DAY 1 (06.11.2026 - Friday)

7.30 - 8.30	**Registration**
8.30 - 9.00	**Opening Ceremony and Speeches (Ziya Gökalp Hall)**
9.00 - 9.40	**Prof. Dr. Seeram Ramakrishna-Keynote Speech-I (Ziya Gökalp Hall)**
9.40 - 10.20	**Prof. Dr. Hassan Bevrani-Keynote Speech-II (Ziya Gökalp Hall)**
10.20 - 11.00	**Prof. Dr. Nizamettin Aydın-Keynote Speech-III (Ziya Gökalp Hall)**
11.00 - 11.45	**Special Talks and Sponsor Recognition Ceremony (Ziya Gökalp Hall)**
11.45 - 12.00	**Family Photo (Ziya Gökalp Hall)**
12.00 - 13.15	LUNCH

PARALEL SESSIONS-1

	Ziya GÖKALP Hall Session: Power and Energy Systems-1 Session Chair:	Orhan ASENA Hall Session: Machine Learning and Deep Learning-1 Session Chair:	Sezai KARAKOÇ Workshop Hall Session: Electrical Engineering-1 Session Chair:	EL-CEZERİ Workshop Hall Session: Machine Learning and Deep Learning-2 Session Chair:	Esma OCAK Workshop Hall Session: Power and Energy Systems-2 Session Chair:	Celal GÜZELSES Hall Session: Session Chair:	WORKSHOP-1
13:50 – 14:15	**Prof. Dr. İbrahim Türkoğlu-Invited Speaker** **Talk Title: "Deep Learning-Based Intelligent Solid Waste Classification System: An Application Supporting COP31 Goals"**	**Dr. Hiwa Mahmoudi** **Talk Title: "From Semiconductor Technology to Chip Design"**	**Prof. Dr. Tolgay Kara- Invited Speaker** **Talk Title: "A solution alternative for the flow separation problem in airfoils: SJA in feedback control loop"**	**Dr. Brindha Ramasubramanian- Invited Speaker** **TalkTitle: "Energy Optimization and Intelligence for Data Centers"**	**Dr. Padmaja Pulivarthy- Invited Speaker**	**Regional Cooperation and Academic Coordination Meeting of Department Heads**	**Assoc. Prof. Dr. Murat AYDOĞAN** **"Retrieval-Augmented Generation (RAG) Based Chatbot Development"** **(Dicle University Faculty of Engineering Computer Laboratory)**
14:15 – 15:00	**5 – Experimental Implementation and Analysis of a Split-Phase Inverter with Sinusoidal PWM Signal** **Süleyman Gönüllü;** Ünal Yılmaz	**33 – Comparative Analysis of Deep Learning Methods for Pneumonia Diagnosis from Chest X-ray Images** **Hande Yüksel;** Sercan Yalcin; Bilal Alatas; Muhammed Yildirim	**37 – Drive-Cycle Simulation of an Electric Scooter Battery Pack: Effect of State of Charge** **Habip Şahin;** Muhammed Sefa Çetin; Ali Arshad; Muhsin Tunay Gençoğlu	**76 – Knowledge Distillation with Single and Multiple Teachers for Lightweight Plant Disease Classification** Ali Altunoğlu; **Özge Özaras;** Asuman Günay Yılmaz; Vasif Nabiyev	**278 – The Effect of the Surge Arrester-Transformer Distance on Protection Performance** Ömer Koca; İrem Görgöz; **Harun Gülan;** Mehmet Cebeci		
	9 – A Unified and Application-Oriented Current Transformer Dimensioning Approach for Modern Protection Systems **Fırat Çelik;** Yavuz Ateş	**49 – A Comparative Analysis of Kolmogorov-Arnold Network-based Hybrid Deep Learning Models for Predicting Electricity Consumption** **Suna Yildirim**	**55 – Early Fault Warning in Power Transformers Using Dissolved Gas Analysis: A Binomial Classification Approach Based on Time-Series Segments** **Kıvanç Doğan;** Merve Ertargin; Abuzer Çalışkan; Ayşenur Bakay; Burak Çelik	**105 – Source-Group-Disjoint Evaluation of Small Thermal Hotspot Detection in UAV Photovoltaic Imagery** **Hussein Yousefalturk;** Yurdagül Benteşen Yakut	**279 – Investigation of Arc Propagation on High-Voltage Insulators via an Flashover Equivalent Circuit** **Harun Gülan;** İrem Görgöz; Abdülcelil Kılekçioğlu; Mahmut Temel Özdemir; M.Salih Mamiş; Mehmet Cebeci		
	58 – Heat-Rejection-Constrained Day-Ahead Scheduling of Water Electrolysers: Thermal Ceilings and Cost-Optimal Commitment Headroom **Bayram Arda Kuş**	**59 – 1D-CNN Based Interference-Resistant Fault Detection in Electrical Machinery** **Oğuz Solmaz;** Merve Yildirim; Muhammed Furkan Küçük	**56 – Harmonic Impact of Maximum Electric Vehicle Charging on a Radial Distribution Network** Kıvanç Doğan; **Hulusi Faik Orhan;** Abuzer Çalışkan; Merve Ertargin; Ezgi Taşkın	**121 – Sensor-Corruption Robustness of Inverter Fault Diagnosis in PMSM Drives Using Open Experimental Data** **Hüseyin Erdoğan**	**280 – Electric Field Analysis and Explainable Machine Learning-Based Evaluation Along the Leakage Distance of High-Voltage Insulators** **İrem Görgöz;** Mehmet Cebeci		
15:00 – 15:10	BREAK						

PARALEL SESSIONS-2

	Ziya GÖKALP Hall Session: Power and Energy Systems-3 Session Chair:	Orhan ASENA Hall Session: Artificial Intelligence-1 Session Chair:	Sezai KARAKOÇ Workshop Hall Session: Control, Automation, and Robotics-1 Session Chair:	EL-CEZERİ Workshop Hall Session: Smart Grids and Microgrids-1 Session Chair:	Esma OCAK Workshop Hall Session: Computing and Embedded Systems Session Chair:Prof. Dr. Hossein Bevrani		
15:10 – 16:10	**236 – Capacity Knees and Post-Knee Life in LFP/Graphite Cells: A Retrospective Comparative Analysis** **Gökhan Yüksek;** Ridvan Firat Cinar; Timur Lale; Emrullah Acar; Enes Bakis	**11 – Validation Mask Guided Channel Explanations for Microplastic Candidate Morphology Classification in Mesh-Filter Microscopy Images** Selman Uzun; Ayse Gul Sahin; Gursel Altundas; Nevim Birici; Ubeyde Ipek; **Gungor Yildirim**	**61 – Smartphone-Based Induction Motor Fault Diagnosis Using Spectrogram Images** **Merve Ertargin;** Kıvanç Doğan; Abuzer Çalışkan; Govind Vashishtha; Sumika Chauhan	**174 – Understanding the Effectiveness of Numerical Synthetic Data Augmentation Across Normalization Methods and Classifiers in the DARWIN Handwriting Dataset** **Cansu Akyürek Anacur;** Asuman Günay Yılmaz; Bekir Dizdaroğlu	**244 – Beyond Accuracy: Statistical Pitfalls in AI, Machine Learning, and Data-Driven Engineering** **Hossein Bevrani**		
	52 – Model Predictive Energy Management for IoT-Enabled PV Irrigation Systems Using FAO-56 Crop Water Modeling **Çakırcan Çakır;** Yurdagül Benteşen Yakut	**79 – An Explainable Environmental Intelligence System Based on the Internet of Things (IoT) and Machine Learning for Real-Time Air Pollutant Monitoring, Risk Assessment, Environmental Support, and Sustainability** **Yasmin Mohialden;** Hussam T. Majeed	**147 – DC Motor Speed Control Using a PID Controller Optimized by the Zebra Optimization Algorithm** Ahmet Top; **Berat Cete;** Turgay Kaya	**166 – Temporal Pattern Discovery in Urban Bus Ridership Using Data-Driven Analysis: A Case Study of Diyarbakır** **Beyhan İpekyüz**	**18 – Development of an IP-Based JTAG Infrastructure for Remote Maintenance of Embedded Systems** **Sahin Duran;** Hasan Şakir Bilge		
	187 – A Comparative Study of the Thermal and Hydrothermal Aging Behavior of Epoxy Composites Used in Electromechanical Switchgear **Hüseyin Alptekin;** İbrahim İdiz; Baran Karahan; Enver Ediz Erol; Mehmet Yüksel; Omran Alabedalkhamis	**172 – Rule-Based Systems and Modern Artificial Intelligence Approaches: A Comparative Analysis** **Hande Yüksel;** Cebrail Barut; Bilal Alatas	**142 – Cross-Speed Bearing Fault Diagnosis Using Autoencoder-Based Feature Extraction and Supervised Target-Domain Adaptation** Merve Ertargin; **Kıvanç Doğan;** Abuzer Çalışkan; Sumika Chauhan; Govind Vashishtha	**104 – SOC-Aware Adaptive Droop Control for Coordinated Battery Power Sharing in a PV-Assisted Multi-EV DC Microgrid** **Ozan Gül;** Bayram Arda Kuş	**140 – Occupancy Analysis of a GPU-Based Particle Filter** **Özcan Dülger**		
		47 – A ROS–Modbus TCP Middleware for Real-Time Transfer of Edge AI Decisions to PLC-Controlled Pneumatic Diverting Systems **Gürkan Kavuran;** Hamza İnanç	**241 – Explainable Artificial Intelligence for Connection-Time Prediction of Electric Vehicle Charging Energy and Plug-In Duration Across Sites** **Merve Dilek**		**215 – A Hybrid Approach to Explainable Network Intrusion Detection Supported by Large Language Models** Feyzi Ferat Ateş; Songül Karakuş; **Musa Çıbuk**		
16:10 – 16:20	BREAK						

PARALEL SESSIONS-3

	Ziya GÖKALP Hall Session: Power and Energy Systems-4 Session Chair:	Orhan ASENA Hall Session: Machine Learning and Deep Learning-3 Session Chair:	Sezai KARAKOÇ Workshop Hall Session: Control, Automation, and Robotics-2 Session Chair:	EL-CEZERİ Workshop Hall Session: Smart Grids and Microgrids-2 Session Chair:	Esma OCAK Workshop Hall Session: Machine Learning and Deep Learning-4 Session Chair:		
16:20 – 17:30	**141 – Feedforward Modulation Index Compensation for a PV-Fed SiC-Based T-Type Inverter: Design and Experimental Validation** **Ahmet Eren;** Ahmet Mete Vural	**158 – Explainable Patient-Level Fusion of Attention MIL and Radiomics for Hydrocephalus Reoperation Risk Stratification on Brain CT** **Mücahit Onur Diril;** Mehmet Siraç Özerdem	**84 – A Design Methodology for Frequency Selection in High Power Density LLC Resonant Converters** **Murat Akkuş;** Ali Rıfat Boynuegri; Erdem Akboy; Burak Tekgun	**135 – Benchmarking Binary Metaheuristic Algorithms for Home Energy Management A Comparative Study of Objective Formulation** **Abdullah Atınç**	**237 – Comparative Classification of Land, Water, and Buildings Using Landsat 9 Spectral Data with Shallow and Deep Learning Models** Ridvan Firat Cinar; Enes Bakis; Gökhan Yüksek; **Emrullah Acar;** Timur Lale		
	180 – Earthing System Analysis of a Large Industrial Facility Considering Site Specific Multilayer Soil Profiles and Covering Effects **Zuhal Çantalı;** Emir Kaan Tutuş; Yavuz Ates; Celal Fadil Kumru; Levent Ozden	**165 – Ensemble Learning in Hematology: A Comparative Study of ConvNeXtV2 and EfficientNetV2 for WBC Classification** **Delal Şeker;** Mehmet Siraç Özerdem; Orhan Ayyildız; Veysi Akpolat; Julius Bamwenda; Mesut Şeker	**160 – Hardware-in-the-Loop Simulation of Fuzzy Logic-Based MPPT Control Developed for Photovoltaic Systems in a PLC Environment** **Ayda Nur Boz;** Öykü Erdoğan; Hakan Çelik	**168 – Day-Ahead Load Forecasting and Smart Grid Optimization Using Extreme Gradient Boosting and Particle Swarm Optimization with Turkish Electricity Demand Data** **Cihan Tiken**	**224 – Toward Closed-Loop Cyber-Physical Testbeds for IEC 61850-Based Digital Substations: A Comparative Review and Conceptual Architecture** **Hamza Ünsal;** Hasan Gündüz; İbrahim Eke		
	220 – Thermocouple Anomaly Detection and Rule-Based Cause Labeling in Unlabeled Long-Term LFP Aging Data Hikmet Yigit; Nigar Mammadova; **Ibrahim Eski;** Jawad Rasheed; Ali Rıfat Boynuegri	**87 – DoHaVein: A Novel Large-Scale Dorsal Hand Vein NIR Image Dataset** Amira Tandirovic Gursel; **Ahmet Hilmi Kasap**	**164 – PLC-Based HIL Simulation of PID Control for a BLDC Motor Optimized with PLC-Aware PSO and GWO** **Muhammed Eltaleb;** Hakan Çeik	**221 – Effects of Energy Storage Type on Post-Disaster Household Services: A Comparison of Electric Vehicles and Second-Life Batteries** Yarkın Akkar; Emir Kaan Tutuş; **Alper Kagan Candan**; Ali Rıfat Boynuegri; Nevzat Onat	**214 – Transformer-Based Multi-Label Cyberbullying Detection in Turkish Social Media Texts** Nurullah Akarslan; Songül Karakuş; **Musa Çıbuk**		
	40 – Disaster-Oriented Air-to-Air and Air-to-Ground Channel Modeling and Altitude-Dependent Reliability Assessment for UAV Mesh Networks **Murat Kayaoğlu;** Bircan Calisir; Sencer Ünal	**88 – Pipeline for Low-Cost Hand Vein Visualization in an Embedded NIR Imaging System** **Ahmet Hilmi Kasap;** Amira Tandirovic Gursel	**226 – Strong Integral Input-to-State Stability for Bilinear Time-Delay Systems** **Gökhan Göksu**	**270 – Urban Morphology Aware Handover in Low Earth Orbit Satellite Networks** **Ferhat Yazar;** Hüseyin Acar	**10 – Data Efficiency of Machine Learning Models for V2V Path Loss Prediction Across Different Environments** **Nuğman Sağır;** Zeynep Hasırcı Tuğcu		
	264 – Coverage and Outage-Aware Energy-Age of Information Co-Design for Rotary-Wing UAV Data Collection in Post-Disaster IoT Networks **Murat Kayaoğlu;** Sencer Ünal						
19.00	GALA DINNER						

DAY 2 (07.11.2026 - Saturday)

PARALEL SESSIONS-1 (ONLINE)

	Online Session Session: Artificial Intelligence-2 Session Chair: Access link: Access link:	Online Session Session: Artificial Intelligence-3 Session Chair: Access link:	Online Session Session: Artificial Intelligence-4 Session Chair: Access link:	Online Session Session: Artificial Intelligence-5 Session Chair: Access link:	Online Session Session: Artificial Intelligence-6 Session Chair: Access link:	Online Session Session: Communication Technologies-2 Session Chair: Access link:	
8.30 - 10.00	**29 – Benchmarking Open Small Language Models for Schema-Valid Analytical JSON Generation from Household Electricity Data** **Omer Akdoğan**, Cem Haydaroğlu, Özal Yıldırım, Heybet Kılıç	**70 – Coordinated Elevator Group Control Using Reinforcement Learning** **Zeynep Oksuz**, Fatih Çakıl	**176 – Motor-Imagery Decoding from a 16-Channel EEG Subset: Channel Reduction, Subject Calibration and Event-Locked Temporal Modeling on Open Data** **Sedi Arif Yüksel**, Fatih Çakıcılar, Erhan Akdoğan	**191 – Comparative Analysis of RAG Strategies in Artificial Intelligence Supported Question Generation** **Elif Canlı**, Levent Karacan, Zülaiyha Dağlımeneci	**201-MedScan AI: Calibrated Triage with Verified, Retrieval-Augmented Guidance for Symptom and Skin-Lesion Screening** **Vujashanti M V**, Dinesh Manoj S	**17 – The Role of PLC Water Technology in the Transition from Traditional to Smart Grids: Analysis of Fault and Outage Statistics** **Zeynullah Dalmiş**	
	35 – PepperAI: An Explainable Multimodal System for Black Pepper Disease Detection, Yield Prediction, and Agronomic Decision Support **Vujashanti M V**	**74 – Date- and Compute-Efficient Fine-Tuning of Domain-Specialized Agentic LLMs via TRISHNA AI Tiny Intelligence Network for Sample Valuation and Selective Native-Weight Adaptation** **Anirudha Lal**	**138 – YOLO11 and YOLO26 Detection Performance Across Object Sizes and Scene-Density Levels** **Ozan Çakmak**, Abdulkadir Sengur, Aycin Cicek	**206 – From Natural Language to Safe UAV Missions: LLM-Based Structured Planning with Deterministic Execution** **Gökhan Alkan**, Rıfat Aşlıyan	**206 – Signal Handling Strategies for Lightweight ECG Classification Under Controlled Artifact Conditions** **Beste Kaşçı**	**60 – Secrecy Performance Analysis of Noise Domain NOMA-Based VLC System** **Suara Canakoğlu**	
	39 – AI-based Heart Disease Detection and Diagnosing System Using Random Forest Classifier **Mrunali Kothalur**	**91 – Cybersecurity and Artificial Intelligence Integration: Threats, Protection Strategies, and Academic Perspectives** Muhammet Hadi, Muhammet Al-Kelleci, **Hassan Hassan Al-Fahlawi**	**154 – Development and Experimental Evaluation of a TinyML-Based Multi-Sensor Smart Agriculture System with LoRa-GSM Hybrid Communication** **Harun Kayacılıç**, Duygu Kaya	**243 – Artificial Intelligence (AI) Integrated Digital Twin System for Semiconductor Design Classification and Optimization using Oracle Exadata** **Padmaja Pulicherla**	**207 – Development of an Intelligent Assistant for Academic Work Using Artificial Intelligence and Information Technologies** **Aydına Özge Akkan**, Emir Kuzak, Meriç Çelik	**67 – Leakage-Free Electric Motor Fault Classification under Constant and Variable Speed Using Cochleagram-Based Features and Extremely Randomized Trees** **Gonca Ocakar**, İbrahim Türkoğlu	
	80 – AI-based Breast Cancer Prediction Using High-Dimensional Gene Expression Data **Rutuj Hanoon**, Hameed R. Farhan, Anas H. Mohammed Taqi	**100 – A Secure Framework for Flexible Artificial Intelligence Model Lifecycle Management in Public Clouds** **Charan MB**, Gautam NS, Nilesh Kumar S	**175 – Reporting Interval and Noise as Privacy Controls Against Smart Meter Occupancy Inference** **Oğuzhan Katar**	**230 – Beyond Semantic Similarity: A Blind Expert Evaluation of Generative AI Performance on Classical Arabic Rhetorical Analysis** Reham Khalifa, **Mohammed Ibrahim**, Rab Mahmood	**268 – Comparative Analysis of Advanced Learning Strategies for YOLOv8n-Based Personal Protective Equipment Detection** Ayhan Kucukmanisa, **Cagri Yilmaz**	**169 – A methodology for generating a structured dataset through parametric sensitivity analysis of hybrid RF/VLC networks to improve machine learning-based performance** **Maner Akshanvi**, Ahmed Taha Abdul-Sadda Aljayashi	
	93 – Intelligent Route Optimization from Satellite Imagery Using EGCSA-Switched and Turkeuity-Weighted Graph Navigation **Vasantha Sandhya Venu**, Ritesh Chimbekodi	**114 – AI-Driven Governance Framework for Disaster Risk Management in Public Cloud Environments** **Gautam NS**, Charan MB, Nilesh Kumar M	**177 – Lightweight Screening of Model Context Protocol Tool Poisoning with Registry Negations and a Cascaded Judge** **Oğuzhan Katar**	**251 – Output Stability and Token Cost of LLM Agent Architectures in Text Similarity Evaluation** **Murat Aydoğan**, Kasım Murat Karakaya	**275 – Artificial Intelligence-Based Plant Disease Detection: A Bibliometric Analysis of Research Trends** **Sema Yıldırım**, İbrahim Arslanoğlu	**110 – Zero-Shot Generalization of Residual Error Compensation for Sparse-Flux MIMO-OFDM Channel Estimation** **Hilal Bıyık**, Ayhan Akbal	
10.00 - 10.30	BREAK						

PARALEL SESSIONS-2 (ONLINE)

	Online Session Session: Communication Technologies-3 Session Chair: Access link:	Online Session Session: Computer Engineering-1 Session Chair: Access link:	Online Session Session: Control, Automation, and Robotics-3 Session Chair: Access link:	Online Session Session: Control, Automation, and Robotics-4 Session Chair: Access link:	Online Session Session: Cybersecurity Session Chair: Access link:	Online Session Session: Electrical Engineering-2 Session Chair: Access link:	WORKSHOP-2
10.30 - 12.00	**145 – BER Performance Analysis of Spatial Modulation over Different Fading Channels** **Sedef Aydın**, İbrahim Dawel, Bıyıcı Cankılıoğlu	**90 – Head-Mounted Display on Moving Bases: A Systematic Review of Motion Cueing, Simulator Sickness and Validity in HMD Driving Simulators** **Anderk Adeb**, Ahmet Alp Sayın, Bilge Kağan Pamuk, Mesude Ömer	**42 – Design of an Intelligent Lighting System Based on Image Processing and PID Control for Visual Comfort** **Ali Uzma**, Mehmet Ali Çiçeklik, Ahmet Serdar Yılmaz	**191 – Slow and Injectable LLM Supervisors Break Control Barrier Function Safety Filters in Autonomous Driving** **Hayder Almameri**, Özkan Akın	**69 – EvidenceX: A Secure Digital Asset Integrity Platform for Tamper Detection Using SHA-256 Hashing and Audit Trail Management** **Archana R**, Dhanshika Bhuruva J, Chitra P	**2 – Underwater Wireless Power Transfer via Laser: System Design, Simulation, and Experimental Analysis** Nurullah Erken, Merve Duygan, Seyma Irem Kurt, **Hami Fadi**, Al Rifai Bayrawgi	**Prof. Dr. Hassan Bevrani** **"Microgrid Control and Applications" at the Dicle University Faculty of Engineering real-time simulation laboratory.**
	148 – A Platform-Matched Preliminary Evaluation of AES-GCM and Ascon-AEAD128 for Resource-Constrained Satellite Systems **Melike Gökmen**, Serdar Solak	**95 – RT-CEG: Residual Temporal CNN-EDN-TinyGRU for Fast and Accurate Edge-AI-Based Short-Term Load Forecasting** **Mahmut Arif Gulen**, Muhammed Gokay, Yavar Khomeyrani, Suhib Bani Melhem	**112 – Robust Autonomous UAV Navigation in GNSS-Denied Environments: Taxonomy, Architectures, and Design Guidelines** **Abdullah Ahmed**, Yunes Alqudsi	**200 – A Novel Vision Transformer-Based Brightness-Enhanced Approach for Rail-Routed Building Segmentation** **Sevma Akca**	**79 – Fail-Closed Authorization for Persistent MQTT Queues Using Volatile Session State** **Furkan Özay**	**5 – A Conceptual Framework for Assessing the Resilience Impacts of Electric Vehicle Charging Stations in Distribution Networks** **Ozan Demir Aktaş**, Zuhal Kocaman	
	199 – Correlated-Failure-Aware Fiber-Wireless Integrated Sensing and Communication for Resilient Observability and Restoration in Active Distribution Networks **Süleyman Kılınç**	**94 – DriftPulse: Lightweight Concept Drift Detection for Resource-Constrained Edge Data Streams** **Muhammed Ordoc**	**222 – Does the Interface Matter? A Comparative Study of Command Interfaces for Large Language Model Agents Piloting a PX4 UAV** **Ahmed Osman Mahamoud**, Yunes Alqudsi	**201 – Recent Advances in DRL and MARL for Cooperative Multiple UAV Path Planning** **Hüseyin Yurtaltaş**, Yunus Alqudsi	**62 – Quantization Erodes the Security Margin: Evasion of INT8 Edge Intrusion Detectors and a Margin-Preserving Defense** **Ayhan Korkmaz**	**19 – Energy Management Strategy and Component Sizing for a Parallel Plug-in Hybrid Electric Vehicle** **Ozan Korkmaz**, Ayşe Yılmaz	
	202 – Social Media, Mobile Marketing, and Customer Loyalty: Evidence from Iraqi Telecommunications **Aiman Ali**, Alameer Hussain	**133 – Structured Custom Instructions for AI-Assisted Code and Test Generation: A Systematic Literature Review** **Sinem Bağcıoğlu**	**132 – A Multi-Objective Metaheuristic MPC Approach for Nutrient Solution Optimization in Closed-Loop Hydroponic Systems** Eren Sağlan, **Emirhan Yalçın**, Yahya Daraşyan	**117 – Demonstrating the Efficiency of RKO-LID on a DJI UAV Platform Utilizing Drone Built-in IMU for GPS-Denied Mapping** Muhammed Al-Mahammed S. Bajhaw, **Ayaz Mahvash Rafi Saeed**, **Aquathi Akpathi**, Munaf el Muhammed, Ayaegal Uzar	**92 – Online Feature Parity for IoT Intrusion Detection at the Edge: A Measured Packet-to- Decision Pipeline** **Atheer Hammad**, Kevdin Dica, Kadir Kharade	**39 – Brushless DC (BLDC) Motor Driving** **Omran Abdoalbkhomsan**, Zaran Karahan, Ibrahim Idiz, Hüseyin Apaloğ, Emrer Kılıç Ersol, Sercan Toplanci	
	204 – Impact of Hardware Impairments on the BER Performance for Maximum Likelihood Detection in Spatial Modulation **Sedef Aydın**, İbrahim Dawel, Bıyıcı Cankılıoğlu	**157 – A Comparative Study of Filter, Embedded and Rank-Aggregated Ensemble Feature Selection for Text Classification** **Sercan Yalçın**, Zuhal Cetin Yalcin, Gulsah Karadurmus, Mohammed Yildirim	**123 – PSO-Tuned Model Predictive Control for Search-to-Park Transition in a Hybrid Automated Valet Parking System** Muhammet Emin Konoğlu, Oğuzhan Çakıroğlu, **Amine Akrehcha**, Yasers Ajeed Bajaqal, Yahya Daraşyan	**233 – Comparative Evaluation of Deep Learning Architectures for Transmission Ratio Prediction in Multi-Joint Robotic Manipulators** **Çağrı Kaymak**, Göksu Taş	**227 – AI Agent-Based Financial Fraud Detection System** Bayza Gul Karakaya, **Zeynep Mutlercioglu**, Dorukk Karatas Bayolgonuz, Cengar Koray Sahingoz	**54 – Sim-to-Real Trajectory Tracking Control of a Turtlebot3 Burger Using Adaptive Fuzzy-PID, PID, and LQR Controllers** **Ceren Ekar Aksaçlıoğlu**, Mesut Hüseyinoğlu, Cem Haydaroğlu	
12.00 - 13.00	BREAK						

PARALEL SESSIONS-3 (ONLINE)

	Online Session Session: Electrical Engineering-3 Session Chair: Access link:	Online Session Session: Electrical Engineering-4 Session Chair: Access link:	Online Session Session: Industrial Applications of Engineering Technologies-1 Session Chair: Access link:	Online Session Session: Industrial Applications of Engineering Technologies-2 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-5 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-6 Session Chair: Access link:	
13.00 - 14.30	**91 – A Novel Non-Isolated Cuk-Sepic DC–DC Buck-Boost Converter for Photovoltaic Power Systems** **Ali Berke Pamuk**, Barış Çavuş	**170 – Comparative Performance Analysis of PID and Fractional-Order PID Controllers for Load Frequency Control in a Grid-Forming Inverter Integrated Two-Area Power System** **Muhammet Emin Ince**, Erhuğrul Çam, Recep Çalenak, Özgür Çelik	**57 – Comparative Morphological Analysis of Electrospun PVA Nanofibers Produced at Two Polymer Concentrations Using Two Collector Substrates** **Muhammet Karaca**, Mehmet Emin Meral	**96 – LoRa-Based Early Warning and Condition Monitoring System for Industrial Electric Motors** Esra Ince, **Mehmet Hasan Celik**, Özgür Hakan Demirbaş, İshak Gündoğdu	**15 – Leakage-Aware Reassessment of High-Accuracy Alzheimer's Disease Classification on Synthetic Data** **Celal Şamil Kanoğlu**, Sergei Aslan	**62 – Generalization to Unseen Operating Speeds in Electric Motor Fault Diagnosis: A Comparison of Sequential and Nature-Inspired Feature Selection in Deep Feature Engineering** Ezgi Taşkın, **Kıvanç Özgenel**, Burak Celik, Ahmet Orhan, Bahadır Tunaboylu, Mehmet Özdemir	
	94 – Sliding-Mode-Enhanced Direct Power Control for DC-Link Voltage Regulation of a Three-Phase PWM Rectifier Muhammad Furqan Hameed, **Abdullah Al Bakir**, Md Zia Uddin Nahid, Khorshed Alam, Tamanna Islam Rokna	**163 – Acoustic Signal Processing and Machine Learning-Based Multi-Fault Diagnosis in Electric Motors** **Ahmet Orhan**	**101 – Comparative Morphological Evaluation of Structures Produced from Different Polymer Systems by Electrospinning Using an MDF-Supported Copper Foil Collector** **Muhammet Karaca**, Mehmet Emin Meral	**171 – COMPARATIVE ANALYSIS OF THE ELECTRO-THERMAL PERFORMANCE OF WBOC/ZB, CuCrSi AND AgNiCdO CONTACT MATERIALS** **Mehmet Yüksel**, Baran Karahan, İbrahim Idiz, Omran Abdeallahamad, Hüseyin Apalaloğlu, Emrer Kılıç Ersl	**16 – Exploring the Impact of Alternative Color Spaces in Deep Retinal Age Prediction from Fundus Images** **Mehmet Ayhuş Yürük**, Abbas Memiş	**63 – Reference-Separated Normalization for Cross-Capacity Stator Fault Detection in Permanent Magnet Synchronous Motors** **Ezgi Taşkın**, Buran Celik, Kıvanç Özgen, Mehmet Özdemir, Bahadır Tunaboylu, Ahmet Orhan	
	103 – Development of a Solar Assisted Hybrid Energy Storage System with the Integration of Three Battery Technologies; Lithium-Ion, Lead Acid and Super Capacitors **Zeynep Tüfek**, Beyza Tezcanlıoğlu, Emrah Çelik	**184 – Investigating the Effects of Amorphous Core and Hairpin Winding on the Electrical Performance of Self-Excited Synchronous Motors** **Hayrullah Nazır**, Ahmet Orhan, Kıvanç DOĞAN	**72 – Fractional-Order PID Controller Optimized by a Gradient-Based Optimizer for Load Frequency Control in Islanded Airport Microgrids** **Fadi Alqaseer**, Abdelrahman Ferghly, Yunes Alqudsi, Ashraf Farahat, Md Ismail Hossain, Ibrahim Kaya, Mohamed E. Dessouki	**195 – Multi-View Explainable Tamper Detection and Selective X-Ray Routing for Electricity Meters** **Erdi Sevgi**	**36 – A Controlled Comparison of Four 3D U-Net Architectures for T1-Weighted Stroke Lesion Segmentation on ISLES 2026** **İrem Kesmezacar**, Salih Taha Alperen Özçelik, Hanifi Göldemir	**65 – SHAP-Based Feature Selection for Solar Power Forecasting Using Machine Learning and Deep Learning Models** **Zeynep Sude Kırmacı**, Zeynep Alparmak Guler, Inayet Ozge Aksu	
	136 – Comparative Analysis of Model-Based and Model-Free Predictive Control for PWSM Drives With a Three-Level H-Bridge Inverter **Muhammed Atif Kadıoğlu**, Doğukal Akar, Burak Tellioğlu	**196 – Performance Comparison of Fuzzy Inference Systems for Virtual Inertia and Damping Control in a Two Area Power System** Elif Gül Ilhan, **Muhammet Emin Ince**, Recep Çalenak, Erhuğrul Çam	**73 – Adaptive Energy Management System for PV-Wind-Battery DC Microgrid with Coordinated Renewable Curtailment and Priority-Based Load Shedding** **Abdelrahman Ferghly**, Yunes Alqudsi, Fadi Alqaseer, Md Ismail Hossain, Ashraf Farahat, Mohamed E. Dessouki	**197 – A Simple Safety-Gated Control Scheme for Autonomous UAV Approach and Perching on Overhead Distribution Lines** **Erdi Sevgi**	**38 – Smart Build: A Machine Learning-Based Platform for Building Material Supply and Recommendations** **Mrunali Kothalur**	**75 – Order Sensitivity and Silent Covariate Loss in the TimeFM 2.5 Evaluation Interface: Evidence from Electricity Load and Photovoltaic Portfolios** Deniz Ari, Mehmet Bordekirli, **Özlem Tarkan**, Zeynep Akyürek Aracuı, Sevdiye Ekinci	
	225 – Constant-Power versus Constant-Current Cycling of a Commercial Sodium-Ion Cell: Capacity Fade at Elevated Temperature Beyond the Cut-off Voltage **Ali Emrecioğlu**, İbrahim Sefa, Kadircan Çakmakoğlu, Burak Tekgün, Ozan Erdinç, Ali Rıfat Boyraz̧oğlu	**139 – Identifiability-Aware Event-Triggered Online Parameter Estimation for Interior Permanent Magnet Synchronous Machine Drives** **Erhanol Ates**	**77 – Water-wiSE: AI-Powered Leak Detection and Non-Revenue Water Reduction in Mumbai's Aging Water Distribution Network** **Rhea Agrawal**	**196 – Context-Aware Hybrid Communication Design for Advanced Metering Infrastructure: A Techno-Economic Synthesis and Adaptive Framework** **Süleyman Kılınç**	**45 – Cochlear Transform and Deep Feature Engineering for Automated Automotive Fault Classification Using Sound Signals** Naci Çora, **Esmanaz Oturbe**, Buran Çelik	**53 – An Explainable AI-Based Adaptive DSA Weaknesss Analysis and Personalized Problem Recommendation System** **Sinanb Er**, Asarb Mİ Ş, Kalaasarb K	
14.30 - 15.00	BREAK						

PARALEL SESSIONS-4 (ONLINE)

	Online Session Session: Machine Learning and Deep Learning-7 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-8 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-9 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-10 Session Chair: Prof. Dr. Serdar Ekinci Access link:	Online Session Session: Machine Learning and Deep Learning-11 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-12 Session Chair: Access link:	
15.00 - 17.00	**85 – Non-Destructive Tool Wear Classification from Machining Sound Using Explainable Deep Feature Fusion** Burak Çelik, Ezgi Taşkın, **Kıvanç Özgenel**, Ahmet Orhan, Abuzer Çakıyan, Bahadır Tunaboylu	**111 – Effective Emotion Detection in Turkish Speech Using Multimodal Pre-trained Models and Cross-Attention Mechanisms** Mustafa Kvanlioglu, **Irfan Kilic**	**144 – Enhancing Heart Disease Prediction Through Hyperparameter Optimization and Ensemble Learning** **Erhan Yaltaz**, Özgen Yaltaz	**188 – A Hybrid Machine Learning and Metaheuristic Approach for PID Tuning in Vehicle Longitudinal Dynamics** **Atilla Fetullah**, Serdar Ekinci, İbrahim Ayaz, Emine Ayaz	**209 – Can Machine Learning-Based Hybrid Feature Fusion Improve RF Modulation Classification?** **Jennifer Allen**, Rohen Saraguglu	**249 – Impact of Context Length on Accuracy, Availability, and Computational Cost in 30-Minute Glucose Forecasting** **Beste Kaşçı**	
	92 – A Calibrated Redescending Robust Loss for Gradient-Boosted Trees: Validation Across Three Engines and Eleven Datasets **Ömer Sarıtaş**	**222 – Synthetic ECG Data Generation: A Comparative Analysis of GAN and Diffusion Models** Nkanna' Nkwa', **Irfan Kilic**	**248 – Feature Engineering and Ensemble Learning for Heart Failure Outcome Classification** **Gülşah Yaltaz**, Özgen Yaltaz	**190 – RIME versus PSO for Fuzzy Energy Management of a Power-Split Hybrid Electric Vehicle Using Dynamometer Data** İbrahim Ayaz, Emine Ayaz, Serdar Ekinci, **Gülbin Çetinkaş**	**113 – Annotator Agreement and Model Performance in Financial Sentiment Classification** **Emre Biçak**	**263 – Explainable Deep Learning for Manhole Cover Presence Classification in Drone Imagery** **Muhammed Yesir Ekiner**, Ömer Akağ, Mehmut Kaya, Yunus Santur, Muhammed Yaldız	
	97 – Classification of Honeybee Health and Colony Status Using Image-Based Deep Learning Muhammed Emir Seçer, **Beydа Yaşar**, Zübeyir Karaduman, Orhan Yaman, İlhan Kılıç	**113 – A Hybrid Deep Learning Architecture Combining ResNet50 and InceptionV3 for Accurate Coral Reef Bleaching Detection** **Edidiong Akpabio**, Ahmed Ahmed, Ibrahim Ozcim Cleniide	**155 – Lightweight Protein Family Classification Using Average Vector Distance Features** **Fatma Jusinoğlu**, Hasan Bin Jamal, Abu Tarek Rabbi, S.M.A. Al-Mamun	**216 – Intelligent Stabilization of an Unstable Ball and Beam System via GSO-Tuned Lead Compensator** Özkan Şimşek, **İbrahim Ayaz**, Emine Ayaz, Serdar Ekinci	**228 – A Hierarchical Multi-Sensor Fusion Approach for Bearing Fault Diagnosis** Mehmet Berhan Bay, **Mustafa Kocakulak**	**269 – Per-Site Evaluation of Byzantine-Robust Federated Learning Under Poisoning Attacks for Melanoma Detection Across Rural Dermoscopy Hospitals** **Ömer Faruk Silgiroğlu**	
	86 – CNN-VAE and Ensemble Deep Learning Approach for ECG Anomaly Detection Muhammed Emir Seçer, **Beydа Yaşar**, Orhan Yaman, İlhan Kılıç, Gülşah Karaduman	**126 – Metadata-Augmented Sentiment Analysis of Online Fashion Reviews Using Deep Text Encoders and Structured Product Information** Sameer Wishwas, **Haydar Nabeel Jabr**	**162 – Separating Forgery Detection from Source Recognition: A Patient-Clustered Evaluation of an Adversarially Trained CT Forgery Detector** **Çağrı Şahin**, Ozal Yıldırım	**205 – Machine Learning-Assisted Hybrid Harris Hawks Optimization and Sequential Quadratic Programming for Model Order Reduction** Özkan Şeker, Mehmet Bunlukeni, **Davut Arı**, Serdar Ekinci	**240 – IBVAP: A Fully Offline Edge-AI Framework for Multi-Feature Video Analytics in Existing CCTV-Based Border Surveillance** **Neha Agarwal**, Gaurav Vaishnav, Krish Charan, Utkarsh Kumar Singh, Kushagra Dixit, Vikas Verma	**273 – Reconstruction-Based Synthetic Data Generation Using Sparse Autoencoders for Improved Classifier Performance in Small-Scale Numerical Datasets** **Cahit Burdiç**	
	108 – Variance-Corrected Evaluation of Graph-Augmented Ensemble Learning for Breast Cancer Classification Omer Sarıtaş, **Abdullah Avcu**	**129 – Classification of Lung Nodules in Computed Tomography Images Using Deep Learning Methods** **Ayşin Ceyda**, Abdulkadir Sengur, Ozan Çakmak	**163 – A Behavioral Comparison of Adversarially Trained ResNet-18 and ViT-Tiny on CIFAR-10: Transfer Metrics, Gradient Structure, and Block-wise Feature Drift** **Çağrı Şahin**, Ozal Yıldırım	**212 – Operator Forecasts as Baselines for Short-Term Load Forecasting in Türkiye and Thirty European Grids** Mehmet Bunlukeni, **Davut Arı**, Özkan Şeker, Serdar Ekinci	**173 – Comparing EMG Feature Representations for Gait Activity Classification Using Machine Learning** **Chala Muhammed**, Kurban Gonsal Osman	**287 – BFF-Net: Balanced CNN–Vision Transformer Feature Fusion for Post-Earthquake Building Damage Classification** **Yavuz Canbay**, Gila Aygün, Pelin Canbay	
	283- MS-ROI: Multi-Scale ROI Learning for Robust Thyroid Nodule Classification in Ultrasound Images **Murale Coskun**	**232 – Personalized Microplastic Exposure Prediction Through IoT and Machine Learning** **Tanya K.**, Jeevitha N, Bharath Raj B, Nandhakumar S	**201 – Recent Advances in DRL and MARL for Cooperative Multiple UAV Path Planning** **Hüseyin Yurtaltaş**, Yunus Alqudsi	**116 – Temporal Detection of GPS Jamming and Spoofing in PX4 UAV Telemetry Using EO-Selected Features** Emine Ayaz, **İbrahim Ayaz**, Özkan Şeker, Serdar Ekinci	**276 – CDN-Aware Hybrid Machine Learning Framework for Real-Time DNS Tunneling Detection Using Statistical Traffic Features** **Praveen Raj K**	**286 – Explainable Machine Learning-Based Prediction of Lateral Load Response of Reinforced Concrete Columns** Gila Aygün, **Pelin Canbay**, Yavuz Canbay	

DAY 3 (08.11.2026 - Sunday)

PARALEL SESSIONS-1 (ONLINE)

	Online Session Session: Power and Energy Systems-5 Session Chair: Access link:	Online Session Session: Power and Energy Systems-6 Session Chair: Access link:	Online Session Session: Power and Energy Systems-7 Session Chair: Access link:	Online Session Session: Renewable Energy Technologies-1 Session Chair: Access link:	Online Session Session: Renewable Energy Technologies-2 Session Chair: Access link:
10.00 - 12.00	**7 – Conceptual Design of a LiDAR Supported Non-Contact Voltage and Electric Field Measurement System for Overhead Lines** **Faik Dalbalta;** Levent Gökrem; Mustafa Çelikpençe	**127 – Parametric Stability and Dynamic Performance Analysis of a GFM Considering Grid Strength and P–f Droop Gain** **Emine Cavus;** Ertuğrul Çam; Recep Çakmak; Özgür Çelik	**193 – Statistical Load Forecasting during Data Center Commissioning Ramp-Up: Effects of Forecast Horizon and Historical Training Window** Mohammad Danish; Hamza Kerem Göközkul; **Taylan Özgür Bilgiç;** Esra Aydın; Cenk Andıç; Belgin Türkay	**71 – Comparative Evaluation of Machine Learning Models for Wind Turbine Active Power Prediction** Hanifi Güldemir; Nazım Ural; **Abdulkadir Sengur**	**192 – Techno-Economic Comparison of PV-Wind Sizing Strategies for a Grid-Connected University Campus** **Damla Bilgin;** Taylan Özgür Bilgiç; Belgin Türkay
	136 – Day-Ahead Hourly Hydroelectric Generation Forecasting and the Role of Market and Weather in the Fırat–Dicle Basin **Aslıye Kaymaz Ozcanli;** Zelal Kılınç; Nursena Kocataş; Nurcihan Kızılkaya	**132 – Investigation on GFM Grid Support Performance During Various Power Plant Shutdown Cases** **Burhan Hükümen;** Recep Çakmak; Özgür Çelik; Ertuğrul Çam	**231 – Protection Coordination and Selectivity Assessment in a 33 kV Radial Distribution Network Using DigSILENT PowerFactory** **Seyhmus Burak Değerli;** Cem Haydaroglu; Gaye Tülgen Kale; Heybet Kılıç; Özal Yıldırım	**80 – Univariate Time Series Forecasting of Photovoltaic Inverter Power: An LSTM-Based Comparative Analysis** **Hilal Hacınedar;** Bülent Haznedar	**211 – Design of PV-Energy Storage Systems under Constant Daily Energy Demand: Electric Vehicle Charging Optimization in the GAP Region** **Cenk Andıç;** Zafer Ozturk; Belgin Turkay
	125 – Detecting State of Health Differences in Series-Parallel Battery Configurations by Interleaved Voltage Sampling **Seda Yıldırım;** Gürkan Aydemir	**134 – Comparative Performance Analysis of Grid-Forming, Grid-Following and Hybrid Inverter Systems in Grid-Connected and Islanded Modes** **Seyma Asik Tamyigit;** Yunus Yalman; Özgür Çelik; Erdem Akboy	**234 – An Integrated Multi-Criteria Framework for Investment Prioritization, Planning and Operational Decision Support in Electricity Distribution Networks** **Hebun Okcu;** Heybet Kılıç; Cem Haydaroglu	**255 – Mission-Based Solar-Lithium Hybrid Electrical Power System for the Diamond DA20-C1: Simulink/Simscape Modeling and System-Level Analysis** **İbrahim Yıldırım;** Yavuz Ates	**213 – Experimental and QBlade Analysis of Blade Geometry and Number Effects with Angle Variation on Small-Scale Wind Turbine Performance** **Shahmurad Abasov ;** Cenk Andıc; Esra Aydın; Taylan Ozgur Bilgic; Belgin Turkay
	179 – Modeling and Power Flow Validation of a DAB-Based Bidirectional EV Charger for G2V and V2G Operation Using PLECS **Mustafa Buğra Okumus;** Erdem Akboy	**89 – Analysis, Simulation, and Closed-Loop Digital PFM Control of a Full-Bridge LLC Resonant Converter for High Step-Up Applications** **Osman Ekici;** Yunus Yalman	**254 – Feedforward-Assisted Control of a Half-Bridge LLC Converter for PEM Electrolysis** **Baha Toprak Sahin;** Seda Kul; Korhan Kayisli	**167 – High-Speed Fault Detection and Accurate Fault Location in Multi-Terminal HVDC Systems Using Empirical Mode Decomposition** **Jalal S. Farkhani;** Özgür Çelik; Seyed Hassan A. Niaki; Hongyi Wang; Claus Leth Bak; Zhe Chen	**217 – MATLAB/Simulink Modeling and Rule-Based Energy Management of a Fuel Cell Electric Vehicle** **Samed Pekdemir;** Mehmet Koç; Ahmet Salih Şenol; Gökay Bayrak; Alper Yılmaz
	34 – ANFIS-Based Input Scaling for Fuzzy PI Frequency Control of an Isolated Microgrid Süleyman Yıldız; Soner Çelikdemir; **Hasan Gündüz**	**189 – Forecasting District-Level Electricity Demand with Urban Development Indicators** Rabia Kalem; **Yavuz Acar;** Ahmet Mirza Duru; Kerem Yıldız; Hasret Doğuer; Selman Minga; Kardelen Kamişli; Tuğbanur Taşdemir Özdemir; Nilsu Halcı; Gülsüm Karagöz; Musa Yılmaz; Hasan Fatih Durkaya; Barış Yağmur	**265 – Detection of Suspicious Energy Consumption Patterns in Smart Metering Systems Using Anomaly Detection Techniques** Madhura Shinde; Gayatri Asalkar; Yogandhar Aphale; **Adhya Ashar;** Ankit Ghuge; Atharva Agarwal	**185 – Augmenting electricity generation in Manzanares power plant via alteration of solar chimney base and slope angle: a computational study** **Mahmut Kaplan**	**246 – Time-Sensitive Calibration of a Wind Turbine Power Curve Using a Sliding Window** **Aysenur Oymak**
	130 – Modeling Data Center Electricity Demand: A Comparative Analysis of Facility Classes and Seasonal Effects **Hasan Gündüz;** Süleyman Yıldız	**156 – LSTM-Assisted Transient Voltage Support in a DC Microgrid with Series R-L Fault Current Limiting** **Helin Bozkurt;** Özgür Çelik; Ahmet Teke; Jalal Sahebkar Farkhani	**253 – Performance Analysis of Grid-Connected Photovoltaic Systems for Educational Buildings in Karaman, Türkiye** **Muharrem Yeni;** Seda Kul	**260 – Simulation-Based Analysis of a Safe Operation Model for River Hydrokinetic Turbines** **Gökmen Öztürkmen**	**269 – Fuzzy Logic-Based Proactive Management of Laser/UAV-Assisted Hybrid Wireless Power Transfer for Internet of Battlefield Things Networks** **Anıl Mercan;** Hüseyin Erdoğan; Cem Haydaroglu
	131 – From Wildfire Risk to Grid Resilience: A Satellite-Based Assessment in Türkiye's Aegean -Mediterranean Region **Hasan Gündüz;** Süleyman Yıldız	**178 – Unsupervised Machine Learning for Operational Characterization and Anomaly Detection in a Real Sub-Transmission Substation Fleet: A Kayseri Case Study** **Hasan Mercan;** Ayhan Rekiler	**32 – AI-Driven Event-Triggered Control for Resilient Hybrid AC/DC Smart Grids** **Geetika Aggarwal;** Gobind Gopalakrishna Pillai; Palat Meethale Ushasree; Manish Rattan; Gurpuneet Kaur; Arooj Mubashara Siddiqui	**262 – Timestamp-Aware and Horizon-Consistent Comparison of Random Forest and 1D-CNN Models for Hourly Electricity Consumption Forecasting** **İlayda Nur Ucar;** Sena Nur Ceylan; Göksu Kayar; Cem Haydaroğlu; Özal Yıldırım; Heybet Kılıç	**102 – Multi-Source Conditional Mamba: Cross-Attentive State-Space Modeling for Joint Wind-Solar Power Forecasting** **Esra İnce;** Muhammed Sefa Çetin
12.00 - 13.00	BREAK				

PARALEL SESSIONS-2 (ONLINE)

	Online Session Session: Computer Engineering-2 Session Chair: Access link:	Online Session Session: Electronics Engineering Session Chair: Access link:	Online Session Session: Data Science and Advanced Computing Session Chair: Access link:	Online Session Session: Signal and Image Processing Session Chair: Access link:	Online Session Session: Communication Technologies-4 Session Chair: Access link:
13.00 - 15.00	**120 – SHE SHIELD: Smart Emergency Street Pole Alert System for Women Safety** Rithika P.J; **Nimna Beverly J;** N. Raja Mohamed; Nirmal Kumar	**107 – The Effect of Using a DC-DC Buck Converter with Different Battery Chemistries on Ripple Behavior in Battery Charging Systems** **Hande Özcelik Soner;** Alper Nabi Akpolat	**137 – Photovoltaic Power Plant Segmentation from Dove Satellite Imagery Using SegFormer** **Seyma Akca**	**51 – A Smart Resonance Sensing Approach for Brain Tumor Detection Using Piezoelectric Transduction** **Roopathy T**	**235 – Cross-Base-Station Generalization of Machine Learning-Based DoS and Port-Scan Detection in 5G Networks: A Feature-Vector Analysis on 5G-NIDD** **Banu Ari;** Cem Haydaroglu; Heybet Kılıç
	194 – Stability-Aware Rank Aggregation for Robust Feature Selection in Text Classification **Sercan Yalçın;** Zuhal Cetin Yalcin; Gulsah Karaduman; Muhammed Yildirim	**124 – Enhanced Multi-Verse Optimizer for Dynamic Performance Improvement of Flyback Converters** **Cihan Ersali**	**223 – Movement Direction Recognition under Missing-Step Measurements in Active Acoustic NLOS Sensing** Dilan Onat Alakuş; **Talha Burak Alakuş;** İbrahim Türkoğlu	**153 – Vision-Assisted Anthropometric Modeling and Preliminary Engineering Evaluation of a 3D-Printed Hand for Transradial Prosthetic Applications** **İlyas Sabri;** Cihan Topcu; Mohammed Albayoumi	**271 – Comparative Evaluation of Deep Learning Architectures for Automatic Modulation Recognition on RadioML Benchmarks** **Bircan Calışır**
	26 – Dream Optimization Algorithm Versus Recent Nature-Inspired Metaheuristic Optimizers: Evidence From the CEC2022 Benchmark Suite Serdar Ekinci; Hayrettin Efe Akpolat; Hasan Argunhan; **Özlem Şeker;** Davut An; Mehmet Burukanlı	**277 – Comparison of Physical Optics and Full-Wave Solutions for the Monostatic Radar Cross Sections of a PEC Plate and Sphere** **Ali Recai Celik;** Muhammed Bahadın Kurt	**242 – Synthetic Data-Based Damage Detection in Asymmetric High-Rise Buildings** **Gülay Yalçın Bayar**	**159 – From Vanilla GAN to DAC-WGAN-GP: A Comprehensive Benchmark of Generative Models for Otitis Media Image Synthesis** **Sedat Oranc**	**210 – Single-Substrate 1-Bit X-Band Reconfigurable Intelligent Surface Unit Cell With an RF Choke** **Yusuf Güzel;** Uğur Cem Hasar
	29 – Performance Analysis of a Single-Phase Active Bridge Rectifier Based on Proportional–Resonant Current Control **Omran Alabedalkhams;** Baran Karahan; İbrahim Idiz; Hüseyin Akdeniz; Enver Ediz Erol; Sercan Toplancı	**268 – A Kink-Aware, Inductorless Cryogenic Cascode Low-Noise Amplifier Front-End with Resistive Feedback for Quantum Readout Interfaces** **Mert Baran Aslan;** Hilal Bıyık; Ayhan Akbal	**274 – Do Machine Learning Models Improve Short-Term Interest Rate Forecasts? A Walk-Forward Study of U.S. Treasury Bill Rates** **Mest Amin**	**161 – Comparative Analysis of U-Net Variants and SegFormer for Skin Lesion Segmentation on the HAM10K Dataset** **Sedat Oranc**	**116 – Design and Implementation of a Low-Cost IoT-Based Urban Drainage Network Monitoring System for Blockage Detection** **Emre Arslan;** Meriç Çetin
	68 – Machine Learning and Deep Learning Based Traffic Accident Severity Prediction for Intelligent Transportation Systems Using MATLAB **Devika Narayan;** Anagha S Kumar; Swathy Panicker; Baby V T	**272 – Multiplier-Free Phase-Noise-Aware Polar Receiver for 140 GHz Sub-THz Links: Carrier Recovery, Demapping, and FPGA Synthesis** Bircan Çalışır; **Mert Baran Aslan**	**203 – Candidate Material Narrowing and Decision Support for Digital Twins in Active Acoustic NLOS Systems** Dilan Onat Alakuş; **Talha Burak Alakuş;** İbrahim Türkoğlu	**182 – A Pixel-Wise Evaluation of U-Net-Based Architectures for Maximum Curvature-Guided Finger-Vein Segmentation** **Mustafa Kocakulak;** Tahir Bekiryazıcı	**119 – A Scalable IoT Gateway Design for Smart Homes and Mobile Living Spaces** Mustafa Kahyaoğlu; **Ufuk Gunar**
		27 – VHDL-Based Real-Time Simulation and FPGA Implementation for Smart Grid Monitoring and Protection **Geetika Aggarwal**	**99 – The Relationship between Demographic and Organizational Characteristics and Commercialization in Firms: A Cross-sectional Study on Firm Scale and the Technology Ecosystem** **Beyda Taşar;** Alperen Talha Halisdemir; İzzet Taşar	**239 – SpaLoRA-Det: A Parameter-Efficient DINOv2 Detector with LoRA and Spatial Adapters for UAV Object Detection in Search and Rescue Environments** **Hasan Hamed;** Munef el Muhammed; Anas Mahyoub Naji Saeed Alqadhi Alqadhi; Mohammed Ali Mohammed S. Bajhaw; Ayseguil Ucar	**238 – Coordinate-Representation Sensitivity of Ascent–Descent Thermodynamic Disagreement in Rotary-Wing UAV Soundings** **Fuat Pekar**
15.00 - 15.30	BREAK				

PARALEL SESSIONS-3 (ONLINE)

	Online Session Session: Renewable Energy Technologies-3 Session Chair: Access link:	Online Session Session: Machine Learning and Deep Learning-13 Session Chair: Access link:	Online Session Session: Control, Automation, and Robotics-5 Session Chair: Access link:	Online Session Session: Smart Grids and Microgrids-3 Session Chair: Access link:	
15.30 - 16.30	**13 – Stability Boundary Locus Based Stability Assessment of Renewable Energy Powered Village Microgrids** Mahmut Temel Özdemir; **Vedat Celik;** Cem Haydaroğlu; Heybet Kılıç; Burak Özdemir; Burak Yıldırım	**64 – Route-Aware Digital Twin for Energy-Aware Operation of Electric and Hydrogen Bus Fleets** **Ömer Faruk Özcan;** Yunus Emre Ekici; Habip Şahin	**229 – Fault-Tolerant Geometric Design Optimization of a Planar Cable-Driven Parallel Robot under Single-Cable Failure** **Gokhan Gungor;** Muhammed Enes Elmas	**267 – Assessment of the Turkic World Hydrogen Corridor Using Multi Criteria Decision-Making and Multi-Objective Optimization** Burak Özdemir; Soner Çelikdemir; Abuzer Çalışkan; **Mahmut Temel Özdemir**	
	151 – Graph Based Multi-Task Prediction of Water Column Dynamics in the Turkish Straits System Mustafa Tan; **Meltem Yavuz Çelikdemir;** Mahmut Temel Özdemir	**149 – Hyperparameter Optimization Assessment of CNN-Attention Models for Short-Horizon Prediction of PEMFC Cell Voltage** Mustafa Tan; **Soner Çelikdemir;** Mahmut Temel Özdemir	**230 – Tension-Optimal Geometric Design of a Planar Cable-Driven Parallel Robot Using the Grey Wolf Optimizer** **Gokhan Gungor;** Hasnae Bounamer	**12 – Province-Specific Modeling and Comparative Assessment of Failure Frequency and Duration in Electrical Distribution Networks** Kerem Bakır; Burak Özdemir; **Mahmut Temel Özdemir**	
	247 – Experimental and Multiphysics Characterization of Bubble-Driven Transport Losses in a Low-Pressure Alkaline Oxyhydrogen Electrolyzer **Süleyman Yıldız**	**150 – Target Dependent Power-Density Demand Estimation from Fleet DNA Telematics** **Soner Çelikdemir;** Mustafa Tan; Meltem Yavuz Çelikdemir	**261 – Design and Analysis of a Nonlinear System with an FOPID Controller** Farhad Zishan; Cem Haydaroğlu; Heybet Kılıç; **Burak Yıldırım;** Mahmut Temel Özdemir	**1 – Co-Optimization of Electric Vehicle Charging and Distributed PV Hosting Capacity in Urban Distribution Networks** **Sulman Shahzad;** Muhammad Talha Sadiq; Saima Akhtar; Muhammad Iqbal; Heybet Kilic; Raza Zafar	
		152 – Predicting Vehicle Weight Class Using Machine Learning Methods and Evaluating Generalization Performance Meltem Yavuz Çelikdemir; Mustafa Tan; **Soner Çelikdemir**	**146 – Design of a 2-DOF Controller for Position Control of a Magnetic Ball Suspension System** **Ahmet Top;** Gulten Celintas; Serdar Ethem Hamamcı		