) [Article at Scopus](#)

Digital twin for FANUC robots: Industrial robot programming and simulation using virtual reality

Garg, Gaurav; Kuts, Vladimir; Anbarjafari, Gholamreza Sustainability (Switzerland) 2021 / Art. 10336
<https://doi.org/10.3390/su131810336> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Digitalization of engineering education : from e-learning to smart education

Makarova, Irina; Shubenkova, Ksenia; Antov, Dago; Pashkevich, Anton Smart Industry & Smart Education : proceedings of the 15th International Conference on Remote Engineering and Virtual Instrumentation 2019 / p. 32–41 https://doi.org/10.1007/978-3-319-95678-7_4 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Dynamic predictive modeling approach of user behavior in virtual reality based application

Köse, Ahmet; Tepljakov, Aleksei; Petlenkov, Eduard 2019 27th Mediterranean Conference on Control and Automation (MED) 2019 / p. 57-62 : ill <https://doi.org/10.1109/MED.2019.8798521>

Enabling the teaching factory leveraging a virtual reality system based on the digital twin

Kuts, Vladimir; Otto, Tauno; Calderola, Enrico G.; Modoni, Gianfranco E.; Sacco, Marco The Industrial Track of EuroVR 2018: Proceedings of the 15th Annual EuroVR Conference 2018 / p. 26–31 : ill <https://www.vtt.fi/inf/pdf/technology/2018/T339.pdf>

Enhancing cyber defense situational awareness using 3D visualizations

Kullman, Kaur; Cowley, Jennifer; Ben-Ashe, Noam 13th International Conference on Cyber Warfare and Security (ICCWS 2018), Washington, DC, USA, 8 – 9 March 2018 2018 / p. 369-378 <http://toc.proceedings.com/38822webtoc.pdf>

Extended reality technologies in small and medium-sized European industrial companies : level of awareness, diffusion and enablers of adoption

Jalo, Henri; Pirkkalainen, Henri; Torro, Osku; Pessot, Elena; Zangiacomi, Andrea; Tepljakov, Aleksei Virtual Reality 2022 / p. 1745 - 1761 <https://doi.org/10.1007/s10055-022-00662-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Haptic smart glove for augmented and virtual reality

Vu, Trieu Minh; Moezzi, Reza; Katushin, Nikita Sensor letters 2019 / p. 358-364 <https://doi.org/10.1166/sl.2019.4070>

Intelligent virtual environments with assessment of user experiences

Köse, Ahmet; Tepljakov, Aleksei; Petlenkov, Eduard Artificial Intelligence and Soft Computing : 20th International Conference, ICAISC 2021, Virtual Event, June 21–23, 2021 : proceedings, Part I 2021 / p. 463–474 : ill https://doi.org/10.1007/978-3-030-87986-0_41 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Light at the end of the tunnel : Visitors' virtual reality (versus in-person) attraction site tour-related behavioral intentions during and post-COVID-19

Itani, Omar S.; Hollebeek, Linda Desiree Tourism Management 2021 / art. 104290 <https://doi.org/10.1016/j.tourman.2021.104290> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Motion tracking glove for augmented reality and virtual reality

Vu, Trieu Minh; Katushin, Nikita; Pumwa, John Paladyn, journal of behavioral robotics 2019 / p. 160–166 : ill

<https://doi.org/10.1515/pjbr-2019-0012> Journal metrics at Scopus Article at Scopus

Operator impressions of 3D visualizations for cybersecurity analysts

Kullman, Kaur; Ben-Asher, Noam; Sample, Char Abstracts and conference materials for the 18th European Conference on Cyber Warfare and Security, University of Coimbra Portugal, 4-5th July 2019 2019 / p. 31-32 <https://www.academic-conferences.org/conferences/eccws/eccws-future-and-past/>

Operator impressions of 3D visualizations for cybersecurity analysts

Kullman, Kaur; Ben-Asher, Noam; Sample, Char Proceedings of the 18th European Conference on Cyber Warfare and Security, University of Coimbra Portugal, 4-5th July 2019 2019 / p. 257–266

https://www.researchgate.net/publication/334226184_Operator_Impressions_of_3D_Visualizations_for_Cybersecurity_Analysts

Real time data communication for intelligent extended reality applications

Köse, Ahmet; Tepljakov, Aleksei; Petlenkov, Eduard 2020 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA), 22-24 June 2020 : proceedings 2021 / 6 p

<https://doi.org/10.1109/CIVEMSA48639.2020.9132970>

Real-time localization and visualization of a sound source for virtual reality application

Köse, Ahmet; Tepljakov, Aleksei; Astapov, Sergei 2017 25th International Conference on Software, Telecommunications and Computer Networks (SoftCOM) : Split, Croatia, September 21-23, 2017 / p 219-224 : ill

<https://doi.org/10.23919/SOFTCOM.2017.8115577> Conference proceedings at Scopus Article at Scopus

Reimagine lab : bridging the gap between hands-on, virtual and remote control engineering laboratories using digital twins and extended reality

Alsaled, Saleh Ragheb Saleh; Tepljakov, Aleksei; Köse, Ahmet; Belikov, Juri; Petlenkov, Eduard IEEE Access 2022 / p. 89924-889943 : ill <https://doi.org/10.1109/ACCESS.2022.3199371> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Sound localization and processing for inducing synesthetic experiences in virtual reality

Tepljakov, Aleksei; Astapov, Sergei; Petlenkov, Eduard; Vassiljeva, Kristina; Draheim, Dirk BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 159-162 : ill http://www.ester.ee/record=b2150914*est

Synchronizing physical factory and its digital twin through an IIoT middleware : a case study

Kuts, Vladimir; Modoni, Gianfranco E.; Otto, Tauno; Sacco, Marco; Tähemaa, Toivo; Bondarenko, Yevhen; Wang, Ruxin Proceedings of the Estonian Academy of Sciences 2019 / p. 364–370 : ill http://www.kirj.ee/32660/?pl=1061&c_tpl=1064

<https://doi.org/10.3176/proc.2019.4.03> Conference proceedings at Scopus Article at Scopus Journal metrics at WOS Article at WOS

The concept of using AR and VR technologies in the vocational training system in robotics and automation

Falkowski, Piotr; Pilat, Zbigniew; Arapi, Polyxeni; **Tamre, Mart**; Dulencin, Peter; Homza, Jozef Robotics in education : methodologies and technologies 2021 / p. 318-325 https://doi.org/10.1007/978-3-030-67411-3_29

Towards a synesthesia laboratory : real-time localization and Visualization of a sound source for virtual reality applications

Köse, Ahmet; Tepljakov, Aleksei; Astapov, Sergei; Draheim, Dirk; Petlenkov, Eduard; Vassiljeva, Kristina Journal of communications software and systems 2018 / p. 112–120 : ill <https://doi.org/10.24138/jcomss.v14i1.410> Conference proceeding at Scopus Article at Scopus

Towards artificial intelligence driven immersive environments in virtual reality for industrial applications

Alsaled, Saleh Ragheb Saleh; Tepljakov, Aleksei; Tamre, Mart; Petlenkov, Eduard 44th International Conference on Telecommunications and Signal Processing (TSP) 2021 / p. 340-345 <https://doi.org/10.1109/TSP52935.2021.9522676>

Towards assessment of behavioral patterns in a virtual reality environment

Köse, Ahmet; Tepljakov, Aleksei; Abel, Mihkel; Petlenkov, Eduard Augmented Reality, Virtual Reality, and Computer Graphics : 6th International Conference, AVR 2019 :Santa Maria al Bagno, Italy, June 24–27, 2019 : Proceedings. Part I 2019 / p. 237–253 : ill https://doi.org/10.1007/978-3-030-25965-5_18 Conference proceeding at Scopus Article at Scopus Conference proceeding at WOS Article at WOS

Towards assisting interactive reality : interactive reality for education, data analysis and industry

Köse, Ahmet; Tepljakov, Aleksei; Petlenkov, Eduard Augmented Reality, Virtual Reality, and Computer Graphics : 5th International Conference : AVR 2018, Otranto, Italy, June 24–27, 2018 : proceedings, Part I 2018 / p. 569-588

https://doi.org/10.1007/978-3-319-95282-6_41 Conference Proceedings at Scopus Article at Scopus Conference Proceedings at WOS Article at WOS

Universal XR framework architecture based on open-source XR tools

Bondarenko, Yevhen; Kuts, Vladimir; Pizzagalli, Simone Luca; Nutonen, Karle; Murray, Niall; O'Connell, Eoin XR and metaverse : proceedings of the 8th international XR-metaverse conference 2023, Las Vegas, USA 2024 / p. 87-98
https://doi.org/10.1007/978-3-031-50559-1_7

Upper extremity movement evaluation using markerless motion capture system

Gavriljuk, Marietta; **Kuts, Vladimir; Gapeyeva, Helena; Otto, Tauno; Pizzagalli, Simone Luca** EuroVR 2020 Application, exhibition & demo track : proceedings of the virtual conference 2020 / p. 83-86 <https://doi.org/10.32040/2242-122X.2020.T381>

User interactions in Virtual Data Explorer

Kullman, Kaur; Engel, Don Augmented Cognition : 16th International Conference, AC 2022, Held as Part of the 24th HCI International Conference, HCII 2022. Virtual Event, June 26 - July 1, 2022, proceedings 2022 / p. 333-347 https://doi.org/10.1007/978-3-031-05457-0_26 Conference Proceedings at Scopus Article at Scopus Conference Proceedings at WOS Article at WOS

User-centred design in industrial collaborative automated systems

Pizzagalli, Simone Luca; Kuts, Vladimir; Otto, Tauno Proceedings of the Estonian Academy of Sciences 2021 / p. 436-443 : ill
<https://doi.org/10.3176/proc.2021.4.10> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Virtual laboratories: engineers' training for automotive industry

Makarova, Irina; Boyko, Aleksey; Shubenkova, Ksenia; **Pashkevich, Anton; Giniyatullin, IIsur** 17 International Conference on Emerginge Learning Technologies and Applications, November 21-22, 2019 Stary Smokovec, The High Tatras Slovak Republic : proceedings 2019 / 7 p. : ill <https://doi.org/10.1109/ICETA48886.2019.9040074>

Virtual reality meets intelligence in large scale architecture

Köse, Ahmet; Petlenkov, Eduard; Tepljakov, Aleksei; Vassiljeva, Kristina Augmented Reality, Virtual Reality, and Computer Graphics : 4th International Conference, AVR 2017, Ugento, Italy, June 12-15, 2017 : proceedings. Part II 2017 / p. 297-309 : ill
https://doi.org/10.1007/978-3-319-60928-7_26

Virtual reality simulators for inclusion and participation : broadening perspectives on accessible cities and public space

Kern, Leyla; **Dembski, Fabian; Obst, Thomas; Bisinger, Laura; Falk, Benedict; Wössner, Uwe** Mobility, Knowledge and Innovation Hubs in Urban and Regional Development : proceedings of REAL CORP 2022, 27th International Conference on Urban Development, Regional Planning and Information Society 2022 / p. 1025-1031 <https://doi.org/10.48494/REALCORP2022.2039>

Virtual reality through the customer journey : framework and propositions

Hollebeek, Linda Desiree; Clark, Moira K.; Andreassen, Tor W.; Sigurdsson, Valdimar; Smith, Dale L.G. Journal of retailing and consumer services 2020 / art. 102056 <https://doi.org/10.1016/j.jretconser.2020.102056> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS