International Conference on AI, IoT, **Embedded Technologies & Sustainable** Energy(AITEC'2024) including the 6th Winter school of technology

MONASTIR-TUNISIA, DECEMBER, 23-24-25-26, 2024

Presentation

Overview

Welcome to The International Conference on AI, IoT, Embedded Technologies & Sustainable Energy, including the 6th Winter School of Technology. This prestigious event brings together researchers, practitioners, and industry experts to explore the latest advancements and innovations in these rapidly evolving fields. Join us for an enriching experience filled with insightful presentations, hands-on workshops, and invaluable networking opportunities.

Honorary General Chairs Kamel Charrada, Tunisia

Training chairs Rafik M'nassri, Tunisia Radhouane Laajimi, Tunisia Walid Ben Mabrouk, Tunisia General chairs Mohamed Mosbah, France Mostapha Mimouni, Maroc

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Publicity chairs Ahmed Ben Elghazi, Maroc Mohamed Khlifi, Saoudi Arabia Soufien Gdaim, Tunisia Abdeaziz Zaidi, Tunisia

Event Schedule

Days 1- 2 Technical Sessions

In the first two days, Technical Sessions will be hosted where scientific papers will be presented by participants. This will be recognized as a fantastic opportunity for research to be shared, feedback to be received, and stimulating discussions to be engaged in with peers and experts in the field.

The following two days will be dedicated to Training Sessions, where four comprehensive workshops will be conducted to deepen knowledge and enhance skills. (The workshops will be conducted in French)

Workshop 1 Artificial Intelligence for research Through hands-on sessions and practical examples, Al tools and techniques will be learned by researchers to enhance their research methodologies, analyze complex data sets, and drive innovative discoveries. Valuable insights will be provided to both novice and experts for integrating Al into their research to achieve impactful results.

Workshop 2 AI with Embedded Systems The integration of AI and IoT technologies with embedded systems will be discovered, with practical experience gained through project-based learning and collaborative exercises.

Workshop 3 Industry 4.0 The transformative impact of Industry 4.0 will be explored, with a focus on smart manufacturing, automation, and digitalization. Discussions on the latest trends, technologies, and case studies in the industry will be engaged in.

Workshop 4 Photovoltaic Sizing and design The art and science of sizing photovoltaic systems will be mastered. Fundamentals knowledge of solar energy, the main components of PV systems, and the reliable methodologies for accurately sizing systems to meet various energy needs will be covered. Practical exercises and simulations will be engaged in to apply this knowledge to real-world scenarios. Importatnt dates

Submission site opening July 20th, 2024

Papers and abstracts submission October 25th, 2024

Acceptance notification November 5th, 2024

Camera Ready paper and November 20th, 2024

Workshops



Artificial Intelligence for research



Al with embedded systems





Photovoltaic Sizing

Topics

Artificial Intelligence

Applications of artificial intelligence in healthcare and medicine, Advanced machine learning and deep learning techniques, Al for predictive analytics and decision-making, Ethical and regulatory aspects of artificial intelligence, Natural language processing and understanding, Computer vision and image recognition, Reinforcement learning and autonomous systems, Al-driven robotics and automation

Internet of Things

IoT architectures and platforms, Security and privacy in IoT networks, Integration of IoT in smart urban environments, IoT applications in agriculture and environmental monitoring, Edge computing and fog computing for IoT, IoT sensors and actuators, IoT for healthcare and assisted living, Industrial IoT (IIoT) and Industry 4.0 applications, IoT standards and interoperability, Energy-efficient IoT solutions

Embedded Technologies

Low-power embedded system design and development, Embedded systems for automotive and intelligent transportation, Embedded systems in wearable technology and smart devices, Real-time operating systems for embedded applications, Hardware/software co-design for embedded systems, Embedded systems for consumer electronics and mobile devices, FPGA and ASIC design methodologies, Embedded AI and machine learning algorithms, Cyberphysical systems and embedded control, Embedded systems security and trustworthiness

Sustainable Energy

Renewable energy systems and environmental sustainability, Smart grid technologies and intelligent energy management, Geothermal Energy, Wind energy, Photovoltaic, Thermal solar energy, Advanced energy storage systems and management, Energy efficient buildings and smart home technologies, Electric vehicles and infrastructure, Grid integration of renewable energy sources, Energy harvesting and wireless power transfer, Sustainable manufacturing and green technologies, Energy efficient data centers and cloud computing







