

IEEE Information Technology and Management Science Conference 2021

October 15th, 2021

08:50 Opening

9:00-10:30 **Session 1: New Home for Computing Research at Riga Technical University, hybrid session**

Session 2: Artificial Intelligence and Analytics, online

1	Inese Polaka, Marta Padilla, Linda Mezmale, Jan Mitrovics and Marcis Leja. Class decomposition for gastric cancer detection from breath	Palak Mahajan, Namrata Karlupia, Pawanesh Abrol and Parveen Lehana. Identifying COVID-19 Pneumonia using Chest Radiography using Deep Convolutional Neural Networks
2	Sergej Jakovlev, Tomas Eglynas, Miroslav Voznak, Pavol Partila, Jaromir Tovarek, Mindaugas Jusi, Edvinas Pocevicus and Zane Purlaura. Development of an Intelligent Digital Twins Framework for Secure Container Terminal Operations	Thanasis Antamis, Charalampos-Rafail Medentzidis, Michael Skoumperdis, Thanasis Vafeiadis, Alexandros Nizamis, Dimosthenis Ioannidis and Dimitrios Tzovaras. AI-supported forecasting of intermodal freight transportation delivery time
3	Alberts Pumpurs. Analysis of Psychographic and Cognitive Human Factors for Building Personalized Product Ecosystems	Dayana Priscilla Peve Villanueva and Igor Aguilar Alonso. A chatbot as a support system for educational institutions
4	Girts Stana and Viesturs Brazis. Predicting the Financial Yield of Mobile Energy Storage Systems for Electric Public Transport	Sergey Lyshevski, Alexander Aved, Philip Philip Morrone and Erik Blasch. Probabilistic Models of Information Management in Cyber-Physical Systems
5	Evita Roponena, Jānis Kampars, Andris Gailītis and Jānis Strods. A Literature Review of Machine Learning Techniques for Cybersecurity in Data Centers	Julija Skrebeca, Paula Kalniete, Janis Goldbergs, Liene Pitkevica, Darja Tihomirova and Andrejs Romanovs. Modern development trends of chatbots using artificial intelligence (AI)
6	Jānis Pekša. Experimental Evaluation of Autonomous Open Data Prediction Framework (AODPF) (invited)	Vasily Karasev. Theoretical Foundations of Ternary Logic Application in Logical-Probabilistic Method for Assessment of Socio-Economic System Reliability

10:45-12:00 **Session 3: Machine Learning, hybrid**

Session 4: Systems, online

Session 5: Applications and Technology I, online

1	Alena Sidorova, Anton Cherenmykh, Oleg Tanfilyev and Anastasia Rusina. Application of Machine Learning Algorithms for Operational Forecasting Load Curve	Justyna Żywiołek, Joanna Rosak-Szyrocka, Izabela Jonek-Kowalska, Antonio Trigo and Michael D. Williams. Social media as an element of the company's image as a security condition in the digital world	Wojciech Wodo and Damian Stygar. PSD2 compliant hardware token for digital banking
2	Zobair Hasan, Rafiur Rahman Khan, Wazed Rifat, Dipok Sarkar Dipu, Muhammad Nazrul Islam and Iqbal H. Sarker. Development of a Predictive Analytic System for Chronic Kidney Disease using Ensemble-based Machine Learning	Heinrihs Skrodelis and Andrejs Romanovs. Cyber-physical Risk Security Framework Development in Digital Supply Chains	Gino Esaul Salguero Contreras and Igor Aguilar Alonso. Influence of the application of Sentiment Analysis as a process improvement in different sectors
3	Ahmed Ali. Hourly Photovoltaic Power Forecasting Using CNN- LSTM Hybrid Model	Diego Gonzalez-Cardenas, Marta Sylvia del Rio-Guerra, Jorge Martin-Gutierrez and Egils Ginters. Determining the most legible and optimized font size and typography displayed in Augmented Reality for senior citizens	Sepideh Kalateh, Luis A Estrada-Jimenez, Terrin Pulikottil, Sanaz Nikghadam Hojjati and Jose Barata. Feeling Smart Industry
4	Firuz Khafizov, Aleksejs Jurenoks and Tahmina Saidova. Overview of Big Data and Application in Aviation Sector	Gilberto Marzano. Can a machine be creative?	Ahmed Ali. Deep Learning Method for Detecting Fraudulent Motor Insurance Claims Using Unbalanced Data
5	Oleg Uzhga-Rebrov and Peter Grabusts. Comparative Evaluation of Four Methods for Exploratory Data Analysis	Liva Deksnē, Jānis Vempers and Jānis Kampars. Technology Selection for Development of Intellectual Road Maintenance Platform	Balamurugan S and Naveen Kt. A guide for selecting healthcare needs from a plethora of ideas for a potentially successful startup: A Biodesign Overview

13:00-14:15 **Session 6: IT Management, online**

Session 7: Machine Learning II, online

Session 8: Applications and Technology II, online

1	Jens Mathis Rieckmann and Ruijun Xu. Competence Assessment and Agile Method for Cross-Border Cooperation: A Study of Industrial Sino-German Cooperation with Private Companies	Ndala Yves Mulongo. Artificial intelligence as key driver for competitiveness in the railway industry: review	Gulesin Das, Murat Yesilkaya, Busra Altinkaynak and Burak Birgoren. Modelling an Industrial Symbiosis Network using Bilevel Programming
2	Iryna Vakhovych, Igor Kryvovyzuk, Nadiya Kovalchuk, Iryna Kaminska, Yuliya Volynchuk and Yuliya Kulyk. Application of Information Technologies for Risk Management of Logistics Systems	Andris Potrebko and Inese Pojaka. Application of Gene Expression Programming in improving the event selection of the semi-leptonic top quark pair process	Michael Stearns and Sergey Lyshevski. Analysis of Multi-Degree-of-Freedom Inertial Sensors for Cyber-Physical Systems
3	Maksim Goman. How to improve IT risk management in standards	Mohamed Shalaby, Mohamed Hassan and Yasser Omar. Speaker Identification using Triplet Loss Function Combined with Clustering Techniques	Zachariah John Belmonte, Jeddaly Deligos, Via Nicole Jalbuna and Jhena Alliah Viray. Factors Affecting Customer Satisfaction among Filipinos in Online Grab Delivery during COVID-19 Pandemic
4	Alina Ore, Oksana Kuznecova and Anna Jegorova. Self-managed organization: a role of business process management	Pavan Gangwar, Ravi Pratap Tripathi and Ashutosh Kumar Singh. Design of Fibonacci Sequence-Based Solar Tree and Analysis the Performance Parameter of Different Phyllotaxy Pattern Based Solar Tree: An Experimental Approach	Hugo Cesar Gómez Tone, Edith Gabriela Manchego Huaquipaco and María Alejandra Calcino Cáceres. The Digital Perception of Architectural Space
5	Zachariah John Belmonte, Eugene Chris Gonzaga, Charles Bandola, Derick Hipolito and Henry Mar Rufino. Do Technological Developments Reduce Unemployment in the Philippines?	Muhammad Nazrul Islam, Nafiz Imtiaz Khan, Ayon Roy, Md Mahbubar Rahman, Md. Saddam Hossain Mukta and A. K. M. Najmul Islam. Sentiment Analysis of Bangladesh-specific COVID-19 Tweets using Deep Neural Network	Jānis Kampars, Dainis Tropins and Ralfs Matisons. A review of application layer communication protocols for the IoT edge cloud continuum

On-site presentations