CALL FOR PAPERS
SPECIAL SESSION ON

Unmanned Aerial and Ground Vehicles (UAV-UGV) Swarm Formation: Mathematical Modelling and Control

for ICCAD'24
May 15-17, 2024, Paris-France

Session Co-Chairs:
- Nasim Ullah, Full Professor of Electrical Engineering, Taif University KSA, nasimullah@tu.edu.sa

Session description:
Unmanned aerial vehicles (UAVs) and unmanned ground vehicles (UGVs) in swarm formation have several uses, including monitoring vital infrastructure, industrial automation, and emergency disaster management. The selection of the proper mathematical models and control mechanisms are crucial for the successful completion of high precision group tasks. The controller design process is a difficult undertaking when there are environmental influences, external disturbances, and parametric uncertainties in the UAV and UGV models. This special session provides a unique opportunity for the researchers around the world to share their recent theoretical and practical implementations findings and discuss practical applications of the UAV and UGVs swarm performing task in collaborative manner.

The topics of interest include, but are not limited to:

- Path planning and trajectory control of swarm for collaborative tasks
- Advanced modeling and swarm formation controllers
- Artificial intelligence and deep learning methods for completion of collaborative tasks optimally.
- Applications of swarms such as hazard monitoring, land mapping, oil site monitoring etc.

SUBMISSION
Papers must be submitted electronically for peer review by**: December 15, 2023**
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).