CALL FOR PAPERS
SPECIAL SESSION ON

Machine Learning and Artificial Intelligent based Operation and Control of Renewable Energy Systems

for ICCAD 2026
July 7-9, 2026, Lisbon, Portugal

Session Co-Chairs:
(Dr. Muhammad Majid Gulzar, Department of Control & Instrumentation Engineering and Interdisciplinary Research Center for Renewable Energy and Power Systems (IRC-REPS), King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia, Email: muhammad.gulzar@kfupm.edu.sa)

Session description:
Recently, unprecedented energy demands have soared drastically that the renewable energy sources (RES) have to pave their way to meet the energy demand. The paradigm shifts towards commonly used renewable energy sources like Photovoltaic (PV) and wind is due to high availability, non-hazardous, clean and sustainable energy sources. Besides all the penetration of RES into conventional energy sources have raised stability issues. However, it is indispensable for the overall system to maintain stability for the effective execution of power flow demand.
For the continuity of power to a load, frequency is the core parameter that needed to be maintained. Hence, it is indispensable to design a smart energy supervision system that has the ability to counter the challenge originated by the perturbation in the load or fluctuation in frequency which gets effected during a fault in any of the interconnected areas of the power system. Moreover, the controller should be efficient to maintain zero steady-state error for frequency disruption with fast response time to preserve system stability.
This Special Session provides a unique platform to present state-of-the-art research findings in all fields of renewable energy integration and innovative solutions associated with the development and selection of renewable technologies to overcome distinctive technical challenges related to sustainable power establishment. This Special Session aims to facilitate and promote interdisciplinary researchers to provide multifaced solutions related to operation and control of renewable energy systems.

SUBMISSION
Papers must be submitted electronically for peer review by: **January 31, 2026**
https://www.iccad-conf.com/submission/

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).