

# The 8th EAI International Conference on Smart Grid and Internet of Things (SGIoT 2024)

## Program-At-a-Glance

November 23, 2024	
8:50~9:00	Registration
9:00~9:50	Technical Session: (MEETING ROOM EAST)
9:50~10:00	Break
10:00~10:10	Opening
10:10~10:50	Keynote Speech (I) (MEETING ROOM EAST)
10:40~10:50	Break
10:50~11:00	Welcome Speech
11:00~11:30	Keynote Speech (II) (MEETING ROOM EAST)
11:30~11:40	Break
11:40~12:10	Keynote Speech (III) (MEETING ROOM EAST)
12:10~13:30	Luncheon
13:30~15:00	Online Technical Session: (Online MEETING)
November 24, 2024	
9:00~10:30	Online Technical Session: (Online MEETING)
10:30~10:40	Break
10:40~12:10	Online Technical Session: (Online MEETING)

November 23, 2024

**8:50 – 9:00 Registration**

**9:00 – 9:50 Technical Session**

**Meeting Room: EAST, Session Chair: Prof. Chien-Liang Chen**

1. **Toward Semantic Scene Understanding: Benchmarking for Mobile Robot Navigation Indoors**  
Isaac Asante, Bee Theng Lau and Mark, Tee Kit Tsun.
2. **Optimal Bounded Error Piecewise Linear Approximation with Resolution Reduction for Sensor Data Compression**  
Fang-Yie Leu, Jeng-Wei Lin, Yu-Hung Tsai, Ching-Che Huang and Chia-Wei Hsu.
3. **Integrating Tabular Data and Satellite Imagery for House Price Prediction with Explainable Techniques**  
Ya-Jin Lyu, Sheng-Tzong Cheng, Yen-Jung Chang and Tzu-Yi Chiu.
4. **Predicting Cardiovascular Disease Risk through Non-Invasive Imaging in Precision Medicine**  
Rita Wiryasaputra, Audrey J. A. Tambunan, Chin-Yin Huang and Chao-Tung Yang.
5. **Comparison of YOLO Power Usage on Edge-AI Device with Smartmeter**  
Chao-Tung Yang, Chandra Wijaya, Anggi Andriyadi, Shi-Yan Chen and I-Jan Wang.

**9:50 – 10:00 Break**

**10:00 – 10:10 Opening**

Prof. Der-Jiunn Deng, National Changhua University of Education, Taiwan.

**10:10 – 10:50 Keynote Speech (I)**

Chair: Prof. Jyh-Cheng Chen, National Yang Ming Chiao Tung University, Taiwan.

Speaker: Prof. Da-Jeng Yao, National Tsing Hua University, Taiwan

**10:40 – 10:50 Break**

**10:50 – 11:00 Welcome Speech**

Dr. Po Tao Chen, Chairman of Overseas Chinese University, Taiwan.

**11:00 – 11:30 Keynote Speech (II)**

Chair: Prof. Sheng-Tzong Cheng, National Taitung University, Taiwan.

Speaker: Prof. Mohammed Atiquzzaman, University of Oklahoma, US.

**11:30 – 11:40 Break**

**11:40 – 12:10 Keynote Speech (III)**

Chair: Prof. Chuan-Yu Chang, President, National Yunlin University of Science and Technology, Taiwan.

Speaker: Ms. Tzu Yun (Fiona) Weng, Co-founder of BioLife, Taiwan.

**12:10 – 13:30 Luncheon**

**13:30 – 15:00 Online Technical Session**

**Online Meeting, Session Chair: Prof. Hung-Chang Chan**

1. **Energy-Efficient YOLO with Knowledge Distillation and Dynamic Energy Control for Edge Devices**  
Chao-Tung Yang, Anggi Andriyadi, Chandra Wijaya, Sh-Yan Chen and Ding-Hsiang Huang.
2. **Increasing the QoS and Lifespan for Wireless Sensor Networks using Cluster Formation and a Mobile Sink (IQLWS-MC)**  
Bo-Jiun Huang, Chen-Min Tsai, Hsi Chen And Lei Wang.
3. **Office Energy Consumption Decision Support System Based on Microservices**  
BOR-LIN CHUNG and Chih-Kun Ke.
4. **Using Deep Learning Recognition to Aid Early Diagnosis and Rehabilitation of Senior Aphasia Care**  
Lun-Ping Hung, Ming-Hung Chen, Jeng-Yeh Hsieh and Chien-Liang Chen.

November 24, 2024

**9:00 – 10:30 Online Technical Session**

**Online Meeting, Session Chair: Prof. Chien-Liang Chen**

1. **A Utilization Method of Big Data in Blockchain Based on Swarm Learning**  
Yiran Cao, Haiyan Kang, Yanfang Li and Zhiyong Zhang.
2. **Warehouse Receipt Financing Governance Optimization Based on the Blockchain**  
Xiao-Xi Zheng and Cheng-Yong Liu.
3. **Copyright Risk Analysis and Mitigation Strategies for AI-Generated Content (AIGC) Works**  
Cheng Chen, Xiao-Xi Zheng and Cheng-Yong Liu.
4. **A Research on Improvement of Blockchain-based Corporate Governance**  
Xiao-Xi Zheng and Cheng-Yong Liu.
5. **Pathway to Refine the Informed Consent Rules for Data Collection in the Context of IoT**  
Xie Shen and Cheng Che

**10:30 – 10:40 Break**

**10:40 – 12:10 Online Technical Session**

**Online Meeting, Session Chair: Prof. Hung-Chang Chan**

1. **Optimization of Corporate Governance from the Perspectives of Law and Economics and Blockchain**  
Xiao-Xi Zheng and Cheng-Yong Liu.
2. **A New Time-series Anomaly Detection Model in CAVs Based on WGAN**  
Jian Yin, Jianjun Zeng and Zhenjiang Zhang.
3. **Computing Task Offloading and Processing for Power Internet of Things in Remote Areas**  
Sai Liu, Zhenjiang Zhang and Xintong Pei.
4. **Anomaly Detection Mechanism for Manufacturing Defects**  
Cheng-Hui Chen, Hsiao Yu Wang and Ching-Hua Hung.
5. **Reflection and Correction of the Data Portability Mechanism of the Internet of Things from the Perspective of Interest Balance**  
Xie Shen and Cheng Che