

Acceleration data acquisition and processing system for structural health monitoring

Herranen, Henrik; Kuusik, Alar; Saar, Tõnis; Reidla, Marko; Land, Raul; Märten, Olev; Majak, Jüri 2014 IEEE International Workshop On Metrology For Aerospace : May 29-30, 2014, Benevento, Italy : proceedings 2014 / p. 244-248 : ill

Analysis and improvement of resilience for long short-term memory neural networks

Ahmadilivani, Mohammad Hasan; Raik, Jaan; Daneshtalab, Masoud; Kuusik, Alar 2023 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) 2023 / 4 p <https://doi.org/10.1109/DFT59622.2023.10313559>

Bio-impedance FDM-modelling inside heart for application in implanted devices

Gordon, Rauno; Kuusik, Alar Proceedings of the 31st International Congress of Electrocardiology "Advances in Electrocardiology 2004" : 27 June - 1 July, 2004, Singapore 2005 / p. 778-782

Bioimpedance monitoring with improved accuracy using three-level stimulus

Paavle, Toivo; Annus, Paul; Kuusik, Alar; Land, Raul; Min, Mart Proceedings of European Conference on Circuit Theory and Design 2007 (ECCTD'07) : Seville, Spain, August 26-30, 2007 2007 / p. 412-415

Channel prediction based enhanced throughput and channel aware MAC in SmartBAN standard

Khan, Rida; Alam, Muhammad Mahtab; Kuusik, Alar 2019 16th International Symposium on Wireless Communication Systems (ISWCS) 2019 / p. 463-468 : ill <https://doi.org/10.1109/ISWCS.2019.8877244>

Compact smart home systems : design and verification of cost effective hardware solutions

Kuusik, Alar 2001 http://www.ester.ee/record=b1578112*est

Compact smart home systems : design and verification of cost effective hardware solutions

Kuusik, Alar 2001 http://www.ester.ee/record=b1622134*est

Component based development of hybrid control systems

Vain, Jüri; Kuusik, Alar; Käärmees, Marko Proceedings of the 15th International Conference on CAD/CAM, Robotics & Factories of the Future CARSAMPFOF'99 : August 18-20, 1999, Aguas de Lindoia, Brasil. Vol. 2 1999 / p. RW5-1 - RW5-6
https://www.researchgate.net/publication/2611129_Component_Based_Development_of_Hybrid_Control_Systems

Component based technique for hybrid control systems design

Vain, Jüri; Kuusik, Alar; Käärmees, Marko Proceedings of the 11th Nordic Workshop on Programming Theory : NWPT'99 : Uppsala University, Sweden, October 6-8, 1999 1999 / p. 48

Computer modelling of intracardiac electrical bioimpedance

Gordon, Rauno; Kuusik, Alar Proceedings of the 31. International Congress on Electrocardiology : June 27-July 1, 2004, Kyoto, Japan 2004 / [4] p

Current mode signal processing in modern lock-in amplifiers

Min, Mart; Parve, Toomas; Kuusik, Alar 8th International Symposium on New Measurement and Calibration Methods of Electrical Quantities and Instruments : Budapest, September 16-17, 1996 : proceedings [IMEKO TC-4] 1996 / p. 49-52 : ill

Current-mode lock-in amplifier

Kuusik, Alar BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 363-366: ill

Design of a highly efficient analog-to-digital converter for Wi-Fi 7 devices = Pidevaja Sigma-Delta muunduri disain Wi-Fi 7 seadmete

Kampus, Vahur 2025 https://www.ester.ee/record=b5752898*est <https://digikogu.taltech.ee/et/Item/156d4c1c-e0f9-45aa-93a9-2cc8f1431aa0>
<https://doi.org/10.23658/taltech.46/2025>

Development of methods for real-time in-step anomaly detection in gait analysis = Reaalajaliste meetodite arendus sammusiseste kõrvalkallete tuvastamiseks kõnnianalüüsis

Rostovski, Jakob 2025 https://www.ester.ee/record=b5734578*est <https://digikogu.taltech.ee/et/Item/c25ff8f8-a46a-45ce-b231-23d2d52e7f54>
<https://doi.org/10.23658/taltech.15/2025>

Device and method for monitoring bioimpedance of tissue transplants

Annus, Paul; Haldre, Eero; Kuusik, Alar; Land, Raul; Min, Mart; Paavle, Toivo; Parve, Toomas Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK teise aastakonverentsi artiklite kogumik : 11.-12. mai 2007, Viinistu kunstimuseum 2007 / lk. 140-143 : ill

Digital multichannel bioimpedance analyser : signal processing approaches

Ronk, Ants; Annus, Paul; Kuusik, Alar; Land, Raul; Märten, Olev Proceedings of the 3rd European Medical & Biological Engineering Conference EMBEC'05 : November 20-25, 2005, Prague, Czech Republic 2005 / [4] p
https://www.researchgate.net/publication/224062830_A_Digital_Multichannel_Bioimpedance_Analyser_Signal_Processing_Task_and_its_Solution

A digital multichannel bioimpedance analyser : signal processing task and its solution

Annus, Paul; Kuusik, Alar; Land, Raul; Märten, Olev; Ronk, Ants Proc. of the IEEE Instrumentation and Measurement Technology Conference : IMTC 2006 : Sorrento, Italy, April 24-27, 2006 2006 / p. 1405-1409 <https://doi.org/10.1109/IMTC.2006.328596>

Dynamic slot allocation using non overlapping backoff algorithm in IEEE 802.15.6 WBAN

Saboor, Abdul; Ahmad, Rizwan; Ahmed, Waqas; Kiani, Adnan Khalid; Alam, Muhammad Mahtab; Kuusik, Alar; Le Moullec, Yannick IEEE sensors journal 2020 / p. 10862-10875 : ill <https://doi.org/10.1109/JSEN.2020.2993795> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti iduettevõtte töötas koos TalTechiga välja rahakotisõbraliku lahenduse, mis muudab energia säästmise lihtsamaks nii elu- kui ärihoonetes

geenius.ee 2023 [Eesti iduettevõtte töötas koos TalTechiga välja rahakotisõbraliku lahenduse, mis muudab energia säästmise lihtsamaks nii elu- kui ärihoonetes](#)

Efektiivsus ja igakülgne toetus Jaapani teadusmaailmas : [A.Kuusik oma osalemisest järel doktoriprogrammis Tokyo Denki Ülikoolis 2003-2004]

Kuusik, Alar Eesti Teadusfondi Aastaraamat 2004 2005 / lk. 29-30 : fot

Effects of physical exercise on balance, range of motion (ROM) and angular velocity (AV) measurements

Kask, Triin; Kuusik, Alar; Meerolla Kumar, S.; Maamägi, Heigo; Gross-Paju, Katrin Journal of the neurological sciences 2019 / p. 295–296 : ill <https://doi.org/10.1016/j.jns.2019.10.1380>

Empirical evaluation of NB-IoT and CAT-M coverage for underground water system

Roosipuu, Priit; Annus, Ivar; Kuusik, Alar; Kändler, Nils; Alam, Muhammad Mahtab; Mürsepp, Ivo IEEE Access 2024 / p. 187290-187301 <https://doi.org/10.1109/ACCESS.2024.3478733> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An empirical modeling for the baseline energy consumption of an NB-IoT radio transceiver

Khan, Sikandar Muhammad Zulqarnain; Alam, Muhammad Mahtab; Le Moullec, Yannick; Kuusik, Alar; Päränd, Sven; Verikoukis, Christos IEEE Internet of Things Journal 2021 / p. 14756-14772 : ill <https://doi.org/10.1109/JIOT.2021.3072769> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Energy efficiency and latency optimization for IoT URLLC and mMTC use cases

Elgarhy, Osama Mohamed Mostafa; Reggiani, Luca; Alam, Muhammad Mahtab; Zoha, Ahmed; Ahmad, Rizwan; Kuusik, Alar IEEE Access / p. 23132-23148 <https://doi.org/10.1109/ACCESS.2024.3364349> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An energy efficient wearable tissue monitor

Annus, A.; Kuusik, Alar; Land, Raul; Haldre, Eero; Min, Mart; Parve, Toomas; Poola, Gustav 13th International Conference on Electrical Bioimpedance and 8th Conference on Electrical Impedance Tomography 2007 : ICEBIT2007 : August 29th - September 2nd 2007, Graz, Austria 2007 / p. 240-243 https://link.springer.com/chapter/10.1007/978-3-540-73841-1_64

Engineering approach for realization of small smart home systems

Kuusik, Alar Preprints [of the] 1st IFAC Conference [on] Telematics Applications in Automation and Robotics : TA'2001 : Weingarten, Germany, July 24-26, 2001 2001 / p. 499-503 : ill <https://www.sciencedirect.com/science/article/pii/S1474667017417393>

Evaluation of low power wide area network technologies for smart urban drainage systems

Malik, Hassan; Kändler, Nils; Alam, Muhammad Mahtab; Annus, Ivar; Le Moullec, Yannick; Kuusik, Alar 2018 IEEE : International Conference on Environmental Engineering, March 12-14, 2018 Milan Italy : conference proceedings 2018 / 5 p. : ill <https://doi.org/10.1109/EE1.2018.8385262>

Experimental modal analysis of maritime composite panel

Gavrijaševa, Alina; Märten, Olev; Land, Raul; Saar, Tõnis; Herranen, Henrik; Majak, Jüri; Reidla, Marko; Kuusik, Alar 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. 143-146 : ill http://www.ester.ee/record=b2150914*est

Extendable data model for universal health records

Reilent, Enar; Lõobas, Ivor; Kuusik, Alar; Parve, Marko; Ross, Peeter AMA-IEEE Medical Technology Conference : Boston, 16-18 October 2011 2011 / [2] p. : ill

Fast synchronous detector based on video switches

Kuusik, Alar Scientific proceedings of Riga Technical University. 7. serija, Telecommunications and electronics 2001 / p. 89-90 : ill

Fast synchronous detector based on video switches

Kuusik, Alar 42-nd Riga Technical University Conference Section on Electronics and Telecommunications : RTUC'2001 : Riga,

Latvia, Oct. 11-13, 2001 : conference proceedings 2001 / p. 89-90

Foreign object induced fiber undulation influence on mechanical properties of composite laminate

Herranen, Henrik; Lend, Henri; Kuusik, Alar; Czichon, Steffen; **Kers, Jaan; Piirlaid, Marko** International Conference on Composite Materials 2013 (ICCM-19) : Montreal, Quebec, Canada, 28 July-2 August 2013 : [proceedings] 2013 / p. 837-844

Formal safety validation of mobile robot teleoperation

Vain, Jüri; Suzuki, Satoshi; **Kuusik, Alar** BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 161-164 : ill

Formal specification of sensors

Kuusik, Alar; Vain, Jüri Ringhääling '99 : VI Rahvusvahelise Telekommunikatsioonipäeva konverentsi ettekannete materjalid 1999 / lk. 80-83

Grey wolf optimizer-based task scheduling for IoT-based applications in the edge computing

Satouf, Aram; Hamidoglu, Ali; Gul, Omer Melih; **Kuusik, Alar** 2023 Eighth International Conference on Fog and Mobile Edge Computing (FMEC) 2023 / p. 53-57 <https://doi.org/10.1109/FMEC59375.2023.10306148>

Handling industrial hazards by pre-emptive model checking [Electronic resource]

Kuusik, Alar; Otto, Tauno; Vain, Jüri 4th International Conference on Industrial Automation : June 9-11, 2003, Montreal, Canada : proceedings 2003 / [4] p. : ill. [CD-ROM] https://www.academia.edu/17640340/Handling_Industrial_Hazards_by_Pre_emptive_Model_Checking

Home based monitoring system with wireless sensors that confirm stable balance and motor function readings during remission is feasible for patients with multiple sclerosis

Gross-Paju, Katrin; Maamägi, Heigo; Reilent, Enar; **Kuusik, Alar** Journal of the neurological sciences 2017 / p. 436 <https://doi.org/10.1016/j.jns.2017.08.3444>

Home rehabilitation system supported by the safety model

Kuusik, Alar; Sarna, Külli; Reilent, Enar pHealth 2013 : proceedings of the 10th International Conference on Wearable Micro and Nano Technologies for Personalized Health : June 26-28, 2013, Tallinn, Estonia 2013 / p. 145-151 : ill

Home telecare and rehabilitation system with aspect oriented functional integration

Kuusik, Alar; Reilent, Enar; Sarna, Külli; Parve, Marko Biomedical Engineering = Biomedizinische Technik ; 57 2012 / p. 1004-1007 : ill <https://pubmed.ncbi.nlm.nih.gov/23096276/>

Human limb model structure optimization with genetic algorithm

Nõmm, Sven; Vassiljeva, Kristina; Kuusik, Alar EMS2013 : UKSim-AMSS 7th European Modelling Symposium, 20-22 November 2013, Manchester, United Kingdom : [proceedings] 2013 / p. 124-129

A human-adaptive-mechatronics assisted system for training constructional ability

Miyashita, O.; Tsukamoto, S.; **Kuusik, Alar;** Miyata, D.; Yoshida, T.; **Vain, Jüri;** Ishigami, S. Proceedings of the 8th International Conference on Mechatronics Technology : ICMT2004 : Hanoi, Vietnam, November 8-12, 2004 2004 / p. 551-555

Hydromast : a bioinspired flow sensor with accelerometers

Ristolainen, Asko; Tuhtan, Jeffrey Andrew; Kuusik, Alar; Kruusmaa, Maarja Biomimetic and biohybrid systems : 5th International Conference, Living Machines 2016, Edinburgh, UK, July 19-22, 2016 : proceedings 2016 / p. 510-517 : ill https://doi.org/10.1007/978-3-319-42417-0_55 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Hydromorphological classification using synchronous pressure and inertial sensing

Ristolainen, Asko; Kalev, Kaia; Tuhtan, Jeffrey Andrew; Kuusik, Alar; Kruusmaa, Maarja IEEE transactions on geoscience and remote sensing 2018 / p. 3222-3232 : ill <https://doi.org/10.1109/TGRS.2018.2795641> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improving the data compatibility of PHR and telecare solutions

Reilent, Enar; Kuusik, Alar; Lõõbas, Ivor; Ross, Peeter 5th European Conference of the International Federation for Medical and Biological Engineering : 14-18 September 2011, Budapest, Hungary 2012 / p. 925-928 https://link.springer.com/chapter/10.1007/978-3-642-23508-5_240

Inertial and positioning sensors fusion for indirect location tracking in warehouse inventory management

Fjodorov, Aleksei; Ulp, Sander; Alam, Muhammad Mahtab; Kuusik, Alar 2023 International Conference on Control, Automation and Diagnosis (ICCAD) 2023 / p. 1-7 <https://doi.org/10.1109/ICCAD57653.2023.10152404>

Intelligentne maja : olemus ja eesmärgid

Kuusik, Alar Raadiotehnika '97 : ettekannete materjalid 1997 / lk. 65-68: ill

Kõrgsageduslik lülitrežiimne sünkroondetektor : magistritöö

Kuusik, Alar 1995 https://www.ester.ee/record=b2680357*est

Latest research trends in gait analysis using wearable sensors and machine learning: A systematic review

Saboor, Abdul; Kask, Triin; Kuusik, Alar; Alam, Muhammad Mahtab; Le Moullec, Yannick IEEE Access 2020 / art. 3022818, p. 167830–167864 <https://doi.org/10.1109/ACCESS.2020.3022818> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Lühiülevaade RFID standarditest

Kuusik, Alar; Ojarand, Jaan A & A 2007 / 4, lk. 47-53 https://artiklid.elnet.ee/record=b1020909*est

Masinõpe toetab maksimaalselt kiiret ja tõrgeteta tootmist

Alvela, Ain ohtuleht.ee 2024 [Masinõpe toetab maksimaalselt kiiret ja tõrgeteta tootmist](#)

Matrix Profile based anomaly detection in streaming gait data for fall prevention

Gerazov, Branislav; Hadjieva, Elena; **Krivošei, Andrei; Sanchez, Fiorella Ines Soto; Rostovski, Jakob; Kuusik, Alar; Alam, Muhammad Mahtab** 2023 30th International Conference on Systems, Signals and Image Processing (IWSSIP) 2023 / p. 1-5 <https://doi.org/10.1109/IWSSIP58668.2023.10180243>

Measurement of intracardiac bioimpedance in rate adaptive pacemakers

Kuusik, Alar; Land, Raul; Min, Mart; Parve, Toomas; Poola, Gustav Proceedings of the 31. International Congress on Electrocardiology : June 27-July 1, 2004, Kyoto, Japan 2004 / [4] p

Measurement of intracardiac bioimpedance in rate adaptive pacemakers

Kuusik, Alar; Land, Raul; Min, Mart; Parve, Toomas; Poola, Gustav Proceedings of the 31st International Congress of Electrocardiology "Advances in Electrocardiology 2004" : 27 June - 1 July, 2004, Singapore 2005 / p. 738-742

Medical and context data acquisition system for patient home monitoring

Reilent, Enar; Lõõbas, Ivor; **Pahtma, Raido; Kuusik, Alar** BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 269-272

Method and system for real-time motion abnormality detection

Krivošei, Andrei; Kuusik, Alar; Rostovski, Jakob; Alam, Muhammad Mahtab 2024

https://patentscope2.wipo.int/search/ar/detail.jsf;jsessionid=4F73F7EDD8684B2050668D97A6E3E4BC?docId=WO2024257016&_cid=JP2-M52SGO-27841-1

Model checking for planning resource-sharing production

Vain, Jüri; Otto, Tauno; Kuusik, Alar Proceedings 20th International Conference on CAD/CAM, Robotics and Factories of the Future : July 21, 22 and 23, 2004, San Cristobal - Venezuela 2004 / p. 151-158 https://www.academia.edu/17640325/Model_Checking_for_Planning_Resource_Sharing_Production

Model-based analysis of secure and patient-dependent pacemaker monitoring system

Tsiopoulos, Leonidas; Kuusik, Alar; Vain, Jüri; Bahsi, Hayrettdin Body Area Networks. Smart IoT and Big Data for Intelligent Health : 15th EAI International Conference, BODYNETS 2020, Tallinn, Estonia, October 21, 2020 : proceedings 2020 / p. 77-91 https://doi.org/10.1007/978-3-030-64991-3_6 [Journal metrics at scopus](#) [Article at Scopus](#)

A modular 6LoWPAN-based wireless sensor body area network for health-monitoring applications

Le Moullec, Yannick; Lecat, Yoann; Annus, Paul; Land, Raul; Kuusik, Alar; Reidla, Marko; Hollstein, Thomas; Reinsalu, Uljana; Tammemäe, Kalle; Ruberg, Priit APSIPA ASC 2014 : Asia-Pacific Signal and Information Processing Association Annual Summit and Conference 2014 : December 9-12, 2014, Siem Reap, city of Angkor Wat, Cambodia 2014 / [4] p. : ill

Monitoring and control of smart urban drainage systems using NB-IoT cellular sensor networks

Roosipuu, Priit; Annus, Ivar; Kuusik, Alar; Kändler, Nils; Alam, Muhammad Mahtab Water science & technology Water science and technology 2023 / p. 339-354 <https://doi.org/10.2166/wst.2023.222> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Narrowband internet of things (NBIIoT) for industrial automation

Malik, Hassan; Alam, Muhammad Mahtab; Kuusik, Alar; Le Moullec, Yannick; Päränd, Sven Wireless automation as an enabler for the next industrial revolution 2020 / p. 65-87 <https://doi.org/10.1002/9781119552635.ch4>

NarrowBand-IoT performance analysis for healthcare applications

Malik, Hassan; Alam, Muhammad Mahtab; Le Moullec, Yannick; Kuusik, Alar Procedia computer science 2018 / p. 1077–1083 <https://doi.org/10.1016/j.procs.2018.04.156> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

NB-IoT network field trial : indoor, outdoor and underground coverage campaign

Malik, Hassan; Khan, Sikandar Muhammad Zulfarnain; Sarmiento, Jeffrey Leonel Redondo; Kuusik, Alar; Alam, Muhammad Mahtab; Le Moullec, Yannick; Päränd, Sven IWCMC 2019 : 15th International Wireless Communications & Mobile Computing Conference (IWCMC), June 24–28, 2019, Tangier, Morocco 2019 / p. 537-542 : ill <https://doi.org/10.1109/IWCMC.2019.8766568>

Neural networks based system for the supervision of therapeutic exercises

Nömm, Sven; Kuusik, Alar; Ovsjanski, Sergei; Malmberg, Ines; **Parve, Marko;** Orunurm, Lii Neural information processing : 19th International Conference, ICONIP 2012, Doha, Qatar, November 12-15, 2012 : proceedings. Part IV 2012 / p. 364-371 : ill https://link.springer.com/chapter/10.1007/978-3-642-34478-7_45

New synchronous measurement technique for intracardiac impedance analysis

Kuusik, Alar; Land, Raul; Min, Mart; Parve, Toomas International journal of bioelectromagnetism 2003 / 1, Advances in Electrocardiology : proceedings of the XXX International Congress of Electrocardiology : ICE2003 : June 11-14, 2003, Helsinki, Finland, p. 23-24

Novel real-time in-step gait anomaly detection algorithms

Rostovski, Jakob; Krivošei, Andrei; Kuusik, Alar; Le Moullec, Yannick; Alam, Muhammad Mahtab techrxiv.org 2024 <https://doi.org/10.36227/techrxiv.171173236.66440239/v1>

Performance comparison of smartphones and a wearable motion sensor for patient m-assessment [Online resource]

Kask, Triin; Kuusik, Alar BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600973>

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 (SEMAPRO 2009) : Sliema, Malta, October 2009 2009 / p. 50-55 <https://ieeexplore.ieee.org/document/5291537>

Prototyping of a machine learning based auxiliary neurostimulation system

Grigorjev, Nikolai; Le Moullec, Yannick; Kuusik, Alar 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 l. <https://doi.org/10.1109/BEC56180.2022.9935607>

Radio resource management scheme in NB-IoT systems

Malik, Hassan; Pervaiz, Haris; Alam, Muhammad Mahtab; Le Moullec, Yannick; Kuusik, Alar; Imran, Muhammad Ali IEEE Access 2018 / p. 15051-15064 : ill <https://doi.org/10.1109/ACCESS.2018.2812299> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Real-time data streaming for functionally improved eHealth solutions

Reilent, Enar; Kuusik, Alar; Paju, Madis Proceedings : IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI 2012) in conjunction with the 8th International Symposium on Medical Devices and Biosensors and the 7th International Symposium on Biomedical and Health Engineering "Global Grand Challenge of Health Informatics" : January 2-7, 2012, Hong Kong and Shenzhen, China 2012 / p. 140-143 : ill <https://ieeexplore.ieee.org/document/6211528>

Real-time gait anomaly detection using 1D-CNN and LSTM

Rostovski, Jakob; Ahmadilivani, Mohammad Hasan; Krivošei, Andrei; Kuusik, Alar; Alam, Muhammad Mahtab Digital Health and Wireless Solutions : First Nordic Conference, NCDHWS 2024, Oulu, Finland, May 7–8, 2024 : Proceedings, Part II 2024 / p. 260-278 https://doi.org/10.1007/978-3-031-59091-7_17 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Real-time gait anomaly detection using SVM time series classification

Rostovski, Jakob; Krivošei, Andrei; Kuusik, Alar; Alam, Muhammad Mahtab; Ahmadov, Ulvi 2023 International Wireless Communications and Mobile Computing (IWCMC) 2023 / p. 1389-1394 <https://doi.org/10.1109/IWCMC58020.2023.10182666>

RFID rack assembly development for mobile platform

Randmaa, Merili; Otto, Tauno; Kuusik, Alar Annals of DAAAM for 2009 & proceedings of the 20th International DAAAM Symposium "Intelligent Manufacturing & Automation : Focus on Theory, Practice and Education" : 25-28th November 2009, Vienna, Austria 2009 / p. 1697-1698 : ill

RFID-based communications for a self-organizing robot swarm

Tammet, Tanel; Vain, Jüri; Puusepp, Andres; Reilent, Enar; Kuusik, Alar SASO 2008 : Second IEEE International Conference on Self-Adaptive and Self-Organizing Systems : 20-24 October, 2008, Venice, Italy : proceedings 2008 / p. 45-54 <https://ieeexplore.ieee.org/document/4663409>

RFID-based knowledge space for service robot swarms [Electronic resource]

Tammet, Tanel; Vain, Jüri; Kuusik, Alar Proceedings of the 3rd COE Workshop on Human Adaptive Mechatronics (HAM) : 3-4 March 2006, Tokyo Denki University, Japan 2006 / [6] p. [CD-ROM]

Safety verification of degrading mechatronic systems

Vain, Jüri; Kuusik, Alar; Kaljas, Frid The Fourth International Conference on Machine Automation : Human-Friendly Reliable

Scheme development for specification hybrid components of control systems

Vain, Jüri; Kuusik, Alar; Kääramees, Marko CAX Techniques : proceedings of the 4th International Scientific Colloquium : Bielefeld, Germany, September 13-15, 1999 1999 / p. 483-491

Self-aware fog computing in private and secure spheres

Tammemäe, Kalle; Jantsch, Axel; Kuusik, Alar; Preden, Jürjo-Sören; Õunapuu, Enn Fog computing in the internet of things : intelligence at the edge 2018 / p. 71-99 : ill http://www.ester.ee/record=b4692402*est https://doi.org/10.1007/978-3-319-57639-8_5

Semantic formal reasoning solution for personalized home telecare

Kuusik, Alar; Reilent, Enar; Lööbas, Ivor; Parve, Marko Proceedings of 2010 International Conference on Mechanical and Electrical Technology (ICMET 2010) : Singapore, September 10-12, 2010 2010 / p. 72-76 <https://ieeexplore.ieee.org/document/5598496>

Sensortehnoloogia põhised kiibid on Eesti võimalus : Alar Kuusik: „Ootan väga, et ühiskonnas tuleks tagasi vastuvõtlikkus uutele, ka radikaalsetele lahendustele ja reformidele.“

Kuusik, Alar sirp.ee 2025 <https://www.sirp.ee/sensortehnoloogia-pohised-kiibid-on-est-voimalus/>

Smart house

Kuusik, Alar Integrated systems and design : interstudy, May 9, 2008 2008 / p. 65-72

Smart, wireless modular communication platform

Ruberg, Priit; Hollstein, Thomas; Reinsalu, Uljana; Tammemäe, Kalle; Le Moullec, Yannick; Kuusik, Alar; Reidla, Marko; Annus, Paul Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 111-112 : ill

SMARTMUSEUM : cultural content recommendation system for mobile users

Kuusik, Alar; Roche, Sylvain; Weis, Frederic Proceedings Fourth International Conference on Computer Sciences and Convergence Information Technology : ICCIT 2009 : Seoul, Korea, 24-26 November 2009 2009 / p. 447-452 <https://ieeexplore.ieee.org/document/5367887>

SOC at smart home realizations

Kuusik, Alar Raadiotehnika 2001 : VIII rahvusvahelise telekommunikatsioonipäeva materjalid 2001 / lk. 121-122

SoC based mobile robot telecontrol system

Kuusik, Alar BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 153-154 : ill

Software architecture for modern telehealth care systems

Kuusik, Alar; Reilent, Enar; Lööbas, Ivor; Parve, Marko Advances on information sciences and service sciences 2011 / p. 141-151

Software architecture for modern telehome care systems

Kuusik, Alar; Reilent, Enar; Lööbas, Ivor; Parve, Marko Proceedings of the 6th International Conference on Networked Computing (INC 2010) : Gyeongju, Korea, May 11-13, 2010 2010 / p. 326-331 : ill <https://ieeexplore.ieee.org/document/5484807>

Software architecture for swarm mobile robots

Vain, Jüri; Tammet, Tanel; Kuusik, Alar; Reilent, Enar 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. 231-234 : ill

Some signal processing ideas for ultrasound motion detectors

Kuusik, Alar BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 313-314: ill

Specification of hybrid components of control systems

Vain, Jüri; Kuusik, Alar; Kääramees, Marko Preprints of the 5th IFAC Workshop on Intelligent Manufacturing Systems IMS'98, November 9-11 1998, Gramado - RS, Brazil 1998 / p. 83-88: ill <https://www.sciencedirect.com/science/article/pii/S147466701741007X>

A survey on the roles of communication technologies in IoT-based personalized healthcare applications

Alam, Muhammad Mahtab; Malik, Hassan; Khan, Muhidul Islam; Pardy, Tamas; Kuusik, Alar; Le Moullec, Yannick IEEE Access 2018 / p. 36611-36631 : ill <https://doi.org/10.1109/ACCESS.2018.2853148> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

SVM Time series classification of selected gait abnormalities

Rostovski, Jakob; Krivoše, Andrei; Kuusik, Alar; Ahmadov, Ulvi BODYNETS 2021: Body Area Networks. Smart IoT and Big Data for Intelligent Health Management : 16th EAI International Conference, BODYNETS 2021, Virtual Event, October 25-26, 2021 :

Süvatehnoloogiate alternatiivsed arengutrajektoolid ja nende tähendus Eestile : lõpparuanne

Koppel, Kaupo; Kuusik, Alar; Arrak, Kadri; Raik, Jaan; Niidu, Allan; Köks, Kerttu-Liis; Lahtvee, Petri-Jaan 2023
<https://media.voog.com/0000/0037/5345/files>

Synchronization algorithm for RFID-reader and its implementation

Märtens, Olev; Liimets, Aivar; Kuusik, Alar 2015 Advances in Wireless and Optical Communications RTUWO : 5-6 November 2015, Riga, Latvia : proceedings 2015 / p. 82-85 : ill <https://doi.org/10.1109/RTUWO.2015.7365725>

Synchronous detector with MOSFETs

Kuusik, Alar BEC : Baltic Electronics Conference : proceedings of the 4th Biennial Conference, October 9-14, 1994, Tallinn (Estonia). 1 1994 / p. 229-232: ill

Tehisaru - inimesed - robotid : [viienda tööstusrevolutsiooni ootel]

Alvela, Ain Tehnikamaailm 2025 / lk. 44-48 : ill https://www.ester.ee/record=b1073050*est

Toimiva digiühiskonna tagavad usaldusväärne tarkvara, turvaline riistvara ning energiasäästlikud ja nutikad asjad

Härmat, Karin Mente et Manu 2022 / lk. 32-33 https://www.ester.ee/record=b1242496*est

Towards scalable proofs of robot swarm dependability

Vain, Jüri; Tammet, Tanel; Kuusik, Alar; Juurik, Silver 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. 199-202 : ill

Ultrasound sensor in integrated presence detection system

Kuusik, Alar Telekommunikatsioon '98 : rahvusvahelise telekommunikatsioonipäeva konverentsi ettekannete materjalid, 15. mai 1998 1998 / lk. 79-83: ill

Using RFID tags for robot swarm cooperation

Tammet, Tanel; Vain, Jüri; Kuusik, Alar WSEAS transactions on systems 2006 / 5, p. 1121-1128

Wearable m-assessment system for neurological disease patients

Kuusik, Alar; Alam, Muhammad Mahtab; Kask, Triin; Gross-Paju, Katrin Proceedings : IEEE 4th World Forum on Internet of Things 2018 / p. 201-206 : ill <https://doi.org/10.1109/WF-IoT.2018.8355165>