all sessions of October 4th and plenary sessions of October 5th and 6th will be transmitted in Zoom:

https://rtucloud1.zoom.us/j/91523186452?pwd=WG1GT2ZTVWozT3JMWTRhZTRGSkE0UT09
Meeting ID: 915 2318 6452
Passcode: 686442

ITMS sessions of October 5th and 6th will be transmitted in Zoom separately (see links in program)

IEEE ICTfest & ITMS'2023 program

04.10.2023

9:00 – 9:30 ICTfest opening ceremony, prof. Anna Litvinenko, prof. Janis Grabis, prof. Andrejs Romanovs ***(https://events.vtools.ieee.org/m/372987***)

9:30 – 11:00 Discussion with Industry representatives on "Skills and perspectives of Post-COVID Young Professionals in the field of Information and Communication Technology" (https://events.vtools.ieee.org/m/373028)

A discussion of the Industry representatives on the skills of the next generation of young professionals in information and communication technology (ICT) field will encourage all interested to participate in whole festival program. Leading industry experts from companies and universities will present, sharing perspectives and challenges in ICT education and professional development. Together we will solve how to prepare young specialists in this rapidly changing digital environment. Representatives of Accenture, Mikrotik, TET, AirBaltic, Sadales tīkls, Lightspace Technologies companies, a representative of the professional association LIKTA and the vice-rector of RTU studies will participate in the discussion.

11:00 – 11:30 Coffee break

11:30 - 12:30 IEEE Joint Baltic Life Member Affinity Group Discussion on "IEEE's Contribution to Professional Development"

In the continuation of the IEEE day, the participants of the IEEE Joint Baltic Life Member Affinity Group will share their experience and discuss the IEEE association's contribution to professional development of young technical specialists. Experienced professionals such as Dr. Ulo Jaaksoo, Dr. Raimund Ubar, Prof. Mart Min, Prof. Jaan Jarvik from Estonia, Dr. Guntis Berzins, Dr. Imants Freibergs, Dr. Ernests Petersons from Latvia and Dr. Borisas Levitas, Dr. Irina Naidionova from Lithuania will participate in the discussion.

12:30 –13:30 Lunch Break

13:30 – 18.40 IEEE Lithuania and Latvia Sections Workshop on Microwave Devices and Systems (https://events.vtools.ieee.org/m/373030)

The IEEE Lithuania and Latvia Sections Workshop on Microwave Devices and Systems gathers Baltic experts from academia and industry to present and discuss the latest innovative solutions and research results in the development of measuring equipment and devices.

13: 30 – 14.15"***Magnetic Field Measurement in Magnetic Pulse Forming and Welding Systems***",
Voitech Stankevič [1,2], Pavel Piatrou[1], Nerija Žurauskienė[1, 2], Skirmantas Keršulis[1] -
[1]Department of Functional Materials and Electronics, Center for Physical Sciences and Technology, Sauletekio ave. 3, LT-10257 Vilnius, Lithuania,
[2]Faculty of Electronics, Vilnius Gediminas Technical University, Naugarduko 41, LT-03227 Vilnius, Lithuania
Magnetic pulse welding (MPW) is a collision welding process, which uses a high velocity impact to join the two metals. This method allows for the joining of similar and dissimilar metals without the input of external heat and without any critical formation of their intermetallic phases. Sheets, profiles, and tubes can be processed. During the MPW process the parts being welded are positioned inside a tool coil. During the fast discharge of the capacitor banks via the coil, a magnetic field is generated around the coil, which leads to eddy currents in the electrically conductive flyer part positioned in close vicinity to the coil. The eddy currents induced in the flyer create an opposite magnetic field and a repulsive Lorentz force. This force causes the flyer to quickly accelerate plastically and to impact with the inner parent at an extremely high velocity resulting in a metallic bond. One of the simplest ways of obtaining information about the electromagnetic processes which take place during MPW is to measure the waveform of the magnetic field in the gap between the coil or field shaper and the flyer. In this work, it was investigated how fast, small size CMR-B-scalar sensors could be used for the measurements of the magnetic field magnitudes in the gap between the flyer and the field shaper during MPW and how they can provide quick, non-destructive evaluations of the weld quality.
and "***Magnetic Field Dynamics During Magnetic Pulse Forming***"
Pavel Piatrou[1], Jorūnas Dobilas1, Voitech Stankevič [1,2]
[1]Department of Functional Materials and Electronics, Center for Physical Sciences and Technology, Vilnius, Lithuania,
[2]Faculty of Electronics, Vilnius Gediminas Technical University, Vilnius, Lithuania
Magnetic Pulse Forming (MPF) is an innovative and environmentally friendly method of forming metal workpieces by the controlled application of magnetic forces. To ensure the quality and accuracy of the MPF process, it is important to monitor the dynamics of the applied magnetic field magnitude in real time. Analysis of the magnetic field dynamics can provide information about the material forming process. This paper discusses the possibility of using manganite oxide-based sensors as an effective control method in the MPF process. Sensors based on manganite oxides (e.g., La1-xSrxMnO3) have a colossal magnetoresistance, their compact size allows to be placed in the gap between the workpiece and the coil, and they are ideal candidates for monitoring the dynamics of magnetic fields with a magnitude of more than 1 Tesla and a duration of tens of microseconds. Numerical modeling of the workpiece deformation process and the dynamics of the magnetic field in the gap between the workpiece and the coil are discussed.

14:15 – 14:50 "***Field hetrogenity estimatiom for sixth-order symmetrical current loop systems***",
Romans Kusnis, Janis Semenako, Anna Litvinenko, Raivis, Deksnis - Institute of Microwave Engineering and Electronics Riga Technical University Riga, Latvia

The magnetic field of symmetrical three-coil DC current loop systems is investigated. All coils are arranged in parallel with their centers aligned along the same axis. The obtained results are applicable to very low-frequency current fields. Assuming negligible cross-sections for the coils, we derive a universal solution for the magnetic field expressed in terms of elliptic integrals, with the coil radii and distances between them serving as system parameters. The commonly used design technique for coil systems that aims to provide maximally homogeneous fields relies on expanding the field generated by the coil system into a Taylor series centered at the origin. In our investigation, the coil system is oriented so that the axis connecting the coil centers corresponds to the z-axis, with the coordinate z=0 representing the center of symmetry. This orientation ensures homogeneity along the z-axis, which, in turn, guarantees a sufficient level of field uniformity in other directions around the origin.
Analytical calculations reveal that the axial component of the magnetic field along the z-axis is an odd function of z. Consequently, the Taylor series exclusively contains even-order terms. To enhance field homogeneity, several lower-order even derivatives within the series can be set to zero. For a tri-coil system, physically realizable solutions are obtained by setting the 2nd and 4th-order derivatives equal to zero, resulting in a sixth-order tri-coil system. Importantly, there exist infinitely many such solutions achieved by varying the radius of the middle coil and the distance

of the outer coils from the center. Notably, coil systems where the radius of the middle coil falls within 0.5 to 1.5 times the radius of the outer coils are particularly interesting for practical applications.
The primary focus of this research is to determine which of these coil systems offers the best field uniformity (heterogeneity). To address this, we investigate how to evaluate and compare the heterogeneity of such coil systems, despite their differing geometric dimensions and occupied volumes. Furthermore, we explore the extent to which the non-zero terms in the Taylor series impact field homogeneity. The research findings highlight the absence of universal solutions and emphasize the need for additional criteria tailored to specific applications, such as constraints on maximum radial system size or dimensions in the longitudinal direction.

14.50 - 15.25 "***Overview of in-vehicle microwave sensors***" , Dr. Eldar Sabanovic
Senior Research Fellow at Transport and Logistics Competence Centre, Faculty of Transport Engineering, Associate Professor at Department of Electronic Systems, Faculty of Electronics
Vilnius Gediminas Technical University (VILNIUS TECH)

In the rapidly evolving landscape of automotive technology, the integration of microwave sensors has emerged as a pivotal advancement, enhancing vehicle safety, performance, and user experience. This presentation provides a comprehensive overview of in-vehicle microwave sensors, elucidating their fundamental principles, diverse applications, and the transformative impact they have on modern transportation.
Microwave sensors, operating in the electromagnetic spectrum, offer unique advantages over traditional sensors, including their ability to function in adverse weather conditions, penetrate non-metallic materials, and provide high-resolution data. These attributes make them particularly suitable for automotive applications.
The overview covers these topics: Fundamentals of Microwave Sensing, Adaptive Cruise Control and Collision Avoidance, Blind Spot Detection and Lane Change Assistance, Parking Assistance and Autonomous Parking, In-Cabin Monitoring, Challenges, and Future Prospects.
In conclusion, as vehicles become increasingly autonomous and connected, the role of microwave sensors will be paramount. This overview aims to shed light on the current state of this technology and its potential to redefine the future of transportation.

15:25– 15:45 Coffee break

15:45 - 16.20 " ***Advanced techniques for Wireless power transfer***", Janis Eidaks[1] , Romans Kusnins [1], Ruslans Babajans [1] , Darja Cirjulina [1, 2] , Anna Litvinenko [1,2]
[1] Institute of Microwave Engineering and Electronics, Riga Technical University, Riga, Latvia,
[2] SpacESPro Lab, Riga Technical University Riga, Latvia

The growing number of low-power wireless devices and sensors led to the integration of the Internet of Things (IoT) and Wireless Sensor Networks (WSNs) in various branches of industry, agriculture, medicine, etc. With such wide application, the powering of the autonomous sensor nodes (SNs) poses a challenge since batteries are the most common power source of the SNs. The growing interest in overcoming this challenge was directed toward developing far field wireless power transfer (WPT). While the given powering technique is feasible, WPT performance enhancement is the main challenge. The device-level improvements focus on enhancing the performance of the WPT nodes. This includes improving the performance of the RF-DC converters, energy storage solutions, and the design of power-carrying signal waveforms. The network-level improvements are focused on incorporating and combining new technologies, such as multi-hop transfer and beamforming, to increase the performance of WPT on a network scale. The current project aims to investigate and experimentally study several innovative techniques of wireless power transfer: multi-hop energy transfer, passive beamforming using intelligent reflecting surfaces (IRSs), and application of RF powering signals adapted to the transmission channel. The research also studies the combinations of the techniques for more efficient WPT.

16.20 - 16:55 "***Open structures in electromagnetics: scientific heritage of Victor P. Shestopalov"***,
Yury Shestopalov - Faculty of Engineering and Sustainable Development, University of Gävle, Sweden.

We briefly summarize the milestones describing comprehensive scientific acitivities and results achieved by Victor P. Shestopalov and his disciples in the fields specifically connected with applications of the nonselfadjoint operator spectral theory in electromagnetics of open structures. We emphasize that his achievements paved the way to creating the modern level of the mathematical theory of wave propagation and diffraction and resulted in constructing efficient solution techniques and discovery of various phenomena and effects.

16:55 - 17.30 "***Mobile FMCW Radar Technology in cm Range***" Dr. Borisas Levitas, Michael Drozdov, Matvej Khazarov – Geozondas LTD, Lithuania.

An overview of frequency domain Software Defined Radars (SDR) was completed. The Frequency Modulated Continuous Wave (FMCW) radar with multiple receiving antennas after the initial processing (some form of Fourier transforms) creates a Range-Azimuth-Doppler 3D data array on each frame. The schemes and signal processing algorithms of SDR through wall radar developing in frame of project FRED were described. A printed Aperture Stacked Patch Antenna were calculated and simulated. 4 antenna transmitting array and 8 antenna receiving array form a 32 elements virtual array. A decade convolutional neural networks (CNN) is used to improve probability and accuracy of though wall live being target detection and localization with a minimum number of false alarms. Our goal with the CNN was to improve the performance of the proprietary FMCW radar, find a data representation that allows to conveniently store the radar data but also have an efficient data pipeline during the training phase and find a set of data augmentation strategies to avoid overfitting to the training set.

17:30 - 18.00 "***Event timer-based PPM transceiver design and implementation***", Arturs Aboltins, Tatjana Solovjova - Institute of Microwave Engineering and Electronics Riga Technical University Riga, Latvia

The employment of event timers for the demodulation of pulse position modulation (PPM) signals allows the building of data communication systems with unprecedented energy efficiency and competitive transmission speeds. PPM modulation techniques can be employed for space communications, sensor networks, high-accuracy integrated sensing and communications.
This presentation is devoted to the PPM transceiver design capable of transmitting data with a data transfer speed of up to 160 Mbit/s and energy efficiency of less than 5 pJ/bit. The transceiver employs Eventech ESTT-01 event-timer to demodulate the signal, whereas the modulation uses high-speed digital delay lines. In the first part, design decisions, main challenges and prospects of high-speed communication using PPM. are addressed. The second part analyzes the impact of optical and microwave links on the transmitted waveform, and electro-optical solutions for transmitter/receiver front-ends are proposed. It will be shown how a pulse expander could be implemented either in the optical or in the electrical domain of the PPM communication link to satisfy the requirements of the event timer for input signal duration.

18:00 – Social program – a guided tour In Old Riga town
(https://events.vtools.ieee.org/m/373039)

RTU and IEEE organized ITMS 2023
64th International Scientific Conference on Information Technology and Management Science of Riga Technical University

05.10.2023

9:00 – 10:30 Keynote speeches

Address: RTU Scientific Library, Paula Valdena Str. 5, room 2.12.
Session is transmitted in Zoom (see 1st page)

9:00 – 9:45 *Prof. Oscar Quevedo-Teruel (Sweden)* – ***A fast ray-tracing code for the simulation of lens antennas*** *(*https://events.vtools.ieee.org/m/373033)

In this talk, Prof. Quevedo-Teruel will explain the operation of a ray-tracing code that can be used to calculate in a few seconds, and extremely accurately, the radiation pattern, efficiency and gain of lens antennas. Lenses are an excellent candidate for new applications in the millimeter frequency regime, especially for antennas with low-scan losses. For example, they are being considered for antenna solutions in 5G/6G, satellite communications in Low-Earth Orbit constellations and automotive radars. However, their simulation and optimization are time-consuming due to their large dimensions in terms of wavelength. In this presentation, Prof. Quevedo-Teruel will explain the theory of ray-tracing, its features, and he will demonstrate its operation with some practical examples.

9:45-10:30 *Prof. Mike Hinchey (UK)* – ***Is There Anything That Isn't Software?*** *(*https://events.vtools.ieee.org/m/373035)

In this rapidly changing world, evolving technologies such as Artificial Intelligence, Robotics, Machine Learning, Cloud Computing, Big Data, the Internet of Things, and Mobile Computing are combining to disrupt traditional models and radically change how we live, work, and interact. More importantly, these technologies change the way we live and do business: the world's largest bookstore is a Cloud Computing provider, and the largest fleet of cars in the world is operated by an app provider. Areas such as healthcare have been transformed dramatically, with better analysis, imaging, detection, diagnosis, treatment, robot-assisted surgery, and even significant advances in sharing health records. We eagerly await the day when cars, buses, trucks, and railways are self-driven, and Industry 4.0 is already upon us, and of course we claim the use of AI in just about everything. All of these advances are entirely dependent on software. We ask the question: is there anything that isn't software?

10:30 – 11:00 Coffee break

11:00 – 12:30 ITMS session A1 (on-line). Link to Zoom: https://rtucloud1.zoom.us/j/93719604849?pwd=blZFWjgwMEp4QnE3Wml5WjJpTW85QT09 (Meeting ID: 937 1960 4849, Passcode: 426238)

Session Chair Janis Peksa

11:00-11.15 ***Smart System for Freshwater Pisciculture(Ornamental Fish Farming)***
Anjalee Waraketiya; Rumeshi Tharushika; Gayashan Kavinga Nawagamuwa; Sangeeth Shrihari; Lokesha Weerasinghe; Gaya Thamali Dassanayake

11:15-11.30 ***Enhancing Cinnamon Crop Yield Through Image Processing-Based Detection and Prevention of Pests, Diseases, and Nutrient Deficiencies***
Vihanga Pamoda Piyawardhana; Tharaka Madhuwantha; Lahiru Chandika De Silva; Mahesh Bavantha; Dharshana Kasthurirathna; Thilini Jayalath

11:30-11.45 Machine Learning Based Anomaly Detection on Streaming Event Logs of IoT Devices
Anant Tiwari; Kokila J; Abhishek Vaish
11:45-12.00 Critical Infrastructure Perspective on Digital Transformation
Arnis Daugulis
12:00-12.15 Initial Development and Performance Evaluation of a Bengali Voice-Operated Virtual Assistant for Personal Computer Control
Raven Mark Quiah; Soma Akter; Shad Ahmed; Mohammad Masudur Rahman; Sanzar A Alam; Ashraful Islam
12:15-12.30 Dimensionality Reduction for Optimization of Radio Base Station Transmission Based on Energy Efficiency
Joss Armstrong; Enda Fallon; Enda Fallon

12:30 – 13.30 Lunch Break

13:30 – 17.15 ITMS session A2 (on-line). Link to Zoom: https://rtucloud1.zoom.us/j/94088445975?pwd=ZS9kOE55NzFCUDNId1hzU0JYVlZ4QT09 (Meeting ID: 940 8844 5975, Passcode: 078973)

Session Chair Ruta Pirta-Dreimane

13:30 – 13:45 Comparing Performance of Ultrasonic Type and Magnetic Type of Flowmeters for Desalination Applications
Ahmidah Elgali
13:45 – 14:00 Heartbeat Driven Network Health Assessment
Kristaps Felzenbergs; Linas Bukauskas; Ginta Majore
14:00 – 14:15 Time-Series Forecasting: Unleashing Long-Term Dependencies With Fractionally Differenced Data
Sarit Maitra; Vivek Mishra; Sukanya Kundu; Srashti Dwivedi; Goutam Kumar Kundu
14:15 – 14:30 Impact of Mobile Applications to Improve Learning in University Students
Ronald Antonio Rodriguez-Gamarra; Hugo Eladio Chumpitaz-Caycho; Ericka Nelly Espinoza-Gamboa; Manuel Alberto Espinoza-Cruz; Franklin Cordova-Buiza, Sr.
14:30 – 14:45 Analysis of the Behavior of Company Employees as Users of Various Systems or Tools, Based on Employees Clustering With K-Means Algorithm
Pavels Garkalns; Oksana Nikiforova; Vitaly Zabiniako; Jurijs Kornienko
14:45 – 15:00 Man-In-The-Middle Attack Against a Network Control System: Practical Implementation and Detection
HamidReza Chavoshi; AmirHossein Salasi; Omid Payam; Hamid Khaloozadeh
15:00 – 15:15 Resilient Control for Cyber-Physical Systems Against Denial-Of-Service Cyber Attacks Using Kharitonov's Theorem
HamidReza Chavoshi; Ali Khoshlahjeh Sedgh; Hamid Khaloozadeh
15:15 – 15:30 Use of Business Games in the Learning Process
Janis Amolins; Sabina Katalnikova; Natalya Prokofyeva; Marina Uhanova; Viktorija Ziborova

15:30 – 16:00 Break

16:00-16:15 A Machine Vision Approach for Nitrate Sufficiency Determination in Aquaponic Lettuce via Leaf Color Recognition

Helcy de Castro Alon; Alvin Sarraga Alon

16:15-16:30 CycleGAN-Based Data Augmentation With CNN and Vision Transformers (ViT) Models for Improved Maize Leaf Disease Classification

Syed Taha Yeasin Ramadan; Tanjim Sakib; Md. Ahsan Rahat; Shakil Mosharrof

16:30-16:45 Building Robust Information Systems for Remote Sensing Data Management

Pavel Osipov; Mihails Fraimans; Mihails Kovalovs; Dmitrijs Bliznuks

16:45-17:00 Comparative Analysis of Optimization Algorithms Applied to Monkeypox Classification

Vincent Peter C Magboo; Ma Sheila A Magboo

17:00-17:15 A Comparative Overview of Local Mobile Financial Services Smartphone Apps Available in Bangladesh

J. M. Sadik-Ul Islam Smaron; Yousra Tabassum; M. m. Simoon; Zara Rahman; Lishan Rafid; Ashraful Islam

17:30 – 18.30 Guided tour to RTU campus

18:30 – 20.30 Gala Dinner in RTU (https://events.vtools.ieee.org/m/373042)

06.10.2023

Address: RTU Scientific Library, Paula Valdena Str. 5, room 2.12.

9:00 – 10:30 Keynote speeches

Address: RTU Scientific Library, Paula Valdena Str. 5, room 2.12.

Session is transmitted in Zoom (see 1st page)

9:45 – 10:30 *Prof. Izzet Kale (UK) –* ***Balanced Model Truncation and its Practical Real-World Applications*** *(https://events.vtools.ieee.org/m/373037)*

This talk will look into the theoretical foundations of Balanced Model Truncation (BMT) which has its origins in the Control Engineering literature, and cover the practical implementation steps, with a view to deploying it in real-world DSP applications.The speaker will provide a number of examples from the use of the BMT technique, in actual product design and development, from project undertaken for various sectors of industry, where the BMT technique has made a very substantial difference in system order reduction as well as complexity reduction, which resulted in substantial footprint and power reduction in the actual circuit level implementations.

9:45 – 10.30 *Prof. Alex Norta (Estonia) –* ***Global Development Trends of Blockchain*** *Technology (https://events.vtools.ieee.org/m/373038)*

The upcoming keynote presentation aims to explore the intricate relationships between Blockchain, the Internet of Things (IoT), and Security as part of the emerging machine-to-everything (M2X) economy. The talk will first introduce the challenges and opportunities in IoT with a focus on issues such as latency, lack of standards, and security concerns. It will then transition into the realm of Blockchain with a topical introduction, further elucidating its role in data integrity and secure transactions. The presentation aims to synthesize these technologies to address data communication and security challenges. Special attention will be given to real-world application cases and the most recent research results, followed by a conclusive discussion on open issues, limitations, and future work. The session promises to offer a structured insight into the effective management of IoT data communications through blockchain-centric architectures, with the goal of conveying future research directions in this topic.

10:30 – 11:00 Coffee break & Special PhD poster session

10:30-11:00 Poster Session. BICTSeMS: Big-Data-Driven Information and Communication Technology Security Management Solution
Janis Kampars; Guntis Mosans; Evita Roponena; Andris Gailitis

11:00 – 12:30 ITMS session B1. Link to Zoom: https://rtucloud1.zoom.us/j/95669668419?pwd=VGl4RmkwUXhQTnRrbWxaNjdURnpJUT09 (Meeting ID: 956 6966 8419, Passcode: 300428)

Session Chair Jelena Pecerska

11:00-11.15 Affective Multi-Agent System: Modelling and Simulation of Social and Rational Effects of Emotions
Mara Pudane
11:15-11.30 Customer-Centric Business Process Discovery Using Process Mining Techniques
Irina Sitova; Jelena Pecerska
11:30-11.45 A Cross-Company Architecture for Cyber-Physical Production Systems and Its Industrial Use
Friedrich Christian Meyer; Michael Frederik Benisch; Florian Baueregger; Armin Zimmermann
11:45-12.00 A Review for Pre-Trained Transformer-Based Time Series Forecasting Models
Yunus Emre Midilli; Sergejs Parsutins
12:00-12.15 Denoising Diffusion Algorithm for Single Image In-Plaine Super-Resolution in CBCT Scans of the Mandible
Ivars Namatevs; Kaspars Sudars; Arturs Nikulins; Anda Slaidina; Laura Neimane; Oskars Radzins, Edgars Edelmers
12:15-12.30 Machine Learning Powered Code Smell Detection as a Business Improvement Tool
Markuss Siksna; Ilze Berzina; Andrejs Romanovs

12:30 – 13.30 Lunch Break

13:30 – 15.30 ITMS session B2. Link to Zoom: https://rtucloud1.zoom.us/j/96774826849?pwd=bWcwWGgrWEhFTDVCRkk4SlF4TWNyZz09 (Meeting ID: 967 7482 6849, Passcode: 637413)

Session Chair Sergejs Parsutins

13:30-13:45 Using Convolutional Neural Networks for Music Emotion Recognition on Microcontrollers
Laima Kamzola; Alla Anohina-Naumeca
13:45-14:00 Leveraging Machine Learning for Predictive Analysis in Incomplete Data Scenarios
Ralfs Matisons; Ruta Pirta-Dreimane; Janis Grabis
14:00-14:15 An Analysis of IT Outsourcing Risks in Post-COVID World
Ilona Petersone; Elina Dovgaluka; Justine Gudzuka; Roberts Kartenko; Andrejs Romanovs
14:15-14:30 Selection of Research Approach for Development of Human Centered Intrusion Detection System
Evita Roponena; Inese Polaka; Janis Grabis

14:30-14:45 Application of the PROMETHEE Method With Missing Criteria Values
Oleg Uzhga-Rebrov; Peter Grabusts
14:45-15:00 Navigating Web Application Security: A Survey of Vulnerabilities and Detection Solutions
Heinrihs Kristians Skrodelis; Agnija Onukrane; Andrejs Romanovs
15:00-15:15 Improving Agile Teams Effectiveness Through the Metrics
Bohdan Haidabrus; Janis Grabis
15:15-15:30 Two-Way Quality of Service Policy Enforcement Methods in Dynamically Formed Overlay Virtual Private Networks
Ints Meijers

15:30 – 16:00 Coffee break

16:00 – 17:15 ITMS session B3. Link to Zoom: https://rtucloud1.zoom.us/j/98229701143?pwd=SHJxQVdERXcvU3JzL3RuUGNVajNaQT09 (Meeting ID: 982 2970 1143, Passcode: 902470)

Session Chair Inese Polaka

16:00-16:15 Approaching Automated COPD Treatment Based on Markov Decision Process
Dmitrijs Bliznuks
16:15-16:30 Comparison of IPv4 and IPv6 Forwarding Performance in Virtual and Hardware Routers
Ints Meijers
16:30-16:45 Forecasting Solar Irradiance Using Machine Learning Methods
Meerah Karunanithi; Ali Alsajed Braitea; Talha Ali Khan
16:45-17:00 An Improved Particle Swarm Optimisation Algorithm
Meerah Karunanithi; Talha Ali Khan
17:00-17:15 Performance Ratio Estimation of Solar Power Plants Using Machine Learning Algorithms
Meerah Karunanithi; Saran Jaya Thilak; Talha Ali Khan