# 1st INTERNATIONAL CONFERENCE ON SMART SYSTEMS, DESIGN AND ENERGY

# November 28-29, 2025 | Hybrid | BİTLİS

# **CONGRESS PROGRAM**

#### **IMPORTANT**

- To be able to make a meeting online, login via https://zoom.us/join site, enter ID instead of "Meeting ID or Personal link Name" and solidify the session.
- The presentation will have 15 minutes (including questions and answers).
- The Zoom application is free and no need to create an account.
- The Zoom application can be used without registration.
- The application works on tablets, phones and PCs.
- Speakers must be connected to the session 15 minutes before the presentation time.
- All congress participants can connect live and listen to all sessions.
- During the session, your camera should be turned on at least %70 of session period
- Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.
- Make sure your computer has a microphone and is working.
- You should be able to use screen sharing feature in Zoom.
- Attendance certificates will be sent to you as pdf at the end of the congress.
- Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.
- Before you login to Zoom, indicate hall number and your surname (Hall-1, Gamze AKSOY)

Meetings ID: 309 258 4587

Passcode: 12345

# OPENING PROGRAM OF THE 1ST INTERNATIONAL CONFERENCE ON SMART SYSTEMS, DESIGN AND ENERGY ISDEC 2025

# BITLIS EREN UNIVERSITY CENTRAL CONFERENCE HALL 28.11.2025 | 10:00

#### **Opening and Welcome**

Introduction of the event and overview of the program.

#### **Associate Professor Vedat TÜMEN**

Conference Chair

#### Professor Dr. Hakan ÇOBAN

Dean of Engineering and Architecture Faculty

#### Professor Dr. Necmettin ELMASTAS

Rector of Bitlis Eren University

#### Associate Professor Dr. Davut İZCİ

#### **Keynote Speaker**

"Metaheuristic Intelligence: Bridging Nature-Inspired Optimization and Real-World Engineering"

#### Professor Dr. Ercan IŞIK

#### **Keynote Speaker**

"A Comparative Assessment of RC Structures Prior to and Following the 2023 Kahramanmaraş Earthquakes"

#### Professor Dr. Ercan IŞIK

Erasmus+ project introduction

"Strengthening green and digital capacities in higher education through collaboration in integrating historical buildings into a sustainable and digital future"

# **FACE TO FACE PRESENTATIONS**

28.11.2025 / Class 1

#### **BITLIS EREN UNIVERSITY**

#### **GRADUATE EDUCATION INSTITUTE**

#### HEAD OF SESSION: Prof. Dr. Serdar EKINCI

13:30-14:30		
AUTHORS	AFFILIATION	TOPIC TITLE
Rıdvan UMAZ	Bitlis Eren University	Analysis Of 5-Level Buck Converter With Steady-State Model
Mehmet Akif Yerlikaya Yunus SAYAN	Bitlis Eren University	An Integrated Energy–Routing– Task Optimization Model for Fuel Cell Powered AGV Systems
Yunus SAYAN	Bitlis Eren University	A System-Level Review of Photovoltaic-Hydrogen-Proton Exchange Membrane Fuel Cell Chains
15:00-16:30		
Sümeyra KAYA ARMAN Halit ÖZEN Güzin AKYILDIZ ALÇURA	Bitlis Eren University İstanbul Teknik University Yıldız Teknik University	Comparison Of Statistical And Machine Learning Methods Based On Sensitivity To The Deficiency Rate In Bluetooth-Based Traffic Data
Bülent KARA Faruk ORAL	Tatvan Vocational Training Center Bitlis Eren University	Offshore Wind Energy And The Current Situation in Türkiye
Nusret BOZKURT Ünal TUNÇ Erden Ozan KARACA	Bitlis Eren University	Evaluation of Pumice-Based Building Materials in Terms of Structural Lightness, Thermal Insulation and Energy Efficiency
Mehmet MOLU	Bitlis Eren University	The Effect of Training Data Order on Model Performance in Deep Learning: CIFAR-10 Analysis

# **FACE TO FACE PRESENTATIONS**

28.11.2025 / Class 2

#### **BITLIS EREN UNIVERSITY**

#### **GRADUATE EDUCATION INSTITUTE**

#### HEAD OF SESSION: Prof. Dr. M. Cihan AYDIN

13:30-14:30				
AUTHORS	AFFILIATION	TOPIC TITLE		
Cansu AKYÜREK ANACUR Asuman GÜNAY YILMAZ Bekir DİZDAROĞLU	Karadeniz Teknik University	Multimodal Deep Learning-Based Classification of Handwriting Data: The Case of Alzheimer's Disease		
Mehmet Kurnaz Celal ALAGÖZ	Sivas Science and Technology University	A Comparative Study of MiniRocket and cFIRE Against Image-Transformation Approaches on EEG Dataset		
Kübra ÇETİN YILDIZ Emine AYAZ	Bitlis Eren University	Multi-Class Sentiment Analysis Of Mpox Disease In X(Twitter) Data		
	15:00-16:30			
Cansu AKYÜREK ANACUR Özlem ŞEKER	Bitlis Eren University	Integrating Geospatial Analysis, Temporal Modeling, And Machine Learning For Seismic Hazard Assessment: A 24-Year Earthquake Study In Chile (2000–2024)		
Yaren YALÇINKAYA Emine AYAZ Vedat TÜMEN	Bitlis Eren University	Land Cover Segmentation and Forest Loss Analysis from Satellite Images Using Vision Transformers		
Mehtap ÜLKER	Bitlis Eren University	Adaptive Multi-Coefficient Quantization Index Modulation in DCT-Based Steganography		

# **FACE TO FACE PRESENTATIONS**

28.11.2025 / Class 3

#### **BITLIS EREN UNIVERSITY**

#### **GRADUATE EDUCATION INSTITUTE**

#### **HEAD OF SESSION: Assoc. Prof. Nusret BOZKURT**

13:30-14:30		
AUTHORS	AFFILIATION	TOPIC TITLE
Nusret BOZKURT Orhan DURAK	Bitlis Eren University	Chronological Evolution of Structural Health Monitoring and Prediction Systems in Türkiye
Mehmet MOLU	Bitlis Eren University	Proposed Management System for Material and Technical Human Resources in Public Institutions
Nusret BOZKURT Saffet SOYUGÜZEL	Bitlis Eren University	Chronological Development Of Green Building Technologies In Türkiye And A Regional Perspective On Sustainability Criteria
	15:00-16:30	
Erden Ozan Karaca Nusret BOZKURT	Bitlis Eren University	Investigation Of The Applicability Of Fuzzy Logic Method In Estimating Load-Displacement Data Of Lightweight Concrete Beams
Özlem ŞEKER Cennet AKÇAKAYA Nurullah AKARSLAN	Bitlis Eren University	BLE Based IoT Application for Life Detection Under Debris
Nusret BOZKURT Nidahi SOYUGÜZEL	Bitlis Eren University	Chronological Evolution of Smart Concrete as a Special Composite Material
Farhad Pirmohammadi ALISHAH Mehdi Mohammad REZAEI	Islamic Azad University, Shabestar Branch	The Use of Artificial Intelligence in Petrology
Farhad Pirmohammadi ALISHAH Mehdi Mohammad REZAEI	Islamic Azad University, Shabestar Branch	Artificial Intelligence is revolutionizing energy consumption in Civil Engineering

# 29.11.2025 / Hall-1 / Session-1

**BITLIS LOCAL TIME**09:30 - 11:30

ZOOM PASSCODE: 12345

**ZOOM ID: 309 258 4587** 

#### HEAD OF SESSION: Assist. Prof. Murat BİNİCİ

AUTHORS	AFFILIATION	TOPIC TITLE
Feride TUĞRUL	Munzur University	Effect on Decision Making Processes of Pythagorean Fuzzy Set
Murat Binici	Bitlis Eren University	Short-Term Electricity Load Forecasting with Holt–Winters, XGBoost and Extended Hybrid
Nebi SUDAY		Model
Celal ALAGÖZ Farhan AADIL	Sivas Science and Technology University	Adaptive Representation—Feature  Selection for Efficient and  Interpretable Time Series  Classification
İlayda AKSOY	Bitlis Eren University	Hybrid Optimization-Based Deep Learning Model Design for Energy- Efficient Intelligent Systems
Yusuf UZ Zafer SERİN Uğur YÜZGEÇ	Bilecik Şeyh Edebali University	Selfie2BFP: A Facial Image–Based  Deep Learning Framework for  Body Fat Percentage Estimation
Mehmet Emin BAKIR Sezer DÖYMAZ Vedat TÜMEN	İzmir Katip Çelebi University Bitlis Eren University	Insult Detection Across Multiple Social Media Platforms

# 29.11.2025 / Hall-2 / Session-1

BITLIS LOCAL TIME

09:30 - 11:30

ZOOM ID: 309 258 4587 ZOOM PASSCODE: 12345

#### HEAD OF SESSION: Assoc. Prof. Ridvan UMAZ

AUTHORS	AFFILIATION	TOPIC TITLE
Fikri AĞGÜN Raif SİME	Bitlis Eren University	A Study On Webassembly-Based Crypto Mining
Berat DEMİRKAN Tolga ÖZASLAN	Ankara Yıldırım Beyazıt University	Detecting Specular Surfaces With LiDAR–Sonar Sensor Fusion
Rıdvan Fırat ÇINAR	Batman University	Data-driven Scoring of a  Continuous Water Quality Index  Using Nonlinear Tree Based  Machine Learning Models
Onur KAYA Songül KARAKUŞ	Bitlis Eren University	Recovering Deleted Data On Thermal Paper Using Uv Light And Image Processing In Digital Forensics
Eyyüp KARDEŞ İrfan ÖKTEN Uğur YÜZGEÇ	Bitlis Eren University Bilecik Şeyh Edebali University	Facial Recognition-Based Security Verification in Mobile Banking: An Innovative AI-Based Approach
Erkan DEVECİ Burhan ERGEN	Osmaniye Korkut Ata University Fırat University	Automated Post-Earthquake Wall  Damage Detection and  Classification Using YOLOv8

# 29.11.2025 / Hall-3 / Session-1

BITLIS LOCAL TIME 09:30 - 11:30 **ZOOM ID: 309 258 4587** 

**ZOOM PASSCODE: 12345** 

# **HEAD OF SESSION: Prof. Dr. Cengiz YILDIZ**

AUTHORS	AFFILIATION	TOPIC TITLE
Fatih İLKBAHAR Şahin KARA Muhammed Zekeriya GÜNDÜZ	Düzce University Sakarya Applied Sciences University Bingöl University	Planning, Optimization, and Grid Integration of Electric Vehicle Charging Infrastructure: A Systematic Literature Review
Gökhan YÜKSEK	Batman University	Evaluating Meteorological Effects on Wind Turbine Performance: Anomaly Detection and Energy Loss Quantification
Serdar EKİNCİ Davut İZCİ Burcu BEKTAŞ GÜNEŞ İlayda AKSOY Mohit BAJAJ Laith ABUALIGAH	Bitlis Eren University Bursa Uludağ University Graphic Era (Deemed to be University) Al al-Bayt University	Stellar Oscillation Optimizer-based Parameter Identification for Photowatt PWP201 and STM6- 40/36 PV Modules
Abdullatif YILMAZ Cengiz YILDIZ	Fırat University	Numerical Investigation Of The Cooling Performance Of Photovoltaic Panels Equipped With Square Fins
Mustafa AKDAĞ Mehmet Salih MAMİŞ	Bitlis Eren University Inönü University	Single-Ended Fault Detection and Fault Location in Transmission Lines Using the Approximate Derivative
Fatih OKTAY Emin EL	Bitlis Eren University	Investigation of the Thermal Performance of Air-Cooled Lithium-Ion Battery Systems in Electric Vehicles

# 29.11.2025 / Hall-1 / Session-2

**BITLIS LOCAL TIME** 

13:30 - 15:30

**ZOOM ID: 309 258 4587** 

**ZOOM PASSCODE: 12345** 

# HEAD OF SESSION: Assist. Prof. Ümit CAN

AUTHORS	AFFILIATION	TOPIC TITLE
Dilan ÖZEK İrfan ÖKTEN Lokman DOĞAN	Bitlis Eren University  Kütahya Health Sciences University	A Deep Learning-Based Bidirectional Sign Language Translation System
Seda YETKİN YEŞİL Olcay PALTA	Bitlis Eren University	ResNet-50 Based CNN Model for Grape Leaf Image Classification in MATLAB
Ümit CAN	Munzur University	Sentiment Analysis of Monkeypox Tweets Utilizing a Hybrid Deep Learning Model
Hasan ÖNDER İlknur ÇEVİK TEKİN	Selçuk University	Monitoring and Analysis of Employee Productivity with Artificial Intelligence: YOLO Algorithm Application
İSMAİL ÇALIKUŞU Kadir HALTAŞ	Nevsehir Hacı Bektaş Veli University	A Machine Learning and Clustering-Based Framework for Assessing Environmental Effects in the Textile Industry
Muhammed Zekeriya GÜNDÜZ Şahin KARA Fatih İLKBAHAR	Bingöl University Sakarya Applied Sciences University Düzce University	Enhancing Situational Awareness Against Ransomware Attacks: Analysis, Detection, and Prevention Approaches

#### 29.11.2025 / Hall-2 / Session-2

BITLIS LOCAL TIME

13:30 - 15:30

**ZOOM ID: 309 258 4587** 

**ZOOM PASSCODE: 12345** 

#### **HEAD OF SESSION: Assist. Prof. Emine AYAZ**

AUTHORS	AFFILIATION	TOPIC TITLE
Mehmet MOLU	Bitlis Eren University	A Conceptual Two-Layer Emotion Chain Model For In-Store Customer Satisfaction Analysis
Elif ERÇEL İrfan ÖKTEN	Bitlis Eren University	Smart Door Security System with Face Recognition: A Low-Cost IoT- Based Approach
Barış ASLAN Pınar ÜNVER Beytullah TÜTÜNCÜ Tuğçe DENİZ	Düzce University	Speaker Attribution in Dialogue- Heavy Texts: Comparative Analysis of Babelscape and SavasyBERT NER Models
Buğra Berk SARIOĞLU Tolga ÖZASLAN	Ankara Yıldırım Beyazıt University	An ESP32-Based Integrated Multi- Peripheral Platform for Micro Aerial Vehicles
Muhammet İsmail GÜNGÖR Davut İZCİ Serdar EKİNCİ Ehab GHITH	Bursa Uludağ University Bitlis Eren University Ain Shams University	Enhanced Transient Performance of Micro-Robotic Systems via SFOA- Based PID Tuning
Şafak SARI Faruk ORAL	Bitlis Eren University	Waste Heat Recovery Potential In Sofc Systems Operating At High Temperatures

# 29.11.2025 / Hall-3 / Session-2

BITLIS LOCAL TIME

13:30 - 15:30

**ZOOM ID: 309 258 4587** 

**ZOOM PASSCODE: 12345** 

#### HEAD OF SESSION: Assist. Prof. Alev Akıllı EL

AUTHORS	AFFILIATION	TOPIC TITLE
		Conductive Asphalt Pavements for
Alev AKILLI EL	Bitlis Eren University	Snow and Ice Management on
		Roads
		Geopolimer Brick Technology In
Aykut TUNTAŞ	Van Yüzüncü Yıl University	Terms Of Energy And
Namık YALTAY		Sustainability
	Internity A and I Trainsposites Challenger	The Application of Artificial
Farhad Pirmohammadi ALİSHAH	Islamic Azad University, Shabestar	Intelligence in Crystallography and
Mehdi Mohammad REZAEI	Branch	Mineralogy
		An Examination Of The Effect Of
	Bitlis Eren University	Channel Height On Heat Transfer
Fatih TAŞDELEN		Within A Chip-Embedded
		Minichannel
		Evaluation Of Heat Transfer
	Bitlis Eren University	Behaviour İn A Minichannel With
Fatih TAŞDELEN		Electronic Chips Using Different
		Fluids
		Investigation of the Use of Waste
Özge Nur ÇETKİN	Bitlis Eren University	Materials in Soil Improvement
Ozge ivai ÇETKIIV		Methods
Zehra ERTOSUN KARABULUT Sabriye Banu İKİZLER		Different Sand Soils Treated by
	Muş Alparslan University	MICP Method: Effect of Flow Rate
	Karadeniz Teknik Üniversitesi	Variation on Calcium Carbonate
		Precipitation