

# ISMSIT 2023

th International Symposium on

## Multidisciplinary Studies and Innovative Technologies

October 26-28, 2023, Ankara, Turkiye

# Symposium Information

Committees Syr

Symposium Statistics

Accepted Papers

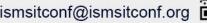
**Technical Program** 







www.ismsitconf.org **□** 





#### Welcome to ISMSIT2023

International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT) has been organized since 2017. The symposium aims to bring scientists, experts, instructors, non-governmental organizations, and private sector representatives together to share and discuss theoretical and practical knowledge in a scientific framework. In addition to cutting edge research paper presentations in engineering areas, the symposium serves as a multi-disciplinary platform for discussing current issues in the multidisciplinary studies and innovative technologies.

The technical program of ISMSIT2023 will include the presentation of invited speakers and regular sessions. ISMSIT is an international symposium organized by universities, research groups, companies, and technology groups from many other countries to communicate their research results and innovative applications.

Authors are invited to submit full papers for consideration in the symposium. All submitted papers will be double-blind peer reviewed, and evaluated based on originality, research content, correctness, relevance to the symposium, and readability. Only accepted papers will be presented and published in the conference proceedings.

The official languages of the symposium are Turkish and English. Papers in both languages are accepted.

The main topics of the congress are "Artificial Intelligence & Machine Learning", "Communication and Networking", "Computational Methods and Algorithms", "Electronic and Embedded Systems", "Information Technology", "Innovative Research and Development", "Power, Energy and Power Electronics", "Robotic, Automation and Control".

ISMSIT 2023 is technically sponsored by IEEE Turkey Section.

#### **Important Dates**

Deadline for Submission: August 1, 2023Deadline for Notification: September 15, 2023Deadline for Registration: October 1, 2023Deadline for Camera-Ready Papers: October 15, 2023Symposium Date: October 26-28, 2023

#### **Sponsors & Supporters**



### ISMSIT 2023 Invited Speakers



**Assoc. Prof. Figen S. Oktem**Middle East Technical University, Turkey

#### **Short-Bio:**

Dr. Oktem is an Associate Professor in the Department of Electrical and Electronics Engineering at Middle East Technical University (METU) and the principal investigator of the Signal Processing And Computational sensing (SPACE) Lab. She received the B.S. and M.S. degrees in electrical and electronics engineering from Bilkent University, Ankara, Turkey, in 2007 and 2009, respectively, and the Ph.D. degree

in electrical and computer engineering from the University of Illinois at Urbana-Champaign (UIUC), IL, USA, in 2014. At UIUC, she was selected to the "List of Teachers Ranked as Excellent by Their Students", and was a recipient of the Professor Kung Chie Yeh Endowed Fellowship from the Department of Electrical and Computer Engineering in 2012, and a NASA Earth and Space Science Fellowship from 2012 to 2014. Before joining METU, she was a Post-Doctoral Research Associate at the NASA Goddard Space Flight Center, where she worked on the development of novel spectral imaging techniques for high-resolution solar imaging. Her general research area is signal and image processing, with a particular focus on the development of next-generation imaging and sensing technologies for emerging scientific and commercial applications in physical and life sciences, and the characterization of the capabilities brought by these cyber-physical systems. Her research spans the areas of computational imaging, inverse problems, statistical signal and image processing, machine learning, compressed sensing, and optical information processing. She is a member of the IEEE and Optica.



Assoc. Prof. Muzaffer Kanaan Erciyes University, Turkey

Title: "Tentative Title: Where is that Capsule? Advances in Localization for Robotic Capsule Endoscopes"

#### **Short-Bio:**

Muzaffer Kanaan is an Associate Professor of Mechatronics Engineering at Erciyes University, where he has been a member of the faculty since 2009. He obtained his B.S. degree from the Eastern

Mediterranean University (Famagusta, North Cyprus) in 1994, M.S. degree from the New Jersey Institute of Technology in 1996, and the Ph.D. degree from the Worcester Polytechnic Institute in 2008, all in Electrical and Computer Engineering. From 1997 to 2008, he was with Verizon Laboratories (Waltham, Massachusetts, USA), where he was involved in various research and development projects in the area of wireless and fiber-optic communications, resulting in five granted US patents with another three pending. His research interests are mainly in the areas of wireless capsule endoscopy, wearable technologies, and application of wireless communication technology for health and wellness.



**Dr. Jamshed Iqbal**University of Hull, UK

#### **Short-Bio:**

Dr. Iqbal is an academically sophisticated professional with pioneering career reflecting strong technical expertise flavored with intensive professional teaching and industrial research experience of over two decades. Currently, he is looking after Mechatronics and Robotics programme. His research interests include Robotics, Mechatronics and Control Systems.



**Assoc. Prof. Tolga Çukur** Bilkent University, Turkey

#### **Short-Bio:**

Dr. Çukur received his B.S. degree from Bilkent University in 2003, and his Ph.D. degree from Stanford University in 2009, both in Electrical Engineering. He was a postdoctoral fellow at Helen Wills Neuroscience Institute at University of California, Berkeley till 2013. Currently, he is an Associate Professor in the Department of Electrical and Electronics Engineering, UMRAM, and Neuroscience Program at

Bilkent University. His lab develops computational imaging methods for understanding the anatomy and function of biological systems in normal and disease states. He is the recipient of TUBITAK Career Award (2015), TUBA-GEBIP Outstanding Young Scientist Award (2015), BAGEP Young Scientist Award (2017), IEEE Turkey Research Encouragement Award (2017), Science Heroes Association Young Scientist of the Year Award (2017), METU Prof. Dr. Mustafa Parlar Foundation Research Incentive Award (2019), TUSEB Research Encouragement Award (2021), and he is a senior member of IEEE (2017).



**Dr. Parvaneh Esmaili**Cyprus International University

Title: "Deep Learning based classification methods on EEG signals"

#### **Short-Bio:**

Parvaneh Esmaili is currently Lecturer in Computer Engineering Department at Cyprus International University. Prior to her recent appointment at the CIU, she was a lecturer in Electric-Electronic

Department at Near East University and Computer Engineering Department at Girne American University. Dr. Parvaneh Esmaili received her undergraduate in Software Engineering from IRAN AZAD University as well as her master's degree in Hardware Engineering from the same University and her P.hD in Computer Science at University Teknologi Malaysia in Synchronize control of multiple robot manipulators. Dr. Parvaneh Esmaili published a number of papers in preferred Journals and chapters in books. Also. she presented various academic as well as research-based papers at several national and international conferences. Her current research is on the Deep Learning based classification methods on signals such as EEG signals.

#### ISMSIT 2023

#### **Committees**

#### Symposium Chair

Ebubekir Yaşar, Tokat Gaziosmanpaşa University, Turkey

#### **Technical Program Chairs**

Turgut Özseven, Tokat Gaziosmanpaşa University, Turkey Cem Emeksiz, Tokat Gaziosmanpaşa University, Turkey

#### **Advisory Committees**

- » Can Eyüpoğlu, National Defense University, Turkey
- » Mehmet Emir Köksal, Ondokuz Mayis University, Turkey
- » Muharrem Düğenci, Karabük University, Turkey
- » Shahnaz N. Shahbazova, Azerbaijan Tecchnical University, Azerbaijan
- » Şahin Yıldırım, Erciyes University, Turkey
- » Şeyda Eyüpoğlu, İstanbul University-Cerrahpasa, Turkey

#### **Technical Program Committee Members**

- » Abdullah Başçi, Atatürk University, Turkey
- » Abdurrahman Ünsal, Dumlupınar University, Turkey
- » Ahmet Altuncu, Dumlupınar University, Turkey
- » Ahmet Özek, Pamukkale University, Turkey
- » Ali Akdağlı, Mersin University, Turkey
- » Atakan Aksoy, Karadeniz Teknik University, Turkey
- » Başak Mesci Oktay, Ondokuz Mayıs University, Turkey
- » Bülent Turan, Tokat Gaziosmanpaşa University, Turkey
- » Cengiz Güngör, Tokat Gaziosmanpaşa University, Turkey
- » Cengiz Taplamacıoğlu, Gazi University, Turkey
- » Ceyhun Karpuz, Pamukkale University, Turkey
- » Chun-Wei Tung, Kaohsiung Medical University, Taiwan
- » Cuma Bindal, Sakarya University, Turkey
- » Esen Dağaşan Bulucu, Erciyes University, Turkey
- » Fa'eq Radwan, Near East University, Cyprus
- » Fatma Kandemirli, Kastamonu University, Turkey
- » Gülfem Binal, Bartın University, Turkey
- » Hao Wu, Maynooth University, Ireland
- » Hediye Aydın, Dumlupınar University, Turkey
- » Indubhushan Patnaikuni, RMIT University, Australia
- » İlker Yıldız, Abant İzzet Baysal University, Turkey
- » Istvan Haber, University of Pécs, Hungary
- » Ivan Ganchev, University of Limerick, Ireland / University of Plovdiv
- "Paisii Hilendarski", Bulgaria
- » José Carlos M. M. Metrôlho, Instituto Politécnico de Castelo Branco, Portugal
- » Kamil Dimililer, Near East University, Cyprus
- » Kenan Zengin, Gaziosmanpaşa University, Turkey
- » Ljiljana Trajkovic, Simon Fraser University, Canada
- » Lucian N. Vintan, University of Sibiu , Romania
- » Mahir Kaya, Tokat Gaziosmanpaşa University, Turkey

- » Manuel G. Gericota, Polytechnic of Porto, Portugal
- » Mariana Petrova, St.Cyril and St.Methodius University of Veliko Tarnovo, Bulgaria
  - » Matteo Gaeta, University of Salerno, Italy
  - » Mete Çelik, Erciyes University, Turkey
- » Mithat Şimşek, Tokat Gaziosmanpaşa University, Turkey
- » Mohd Asyraf Kassim, Universiti Sains Malaysia, Malaysia
- » Nehir Tokgöz, Osmaniye Korkut Ata University, Turkey
- » Nesrin Aydın Atasoy, Karabük University, Turkey
- » Nur Syazreen Ahmad, Universiti Sains Malaysia, Malaysia
- » Nuray Emin, Kastamonu University, Turkey
- » Nursal Arıcı, Gazi University, Turkey
- » Patrick Goh Kuan Lye, Universiti Sains Malaysia, Malaysia
- » Recep Özdağ, Yüzüncü Yıl University, Turkey
- » Ricardo Branco, University of Coimbra, Portugal
- » Rui L. Reis, University of Minho, Portugal
- » Ryszard Pukala, PWSTE, Poland
- » Saadeen Rashid Ahmed, Tikrit University, Iraq
- » Selami Beyhan, Pamukkale University, Turkey
- » Sinan Kıvrak, Ankara Yıldırım Beyazıt University, Turkey
- » Sinem Çevik, Ondokuz Mayıs University, Turkey
- » Sos Agaian, The University of Texas at San Antonio, USA
- » Tayfun Dede, Karadeniz Teknik University, Turkey
- » Uğur Fidan, Afyon Kocatepe University, Turkey
- » Yahya Altunpak, Abant İzzet Baysal University, Turkey
- » Yasemin Çetin Kaya, Gaziosmanpaşa University, Turkey
- » Yasin Kanbur, Karabük University, Turkey
- » Yasin Sarıkavak, Ankara Yıldırım Beyazıt University, Turkey
- » Zafer Dogan, Tokat Gaziosmanpaşa University, Turkey

#### **Paper Submission Policies**

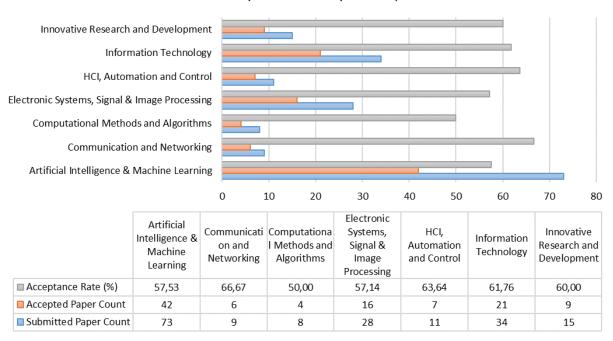
#### Paper Process

- Papers must be prepared at the highest level of quality.
- Papers have a maximum page limit of 6 pages including references, graphs and figures. If they exceed 6
  pages, author must pay extra fee.
- Since the acceptance rate will be kept below 60%, priority will be given to papers with high review scores.
- A speaker can present a maximum of 3 papers. An author's name can be included on maximum 5 papers.
- Plagiarism Rate: 20% without references, 30% with references at most
- Review: Double-blind / at least 3 reviewers per paper

### ISMSIT 2023 Symposium Statistics

#### **Submissions By Topics**

#### Acceptance Rate (58.99%)

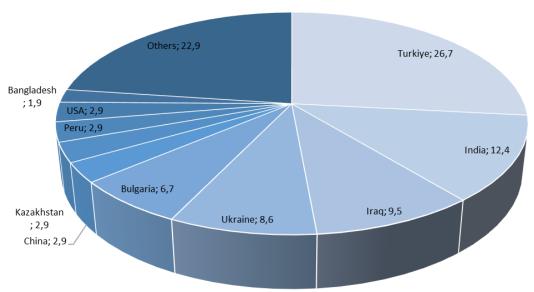


#### **Top 10 Countries**

■ Accepted Paper Count

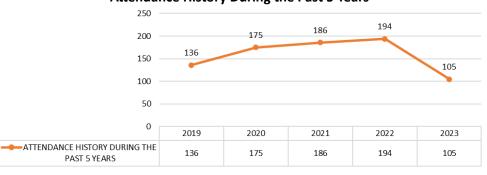
Submitted Paper Count

■ Acceptance Rate (%)



Bangladesh, Belarus, Bulgaria, China, Croatia, Cyprus, Germany, Greece, India, Indonesia, Iraq, Kazakhstan, New Zealand, North Macedonia, Norway, Oman, Pakistan, Peru, Romania, Saudi Arabia, Sri Lanka, Tunisia, Turkiye, UAE, UK, Ukraine, USA

#### **Attendance History During the Past 5 Years**



### ISMSIT 2023 Accepted Papers

Title	Author(s)
An Analysis System of Fault Diagnosis and Classification in Electrical Energy System Distribution Networks based on Convolutional Neural Network	Saja Jawad Kadhum Kadhum, Abdullahi Abdu Ibrahim
Sentiment Analysis Using Machine Learning Techniques on IMDB Dataset Perceived Risk and Intelligent Investment Advisor Technology Adoption: A UTAUT	Selen Nazlı Başa, Muhammet Sinan Başraslan
Perspective	Wenyu Wang, Wenyu Ma
Geolocation and Virtual Reality to Streamline The Management of Hydrographic Basins of The Regional Agriculture Management of La Libertad - Peru	Isac Daniel Miñano Corro , Waldir Carlos Sanchez Peralta, Luis Antonio Orbegoso Moreno, Jose Luis Ruiz Rodriguez, Jose María Pasco Sanchez, Edgar David Valverde Ramirez
Survey of the Importance of Implementing Blockchain Technology to Support Supply-Chain Management for Identifying and Tracking Counterfeit Products	Abdulrahman Almuhaidib, Sunday Olatunji, Abdulmajed Aldulaijan
Improving Text-to-Speech Systems through Preprocessing and Postprocessing Applications	Saadin Oyucu, Ferdi Dogan
A Multidisciplinary In-depth Systemic Analysis to Support European Green Deal Halving Pesticides Use and Loss of Nutrients: A Greek Case study	Eleftheria-Maria Pechlivani, Anastasia Kapetanakou, Sofia Faliagka, Nikolaos Giakoumoglou, Fotini Salta, Nikolaos Katsoulas
Automation İn Vehicle Tracking Through RFID & Bar Code System	Vinay Kumar Garg , Sunny Singh, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan
Electronic Equipment Waste Generated by Computers and its Effect on Public Health in India	Sanjana Dewangan, Prashant Mundeja, Bhagyashree Deshpande, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha
Autonomic Computing Based Respiratory Disorders Assessment using Speech Parameters: A Systematic Review	Poonam Shrivastava, Neeta Tripathi, Bhupesh Kumar Dewangan, Bikesh Kumar Singh, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan
Empowering Hepatitis Diagnosis using RFE Feature Selection	Ravi Kumar Sachdeva, Kritya Deo Singh, Priyanka Bathla, Anurag Jain, Tanupriya Choudhury, Ketan Kotecha
ML-Based Feature Selection Technique for Imbalanced Data Streams	Ayushi Pillai, Monika Arya, Sumit Kumar Sar, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan
Heart Disease Prediction Using Bayesian Optimized Classification Algorithms	Pooja Rani, Rohit Lamba, Ravi Kumar Sachdeva, Anurag Jain, Tanupriya Choudhury, Ketan Kotecha
An adaptive streaming feature selection technique for classifying non-stationary data streams	Monika Arya, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan, Akhilesh Gaidhane
Design of a Neural Helmet for the Treatment of People With Dementia	Alexis Esteban Camarena Ramirez, Katherine Lucero Cardenas Aliaga, Leonardo Jhoan Rodriguez Revoredo , Melva Iparraguirre Meza , Jenny Mendoza- Vilcahuaman , Mildred Condor-Privat, Sario Angel Chamorro Quijano
Design of an Automatic Monitoring System for People with Dementia with an IOT control	Piero André Chávez Gavino , Yofre Brayan Poma Chuquillanqui , Jean Pol Daniel Allca Sabuco, Jesus Ananias Arteaga Ortega , Melva Iparraguirre Meza , Jenny Mendoza-Vilcahuaman, Mildred Condor-Privat, Sario Angel Chamorro Quijano
Prediction Network Downtime Values Using Bayesian Non- Negative Matrix Factorization	Ezgi Bingöl
Plazma Ark Kesme Yönteminde İşleme Parametrelerinin Dairesellik Toleransına Etkileri	Şerafettin Hırtıslı, Oğuz Erdem
Advancements and Challenges in Networking Technologies: A Comprehensive Survey  Experimental and Numerical Evaluation of Models for Metallic Honeycomb Sandwich Structures	Mustafa A. Shihab, Salma Abdullah Aswad, Rawshan Nuree Othman, Saadaldeen Rashid Ahmed Ali Mohammed Hussien, Sewara Mohsin Mahealdeen Shekhan, Asmaa Mehasn Abreesm
A Comparative Study on Feature Descriptors in the Visual Odometry Stack for State Estimation	Erdem Arslan, Mohamed Gbreel
Optimization-Based Feature Selection in Deep Learning Methods for Monkeypox Skin Lesion Detection	Ahmet Ciran, Erdal Özbay
Information Security: A Review on Steganography with Cryptography for Genetic Algorithm (GA) Transaction	Shihab A. Shawkat, Najiba Tagougui, Monji Kherallah
Smart System to Optimize Organic Crop Rotation Using Precision Agriculture Data	Danushka Ranasinghe, Upendra Ihalagedara, Anjana Samarakoon, Madusanka Waththaladeniya, Udara Samaratunge, Nuwan Kodagoda

A Bibliometric Analysis of Cloud Computing and Business Intelligence	Mert Durgut, Kutan Koruyan, Cigdem Tarhan
Design of a Smart System for Street Light Monitoring and Control	Nikolay Valov, Martin Deyanov, Stoyan Nyagolov, Irena Valova, Donka Ivanova, Tsvetelina Mladenova, Orlin Petrov, Vladimir Tsanknov
Diagnosing Chest X-Ray Images of Unseen Style Using Transfer Learning	Mohammad Marufur Rahman, Md. Ariful Islam Evan, Shahabaj Tamjid, Tanaji Chowdhury
Non-invasive mHealth Application for Detecting Anemia from Conjunctiva Images	Mohammad Marufur Rahman, Omar Faruk Tasnim, Syed Shah Asheq Ullah, Md. Johurul Alam, Shah Md. Safi Sadman
Liquid Level Controlling Using the Intelligent Techniques	Qahtan Jawad, Rafid Mohammed, Ali Hadi, Imad Kheioon
A Review on Secure Authentication Protocols in IOV: Algorithms, Protocols, and Comparisons	Ahmed Aljumaili, Hafedh Trabelsi, Wassim Jerbi
Computer-Mathematical Modeling of The Influence of The Macro-Environment on The Economic Behavior of The Enterprise	Olena Rayevnyeva, Olha Brovko, Su Rui
Channel Hopping Steganography For Color Images	Yusuf Şanlı, Mahmut Kılıçaslan, Recep Demirci
Comparison and Failure Analysis of Solid and Hollow Compression Helical Spring By FEA	Mohannad Aziz Kadhom, Maher Rehaif Khudhair, Faeq Hamid Gburi, Zaid M. H. Al-Dulaimi, Farah Kamil, Areej Ghazi Abdulshaheed
Virtual Patient in Medical Education	Mohammad Nasfikur Rahman Khan, Faysal Ahmed, Md Khizir Al Zabir, Kari J Lippert
Development of a sociocyberphysical systems cyber threats classifier	Serhii Yevseiev, Pierre Murr, Stanislav Milevskyi, Olha Korol, Marharyta Melnyk
Assessing the Economic and Technical Effectiveness of Intercepting UAVs using Alternative Methods	Serhii Pohasii, Maryna Mashchenko, Olena Serhiienko, Olena Klimenko, Tetiana Andriushchenko, Tetiana Milevska
Comprehensive Review of Benefits from the Use of Neuron Connection Pruning Techniques during the Training Process of Artificial Neural Networks in Reinforcement Learning: Experimental Simulations in Atari Games	Martin Kaloev, Georgi Krastev
Computer-mathematical support for analysis of stability of the interrelation between macroeconomic financial indicators and migration	Olena Rayevnyeva, Kostyantyn Stryzhychenko, Olha Brovko
Method for Assessing Meter Error Characteristics of Random Signals	Sergey Herasimov, Andrii Tkachov, Viacheslav Soroka, Serhii Yevseiev, Tetiana Milevska, Sergii Dunaiev
Security Models And Methods Of Socio-Cyberphysical Systems	Aleksandr Serkov, Alla Jammine, Dmytro Kudii, Nataliia Dzheniuk, Nait-Abdesselam Farid, Bogdan Lazurenko
Personality-based Hybrid Machine Learning Model for Mentor-Mentee Matching using Collaborative and Content Filtering Methods	Jitty Varghese, Mahsa Mohaghegh
Technical Analysis of Stock Market Trends using LSTM for Price Prognosis	Nilima Zade, Om Om Mengshetti, Gayatri Joshi, Siddhanth Mutha, Kanishk Gupta, R Kamatchi Iyer
Preparation of ZnO Thin Film for Gas Sensors Using Spray Pyrolysis Technique	Mithal Abdulhadi, Saif Al-jumaili, Osman Nuri Uçan
FPGA based Secure Channel Design in Power Distribution Systems	Mohamed Asan Basiri M, Chitturi Kesava Jaya Ram
Sociocyberphysical Security Systems Synthesis Models	Nataliia Dzheniuk, Stanislav Milevskyi, Bogdan Lazurenko, Aleksandr Serkov, Andrii Zakharzhevskyi
Clinically Significant Prostate Cancer Classification using Anatomical T2W MRI Sequences and Deep Learning	William Olurotimi Falana, Ali Serener, Sertan Serte
Deep Learning for Comparative Study of Ovarian Cancer Detection on Histopathological Images	William Olurotimi Falana, Ali Serener, Sertan Serte
Blockchain Application in The Waste Trading	Anita Hidayati, lan Dana, Iklima Ismail
UAV bioacoustic monitoring for bird survey	Michael Clayton, Lin Wang
Embroidered Patches for Seamlessly Embedding Sensors in Smart Textiles	Daniela Sofronova, Radostina Angelova
Comparing The Fine-Tuning and Performance of Whisper Pre-Trained Models for Turkish Speech Recognition Task	Saadin Oyucu
Selection of Outsource Security Guard using Multi-Objective Optimization Ratio Analysis Method	Mochamad Rafly Aditya Firmansyah, Iklima Ermis Ismail, Anita Hidayati
Facial Features Recognition Based on their Shape and Color using YOLOv8	Dhufr Al-Obidi, Seydi Kacmaz
Application of Finite Partially Ordered Sets in the Determination of Production Chain Planning Strategy	Valentyn Sobchuk, Oleksandr Laptiev, Iryna Tsyganivska, Viktor Zhuravlev
Enhancing Resilience in Interconnected Cyber-Physical Power Networks	Veselin Chobanov
Relative Concepts of Group Z_e on Sum Graph with some Topological Indices	Anas A. Hijab, Mahera R. Qasem, Hashmia A. Ajaj
Historiographical Study of the Evolution of the Geocoding Systems with Equiangular Tessellation	Pavel Petrov, Radka Nacheva, Jordan Jordanov, Georgi Dimitrov, Oleksii Bychkov, Volodymyr Petrivskyi

STUDY AND ANALYSIS OF PV SYSTEM BEHAVIOR DURING DISTURBANCES	Ramzi Qasim Mohammed, Kevork Mardikyan,
Successful Delivery using Stable Multi-Hop Clustering Protocol for Energy Efficient	Mesut Çevik  Mustafa Maad Hamdi, Salah Ayad Jassim, Baraa Saad
Highway VANETs	Abdulhakeem
Multispecies Ensemble Architecture For Texts Authorship Classification	Ilya Trukhanovich, Anton Paramonov
Neural-based Classifier Evaluation for Maneuver Type Identification of Flying Target	Akin Ozkan, Gokhan Bircan
Clinical Informatics System to Understand Lung Cancer Using Transfer Learning- Based Computer-Aided Application	Ahed Abugabah, Atif Mehmood, Farah Shahid
Conversational AI in Academia: A Practical Exploration with ChatGPT	Elizabeth Ango Fomuso Ekellem
Functional Model of the Clinical and Hematological Syndromes Diagnosis	Saule Belginova, Indira Uvaliyeva, Aigerim Ismukhamedova
An EMG Controlled Bionic Arm with Machine Learning	Mehmet Ilker Uygun, Berk Recber, Melisa Aleyna Celikli, Yesim Oniz
Comprehensive Monitoring and Observability with Jenkins and Grafana: A Review of Integration Strategies, Best Practices, and Emerging Trends	Renuka Agrawal, Neha Chankhore, Ishan Siddiqui, Ankit Pandey, Hetang Kothadia, Saurabh Jain
Hand Recognition Solution as Conference Room Intelligent Lighting Control Technique	Abdulvahit Karail, Veysel Gökhan Böcekçi, İsmail Kıyak
Optimum Torque Distribution During Regenerative Braking in A Fully Electrical Vehicle Via Dynamic Programming	Ömer Ergün, Nurettin Okan Çaycı, Erkin Dinçmen, İlyas İstif
In-depth Study Across Various Disciplines of The Agri-food Retail Chain on Sufficient, Safe and Healthy Food	Agoustina Galitsopoulou, Eleftheria-Maria Pechlivani, Stefanos Tsachouridis, Sofia Faliagka, Nikolaos Giakoumoglou, Aggeliki Elvanidi, Nikolaos Katsoulas
Görüntü İşlemenin Çift Kullanımı	Hasan Tolga Ünal, Arif Furkan Mendi, Tunç Taner, Ömer Özkan, Mehmet Akif Nacar
A Classifier of Petri Nets for GPenSIM environment	Reggie Davidrajuh
A Comparative Study of Self-Sufficient Houses with Half-cut Solar Cells in Turkey: Antalya, Giresun Region	Nil Bağrıaçık, Hayriye Serra Altınoluk
Determining Robot Trajectory Planning using Image Processing for Wood Painting	Enez Aykut Gülırmak, Zafer Bingül
Pseudopapilledema Diagnosis Using Deep Transfer Learning Approaches	Athar Al-azzawi, Saif Al-jumaili, Adil Deniz Duru, Oguz Bayat, Sefer Kurnaz, Osman Nuri Uçan
Anomaly Detection and Security Enhancement through Machine Learning in Administrative Information Systems	Omer Fawzi Awad, Sazan Kamal Sulaiman, Ghassan Hamada Ali Alshmee
Comparative Performance Analysis of Grid-connected Microinverter and String Inverter Technologies Operated in a Snowy Region	Mehmet Ali Anadol, Burak Karaçam
The Effect of Raw Material Selection on Productivity in Assembly Apparatus and Fixture Manufacturing	Aycan Anıl
Innovating Vending Machine through Object Detection for Currency Recognition and Enhanced Cash Handling	Ahmad Farooq, Muhammad Imran
Indexed Coloring in GPenSIM for Developing Colored Petri Nets	Reggie Davidrajuh
Analysis of Data Balancing Techniques in Fraudulent Transactions Datasets	Laura-Nicoleta Ivanciu, Adelina-Veronica Dumitras, Emilia Sipos
Information Influence on the Virtual Community: Implementation Features and Method of Detection in Social Internet Services	Kateryna Molodetska, Sergiy Veretiuk, Irada Rahimova, Stanislav Milevskyi, Vladyslav Khvostenko
An Approach to Classifying Breast Density Level Using Deep Learning-Based Segmentation Model on Full-Field Digital Mammograms	Muhammet Üsame Öziç, Ayşe Sidenur Yılmaz, Halil İbrahim Sandıraz, Baihaqi Hilmi Estanto
Performance Testing of Multicast-to-Unicast Conversion Mechanism in Wi-Fi Environment	Ivan Letica, Silvio Papić, Karlo Josić
DC-DC POWER SUPPLY DESIGN WITH LT1243	Ahmet Kutay Aydoğan, Hasan Kayan, Burak Yılmaz, Zekeriya Bora Sunamak, Müslüm Cengiz Taplamacıoğlu, Şamil Tarkay
Analysis of The Machine Learning Methods Effectiveness for Morphological Classification of Anemia	Indira Uvaliyeva, Saule Belginova, David Borozenets
Surface Sampling, Vertex Manipulation and Surface Generation based on WebGL Technologies	Danail Runchevski, Ustijana Rechkoska-Shikoska, Rasim Salkoski
Enhancing Smart Grid Efficiency: A Modified ANN-LSTM Approach for Energy Storage and Distribution Optimization	Ramzi Qasim Mohammed, Mohammed Majid Abdulrazzaq, Ayoob Jasim Mohammed, Kevork Mardikyan, Mesut Çevik
Modified Active Learning Framework for Hyperspectral Image Classification with Convolutions Neural Networks.	Zainab Dheyaa, Ali Can

The Evolution of Administrative Information Systems: Assessing the Revolutionary Impact of Artificial Intelligence	Noor.Z. Mahmood, Saadaldeen Rashid Ahmed, Ali Faiek Al-Hayaly, Sameer Algburi, Jawad Rasheed
A Cross-Domain Energy Optimization Approach for End-to-End Cloud Environments	Ali Metin Balci
Synthesizing Procedural Landscape for Volcanic Eruption Simulation in Virtual Reality	Wanwan Li
Customer Lifetime Value Prediction: Using Machine Learning To Forecast CLV And Enhance Customer Relationship Management	Ankit Kumar, Kamred Udham Singh, Gaurav Kumar, Tanupriya Choudhury, Ketan Kotecha
C-QoS-AOMDV: A Cluster Based QoS Aware Multipath Routing Protocol For MANET Using Hybrid Soft Computing Techniques	Tanupriya Choudhury, Kamred Udham Singh, Ankit Kumar, Gaurav Kumar, Shilpa Gite, Ketan Kotecha
A survey of machine learning methods for diagnosing Parkinson's disease with handwriting	Turgut Özseven, Gülşen Polat
Classifying Anticancer Peptides Using Gated Recurrent Unit	Onur Karakaya, Zeynep Hilal Kilimci
Development And Approbation Of A Android Mobile Application For Processing Space Images And Calculating Vegetation Data	Marzhan Sadenova, Indira Uvaliyeva, Nail Beisekenov
Parhit: An Innovative Full-Stack Donation Platform With Dynamic-Routing Approach In ReactJS	Shivangi Joshi, Vishal Pushpad, Nabya Dutt, Tanupriya Choudhury, Ketan Kotecha
A Data Science Approach To Precision Medicine: Allostatic Load As A Predictor Of Cardiovascular Disease.	Otto Ikome, Venkata Melapu, Tor Kwembe
Design And Development Of A Smartphone-enabled Smart Card-based Attendance Tracking Module For Personalized Education	Pavel Zlatarov, Galina Ivanova
XVAE-mViT: Explainable hybrid Artificial Intelligence Framework for predicting COVID-19 from Chest X-ray and CT scans	Daniel Addo, Mugahed A. Al-antari , Shijie Zhou, Kwabena Sarpong, Ertan Bütün, Muhammed Talo, Humam AbuAlkebash, Chiagoziem C. Ukwuoma
Artificial Intelligence Framework For Skin Lesion Prediction Using Medical Dermoscopic Images	Humam AbuAlkebash, Radhwan A. A. Saleh, H. Metin ERTUNÇ, Daniel Addo, Muhammed Talo, Mugahed A. Al- antari
Smart Marketing Solutions: Applications with Artificial Intelligence to Increase the Effectiveness of Marketing Operations	Ana Todorova, Diana Antonova
Availability and Demand of Jobs from the Perception of Automated Recruitment in Oman	Mohamed Abdul Karim Sadiq, Nasser Al-Fannah, Thirumurugan Shanmugam, Firdous Kausar
Case Study: The Effect of Live Sessions on Student Success in Online Education	Neslihan Ademi, Suzana Loshkovska
Classification of Attention Deficit Hyperactivity Disorder using Hybrid SWIN Transformer and Graph Convolutional Neural Networks	Kailash Shaw

#### ISMSIT 2023 Technical Program

October 26, 2023			
	9:00 am - 10:15 am	Session 1.1. (ROOM1) Chair: Turgut Ozseven	Session 1.2. (ROOM2) Chair: Ebubekir Yasar
	10:15 am - 10:30 am	Coffee Break	
10:30 am - 11:00 am  Keynote Speaker Session 2.1. (ROOM Assoc. Prof. Figen S. Oktem, Middle East Tec		on 2.1. (ROOM2)	
Time (GMT+3)	11:15 am - 12:30 pm	Session 3.1. (ROOM1) Chair: Turgut Ozseven	Session 3.2. (ROOM2) Chair: Ebubekir Yasar
<u>(G</u>	12:30 pm - 1:30 pm	Lunch	
Time	1:30 pm - 3:00 pm	Session 4.1. (ROOM1) Chair: Turgut Ozseven	Session 4.2. (ROOM2) Chair: Ebubekir Yasar
	3:30 pm - 4:00 pm	Keynote Speaker Session 5.1. (ROOM2) Dr. Parvaneh Esmaili, Cyprus International University	
	4:00 pm - 4:30 pm	Coffee Break	
	4:30 pm - 7:30 pm	Session 6.1. (ROOM1) Chair: Turgut Ozseven	Session 6.2. (ROOM2) Chair: Ebubekir Yasar

	October 27, 2023			
	9:30 am - 11:30 am	Session 7.1. (ROOM1) Chair: Turgut Ozseven	Session 7.2. (ROOM2) Chair: Oguzhan Pektezel	
	11:30 am - 12:00 pm	Keynote Speaker Session 8.1. (ROOM2) Assoc. Prof. Tolga Çukur, Bilkent University, Turkey		
	12:00 pm - 2:00 pm		Lunch	
Time (GMT+3)	2:00 pm - 2:30 pm	Assoc. Prof. Muzaffer Kanaan, Erciyes University, Turkey  Opm - 3:00 pm  Coffee Break  Session 10.1. (ROOM2)		
me	2:30 pm - 3:00 pm			
Ē	3:00 pm - 5:00 pm			
	5:30 pm - 6:00 pm	Keynote Speaker Session 11.1. (ROOM2) Dr. Jamshed Iqbal, University of Hull, UK		
	6:00 pm - 7:30 pm	Session 12.1. (ROOM2) Chair: Oguzhan Pektezel		

	October 28, 2023		
Time (GMT+3)	10:30 am - 12:30 pm	Session 13.1. (ROOM1) Chair: Ebubekir Yasar	

#### **ISMSIT 2023 Technical Program**

Session 1.1. (ROOM1)	Date: October 26, 2023
Chair: Turgut Ozseven	Time (GMT+3): 9:00 am - 10:15 am
Paper	Author (s)
Sentiment Analysis Using Machine Learning Techniques on IMDB Dataset	Selen Nazlı Başa, Muhammet Sinan Başarslan
An Analysis System of Fault Diagnosis and Classification in Electrical Energy System Distribution Networks based on Convolutional Neural Network	Saja Jawad Kadhum Kadhum, Abdullahi Abdu Ibrahim
Improving Text-to-Speech Systems through Preprocessing and Postprocessing Applications	Saadin Oyucu, Ferdi Dogan
Comparing The Fine-Tuning and Performance of Whisper Pre-Trained Models for Turkish Speech Recognition Task	Saadin Oyucu
DC-DC POWER SUPPLY DESIGN WITH LT1243	Ahmet Kutay Aydoğan, Hasan Kayan, Burak Yılmaz, Zekeriya Bora Sunamak, Müslüm Cengiz Taplamacıoğlu, Şamil Tarkay
Optimization-Based Feature Selection in Deep Learning Methods for Monkeypox Skin Lesion Detection	Ahmet Ciran, Erdal Özbay
Development of a sociocyberphysical systems cyber threats classifier	<b>Serhii Yevseiev</b> , Pierre Murr, Stanislav Milevskyi, Olha Korol, Marharyta Melnyk

Session 1.2. (ROOM2)	Date: October 26, 2023
Chair: Ebubekir Yasar	Time (GMT+3): 9:00 am - 10:15 am
Paper	Author (s)
Electronic Equipment Waste Generated by Computers and its Effect on Public Health in India	<b>Sanjana Dewangan</b> , Prashant Mundeja, Bhagyashree Deshpande, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha
Autonomic Computing Based Respiratory Disorders Assessment using Speech Parameters: A Systematic Review	<b>Poonam Shrivastava</b> , Neeta Tripathi, Bhupesh Kumar Dewangan, Bikesh Kumar Singh, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan
Empowering Hepatitis Diagnosis using RFE Feature Selection	Ravi Kumar Sachdeva, Kritya Deo Singh, Priyanka Bathla, Anurag Jain, Tanupriya Choudhury, Ketan Kotecha
ML-Based Feature Selection Technique for Imbalanced Data Streams	Ayushi Pillai, <b>Monika Arya</b> , Sumit Kumar Sar, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan
An adaptive streaming feature selection technique for classifying non-stationary data streams	Monika Arya, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan, Akhilesh Gaidhane
Heart Disease Prediction Using Bayesian Optimized Classification Algorithms	<b>Pooja Rani</b> , Rohit Lamba, Ravi Kumar Sachdeva, Anurag Jain, Tanupriya Choudhury, Ketan Kotecha

### **Keynote Speaker**

Session 2.1. (ROOM2)

Assoc. Prof. Figen S. Oktem

"Computational Imaging and Deep Learning: Making the Invisible Visible"

5, 2023 Time (GMT+3): 10:30 am - 11:00 am Chair: Ebul

Session 3.1. (ROOM1)	Date: October 26, 2023
Chair: Turgut Ozseven	Time (GMT+3): 11:15 am - 12:30 pm
Paper	Author (s)
Assessing the Economic and Technical Effectiveness of Intercepting UAVs using Alternative Methods	Serhii Pohasii, Maryna Mashchenko, Olena Serhiienko, Olena Klimenko, Tetiana Andriushchenko, Tetiana Milevska
Security Models And Methods Of Socio-Cyberphysical Systems	Aleksandr Serkov, <b>Alla Jammine</b> , Dmytro Kudii, Nataliia Dzheniuk, Nait-Abdesselam Farid, Bogdan Lazurenko
Channel Hopping Steganography For Color Images	Yusuf Şanlı, Mahmut Kılıçaslan, Recep Demirci
Görüntü İşlemenin Çift Kullanımı	<b>Hasan Tolga Ünal</b> , Arif Furkan Mendi, Tunç Taner, Ömer Özkan, Mehmet Akif Nacar
The Effect of Raw Material Selection on Productivity in Assembly Apparatus and Fixture Manufacturing	Aycan Anıl
Information Influence on the Virtual Community: Implementation Features and Method of Detection in Social Internet Services	Kateryna Molodetska, Sergiy Veretiuk, Irada Rahimova, <b>Stanislav Milevskyi</b> , Vladyslav Khvostenko

Session 3.2. (ROOM2)	Date: October 26, 2023	
Chair: Ebubekir Yasar	Time (GMT+3): 11:15 am - 12:30 pm	
Paper	Author (s)	
Perceived Risk and Intelligent Investment Advisor Technology Adoption: A UTAUT Perspective	Wenyu Wang, Wenyu Ma	
Geolocation and Virtual Reality to Streamline The Management of Hydrographic Basins of The Regional Agriculture Management of La Libertad - Peru	Isac Daniel Miñano Corro, Waldir Carlos Sanchez Peralta, Luis Antonio Orbegoso Moreno, Jose Luis Ruiz Rodriguez, Jose María Pasco Sanchez, Edgar David Valverde Ramirez	
Conversational AI in Academia: A Practical Exploration with ChatGPT	Elizabeth Ango Fomuso Ekellem	
Classification of Attention Deficit Hyperactivity Disorder using Hybrid SWIN Transformer and Graph Convolutional Neural Networks	Kailash Shaw	
Automation İn Vehicle Tracking Through RFID & Bar Code System	Vinay Kumar Garg , Sunny Singh, Bhupesh Kumar Dewangan, Tanupriya Choudhury, Ketan Kotecha, Sanjana Dewangan	
Clinically Significant Prostate Cancer Classification using Anatomical T2W MRI Sequences and Deep Learning	William Olurotimi Falana, Ali Serener, Sertan Serte	
Deep Learning for Comparative Study of Ovarian Cancer Detection on Histopathological Images	William Olurotimi Falana, Ali Serener, Sertan Serte	

Session 4.1. (ROOM1)	Date: October 26, 2023
Chair: Turgut Ozseven	Time (GMT+3): 1:30 pm - 3:00 pm
Paper	Author (s)
Comprehensive Review of Benefits from the Use of Neuron Connection Pruning Techniques during the Training Process of Artificial Neural Networks in Reinforcement Learning: Experimental Simulations in Atari Games	Martin Kaloev, Georgi Krastev
Method for Assessing Meter Error Characteristics of Random Signals	Sergey Herasimov, <b>Andrii Tkachov</b> , Viacheslav Soroka, Serhii Yevseiev, Tetiana Milevska, Sergii Dunaiev
Successful Delivery using Stable Multi-Hop Clustering Protocol for Energy Efficient Highway VANETs	<b>Mustafa Maad Hamdi</b> , Salah Ayad Jassim, Baraa Saad Abdulhakeem
Innovating Vending Machine through Object Detection for Currency Recognition and Enhanced Cash Handling	Ahmad Farooq, Muhammad Imran
The Evolution of Administrative Information Systems: Assessing the Revolutionary Impact of Artificial Intelligence	Noor.Z. Mahmood, <b>Saadaldeen Rashid Ahmed</b> , Ali Faiek Al-Hayaly, Sameer Algburi, Jawad Rasheed

Session 4.2. (ROOM2)	Date: October 26, 2023
Chair: Ebubekir Yasar	Time (GMT+3): 1:30 pm - 3:00 pm
Paper	Author (s)
Diagnosing Chest X-Ray Images of Unseen Style Using Transfer Learning	Mohammad Marufur Rahman, Md. Ariful Islam Evan, Shahabaj Tamjid, Tanaji Chowdhury
Non-invasive mHealth Application for Detecting Anemia from Conjunctiva Images	Mohammad Marufur Rahman, Omar Faruk Tasnim, Syed Shah Asheq Ullah, Md. Johurul Alam, Shah Md. Safi Sadman
Surface Sampling, Vertex Manipulation and Surface Generation based on WebGL Technologies	<b>Danail Runchevski</b> , Ustijana Rechkoska-Shikoska, Rasim Salkoski
Availability and Demand of Jobs from the Perception of Automated Recruitment in Oman	Mohamed Abdul Karim Sadiq, Nasser Al-Fannah, Thirumurugan Shanmugam, Firdous Kausar
Personality-based Hybrid Machine Learning Model for Mentor-Mentee Matching using Collaborative and Content Filtering Methods	Jitty Varghese, <b>Mahsa Mohaghegh</b>
Preparation of ZnO Thin Film for Gas Sensors Using Spray Pyrolysis Technique	Mithal Abdulhadi, Saif Al-jumaili, Osman Nuri Uçan
Sociocyberphysical Security Systems Synthesis Models	Nataliia Dzheniuk, <b>Stanislav Milevskyi</b> , Bogdan Lazurenko, Aleksandr Serkov, Andrii Zakharzhevskyi

# Keynote Speaker Session 5.1. (ROOM2) Dr. Parvaneh Esmaili "Deep Learning based classification methods on EEG signals" 3 Time (GMT+3): 3:30 pm - 4:00 pm Chair.

Session 6.1. (ROOM1)	Date: October 26, 2023
Chair: Turgut Ozseven	Time (GMT+3): 4:30 pm - 7:30 pm
Paper	Author (s)
Enhancing Smart Grid Efficiency: A Modified ANN-LSTM Approach for Energy Storage and Distribution Optimization	Ramzi Qasim Mohammed, Mohammed Majid Abdulrazzaq, Ayoob Jasim Mohammed, Kevork Mardikyan, Mesut Çevik
Modified Active Learning Framework for Hyperspectral Image Classification with Convolutions Neural Networks.	Zainab Dheyaa, Ali Can
Pseudopapilledema Diagnosis Using Deep Transfer Learning Approaches	Athar Al-azzawi, Saif Al-jumaili, Adil Deniz Duru, Oguz Bayat, Sefer Kurnaz, Osman Nuri Uçan
Anomaly Detection and Security Enhancement through Machine Learning in Administrative Information Systems	Omer Fawzi Awad, Sazan Kamal Sulaiman, Ghassan Hamada Ali Alshmee
Hand Recognition Solution as Conference Room Intelligent Lighting Control Technique	Abdulvahit Karail, Veysel Gökhan Böcekçi, İsmail Kıyak
Case Study: The Effect of Live Sessions on Student Success in Online Education	Neslihan Ademi, Suzana Loshkovska
An EMG Controlled Bionic Arm with Machine Learning	Mehmet Ilker Uygun, Berk Recber, Melisa Aleyna Celikli, Yesim Oniz
Classifying Anticancer Peptides Using Gated Recurrent Unit	Onur Karakaya, Zeynep Hilal Kilimci
Determining Robot Trajectory Planning using Image Processing for Wood Painting	Enez Aykut Gülırmak, Zafer Bingül

Session 6.2. (ROOM2) Chair: Ebubekir Yasar	Date: October 26, 2023 Time (GMT+3): 4:30 pm - 7:30 pm
Paper	Author (s)
Comprehensive Monitoring and Observability with Jenkins and Grafana: A Review of Integration Strategies, Best Practices, and Emerging Trends	Renuka Agrawal, Neha Chankhore, Ishan Siddiqui, Ankit Pandey, Hetang Kothadia, Saurabh Jain
Smart Marketing Solutions: Applications with Artificial Intelligence to Increase the Effectiveness of Marketing Operations	Ana Todorova, Diana Antonova
Application of Finite Partially Ordered Sets in the Determination of Production Chain Planning Strategy	Valentyn Sobchuk, Oleksandr Laptiev, <b>Iryna</b> <b>Tsyganivska</b> , Viktor Zhuravlev
Relative Concepts of Group Z_e on Sum Graph with some Topological Indices	Anas A. Hijab, Mahera R. Qasem, Hashmia A. Ajaj
Blockchain Application in The Waste Trading	Anita Hidayati, lan Dana, Iklima Ismail
Selection of Outsource Security Guard using Multi-Objective Optimization Ratio Analysis Method	Mochamad Rafly Aditya Firmansyah, Iklima Ermis Ismail, Anita Hidayati
Enhancing Resilience in Interconnected Cyber-Physical Power Networks	Veselin Chobanov
Synthesizing Procedural Landscape for Volcanic Eruption Simulation in Virtual Reality	Wanwan Li
A Data Science Approach To Precision Medicine: Allostatic Load As A Predictor Of Cardiovascular Disease.	Otto Ikome, Venkata Melapu, Tor Kwembe
Smart System to Optimize Organic Crop Rotation Using Precision Agriculture Data	Danushka Ranasinghe, Upendra Ihalagedara, Anjana Samarakoon, Madusanka Waththaladeniya, Udara Samaratunge, Nuwan Kodagoda

Session 7.1. (ROOM1) Chair: Turgut Özseven	Date: October 27, 2023 Time (GMT+3): 09:30 am - 11:30 pm
Paper	Author (s)
A Comparative Study on Feature Descriptors in the Visual Odometry Stack for State Estimation	Erdem Arslan, Mohamed Gbreel
A Bibliometric Analysis of Cloud Computing and Business Intelligence	Mert Durgut, Kutan Koruyan, Cigdem Tarhan
A Review on Secure Authentication Protocols in IOV: Algorithms, Protocols, and Comparisons	Ahmed Aljumaili, Hafedh Trabelsi, Wassim Jerbi
Computer-Mathematical Modeling of The Influence of The Macro-Environment on The Economic Behavior of The Enterprise	Olena Rayevnyeva, Olha Brovko, <b>Su Rui</b>
Virtual Patient in Medical Education	Mohammad Nasfikur Rahman Khan, <b>Faysal Ahmed</b> , Md Khizir Al Zabir, Kari J Lippert
An Approach to Classifying Breast Density Level Using Deep Learning-Based Segmentation Model on Full-Field Digital Mammograms	<b>Muhammet Üsame Öziç</b> , Ayşe Sidenur Yılmaz, Halil İbrahim Sandıraz, Baihaqi Hilmi Estanto
Comparison and Failure Analysis of Solid and Hollow Compression Helical Spring By FEA	Mohannad Aziz Kadhom, Maher Rehaif Khudhair, Faeq Hamid Gburi, Zaid M. H. Al-Dulaimi, Farah Kamil, Areej Ghazi Abdulshaheed
STUDY AND ANALYSIS OF PV SYSTEM BEHAVIOR DURING DISTURBANCES	Ramzi Qasim Mohammed, Kevork Mardikyan, Mesut Çevik
Comparative Performance Analysis of Grid-connected Microinverter and String Inverter Technologies Operated in a Snowy Region	Mehmet Ali Anadol, Burak Karaçam

Session 7.2. (ROOM2)	Date: October 27, 2023
Chair: Oguzhan Pektezel	Time (GMT+3): 09:30 am - 11:30 pm
Paper	Author (s)
A Multidisciplinary In-depth Systemic Analysis to Support European Green Deal Halving Pesticides Use and Loss of Nutrients: A Greek Case study	Eleftheria-Maria Pechlivani, Anastasia Kapetanakou, Sofia Faliagka, Nikolaos Giakoumoglou, Fotini Salta, Nikolaos Katsoulas
Survey of the Importance of Implementing Blockchain Technology to Support Supply-Chain Management for Identifying and Tracking Counterfeit Products	Abdulrahman Almuhaidib, Sunday Olatunji, Abdulmajed Aldulaijan
Design of a Neural Helmet for the Treatment of People With Dementia	Alexis Esteban Camarena Ramirez, <b>Katherine Lucero Cardenas Aliaga</b> , Leonardo Jhoan Rodriguez Revoredo , Melva Iparraguirre Meza , Jenny Mendoza- Vilcahuaman , Mildred Condor-Privat, Sario Angel Chamorro Quijano
Design of an Automatic Monitoring System for People with Dementia with an IOT control	Piero André Chávez Gavino, Yofre Brayan Poma Chuquillanqui , Jean Pol Daniel Allca Sabuco, Jesus Ananias Arteaga Ortega , Melva Iparraguirre Meza , Jenny Mendoza-Vilcahuaman, Mildred Condor-Privat, Sario Angel Chamorro Quijano
Advancements and Challenges in Networking Technologies: A Comprehensive Survey	Mustafa A. Shihab, Salma Abdullah Aswad, Rawshan Nuree Othman, <b>Saadaldeen Rashid Ahmed</b>
Experimental and Numerical Evaluation of Models for Metallic Honeycomb Sandwich Structures	Ali Mohammed Hussien, Sewara Mohsin Mahealdeen Shekhan, Asmaa Mehasn Abreesm
Information Security: A Review on Steganography with Cryptography for Genetic Algorithm (GA) Transaction	Shihab A. Shawkat, Najiba Tagougui, Monji Kherallah
Design of a Smart System for Street Light Monitoring and Control	Nikolay Valov, <b>Martin Deyanov</b> , Stoyan Nyagolov, Irena Valova, Donka Ivanova, Tsvetelina Mladenova, Orlin Petrov, Vladimir Tsanknov
Liquid Level Controlling Using the Intelligent Techniques	Qahtan Jawad, Rafid Mohammed, <b>Ali Hadi</b> , Imad Kheioon

#### Keynote Speaker Session 9.1. (VROOM2)

#### Assoc. Prof. Muzaffer Kanaan

"Where is that Capsule? Advances in Localization for Robotic Capsule Endoscopes"

October 27, 2023 Time (GMT+3): 2:00 pm - 2:30 pm Chair: Oguzhan Pekteze

Session 10.1. (ROOM2)	Date: October 27, 2023
Chair: Oguzhan Pektezel	Time (GMT+3): 3:00 pm - 5:00 pm
Paper	Author (s)
Technical Analysis of Stock Market Trends using LSTM for Price Prognosis	Nilima Zade, Om Om Mengshetti, Gayatri Joshi, <b>Siddhanth Mutha</b> , Kanishk Gupta, R Kamatchi Iyer
FPGA based Secure Channel Design in Power Distribution Systems	Mohamed Asan Basiri M, Chitturi Kesava Jaya Ram
UAV bioacoustic monitoring for bird survey	Michael Clayton, Lin Wang
Embroidered Patches for Seamlessly Embedding Sensors in Smart Textiles	Daniela Sofronova, Radostina Angelova
In-depth Study Across Various Disciplines of The Agri-food Retail Chain on Sufficient, Safe and Healthy Food	Agoustina Galitsopoulou, Eleftheria-Maria Pechlivani, Stefanos Tsachouridis, Sofia Faliagka, Nikolaos Giakoumoglou, Aggeliki Elvanidi, Nikolaos Katsoulas
Performance Testing of Multicast-to-Unicast Conversion Mechanism in Wi-Fi Environment	Ivan Letica, <b>Silvio Papić</b> , Karlo Josić
Facial Features Recognition Based on their Shape and Color using YOLOv8	Dhufr Al-Obidi, Seydi Kacmaz
Historiographical Study of the Evolution of the Geocoding Systems with Equiangular Tessellation	Pavel Petrov, Radka Nacheva, Jordan Jordanov, Georgi Dimitrov, Oleksii Bychkov, Volodymyr Petrivskyi
Multispecies Ensemble Architecture For Texts Authorship Classification	Ilya Trukhanovich, Anton Paramonov

Keynote Speaker Session 11.1. (VROOM2) Dr. Jamshed Iqbal

October 27, 2023

Chair: Oguzhan Pektezel

Session 12.1. (ROOM2)	Date: October 27, 2023
Chair: Oguzhan Pektezel	Time (GMT+3): 6:00 pm - 7:30 pm
Paper	Author (s)
Parhit: An Innovative Full-Stack Donation Platform With Dynamic-Routing Approach In ReactJS	Shivangi Joshi, Vishal Pushpad, Nabya Dutt, Tanupriya Choudhury, Ketan Kotecha
Design And Development Of A Smartphone-enabled Smart Card-based Attendance Tracking Module For Personalized Education	Pavel Zlatarov, Galina Ivanova
XVAE-mViT: Explainable hybrid Artificial Intelligence Framework for predicting COVID-19 from Chest X-ray and CT scans	Daniel Addo, Mugahed A. Al-antari , Shijie Zhou, Kwabena Sarpong, Ertan Bütün, Muhammed Talo, Humam AbuAlkebash, Chiagoziem C. Ukwuoma
Artificial Intelligence Framework For Skin Lesion Prediction Using Medical Dermoscopic Images	Humam AbuAlkebash, Radhwan A. A. Saleh, H. Metin Ertunç, Daniel Addo, Muhammed Talo, Mugahed A. Al- antari
Customer Lifetime Value Prediction: Using Machine Learning To Forecast CLV And Enhance Customer Relationship Management	Ankit Kumar, Kamred Udham Singh, Gaurav Kumar, Tanupriya Choudhury, Ketan Kotecha
C-QoS-AOMDV: A Cluster Based QoS Aware Multipath Routing Protocol For MANET Using Hybrid Soft Computing Techniques	<b>Tanupriya Choudhury</b> , Kamred Udham Singh, Ankit Kumar, Gaurav Kumar, Shilpa Gite, Ketan Kotecha
Development And Approbation Of A Android Mobile Application For Processing Space Images And Calculating Vegetation Data	Marzhan Sadenova, Indira Uvaliyeva, Nail Beisekenov
Analysis of Data Balancing Techniques in Fraudulent Transactions Datasets	Laura-Nicoleta Ivanciu, Adelina-Veronica Dumitras, Emilia Sipos
Computer-mathematical support for analysis of stability of the interrelation between macroeconomic financial indicators and migration	Olena Rayevnyeva, <b>Kostyantyn Stryzhychenko</b> , Olha Brovko
Indexed Coloring in GPenSIM for Developing Colored Petri Nets	Reggie Davidrajuh
A Classifier of Petri Nets for GPenSIM environment	Reggie Davidrajuh
A Comparative Study of Self-Sufficient Houses with Half-cut Solar Cells in Turkey: Antalya, Giresun Region	Nil Bağrıaçık, Hayriye Serra Altınoluk

Session 13.1. (ROOM1) Chair: Ebubekir Yaşar	Date: October 28, 2023 Time (GMT+3): 10:30 am - 12:30 pm
Paper	Author (s)
Prediction Network Downtime Values Using Bayesian Non- Negative Matrix Factorization	Ezgi Bingöl
A survey of machine learning methods for diagnosing Parkinson's disease with handwriting	Turgut Özseven, <b>Gülşen Polat</b>
Plazma Ark Kesme Yönteminde İşleme Parametrelerinin Dairesellik Toleransına Etkileri	Şerafettin Hırtıslı, Oğuz Erdem
Neural-based Classifier Evaluation for Maneuver Type Identification of Flying Target	Akin Ozkan, Gokhan Bircan
Functional Model of the Clinical and Hematological Syndromes Diagnosis	Saule Belginova, Indira Uvaliyeva, Aigerim Ismukhamedova
Optimum Torque Distribution During Regenerative Braking in A Fully Electrical Vehicle Via Dynamic Programming	Ömer Ergün, Nurettin Okan Çaycı, Erkin Dinçmen, İlyas İstif
Clinical Informatics System to Understand Lung Cancer Using Transfer Learning-Based Computer-Aided Application	Ahed Abugabah, Atif Mehmood, Farah Shahid
Analysis of The Machine Learning Methods Effectiveness for Morphological Classification of Anemia	Indira Uvaliyeva, Saule Belginova,  David Borozenets
A Cross-Domain Energy Optimization Approach for End-to-End Cloud Environments	Ali Metin Balci