

CALL FOR PAPERS SPECIAL SESSION ON Applied Artificial Intelligence on Computer Vision and Large Language Modelling for ICCAD 2025 July 1-3, 2025, Barcelona, Spain

Session Co-Chairs:

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Session description:

This special session deals with the problem of the application of **Artificial Intelligence (AI)** and **deep learning** in **Computer Vision** and **Large Language Modelling (LLM)**, highlighting the advancements in visual data processing, real-time analysis, and multi-modal systems. As AI continues to transform industries such as healthcare, security, autonomous vehicles, and robotics, computer vision technologies are at the forefront of these changes, driving innovation in areas like object detection, image recognition, and human-computer interaction.

With the rise of AI-powered systems, it is crucial to explore both the **theoretical advancements** and **practical applications** of deep learning techniques that have enhanced the capabilities of computer vision systems. This session aims to provide a platform for discussing cutting-edge research and novel applications of AI in computer vision, as well as their integration with natural language models for more holistic and intelligent systems.

The goal is to explore both the theoretical advancements and practical applications of deep learning techniques that have significantly enhanced computer vision capabilities. The session will delve into cutting-edge research and innovative AI applications in both computer vision and natural language processing, aiming to develop more integrated and intelligent systems.

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

- AI-Driven Object Detection and Tracking.
- Deep Learning for Image Segmentation and Classification.
- 3D Vision and Al-Based Depth Estimation.
- Generative AI Models in Vision.
- Generative Adversarial Networks (GANs).
- Action and Gesture Recognition Using Deep Learning.
- Real-Time AI-Powered Video Analytics.
- Al in Medical Imaging and Diagnostics.
- Vision-Based Robotics with AI.
- Anomaly Detection in Visual Data Using Deep Learning.
- Multi-Spectral and Hyper-Spectral Imaging with AI.

- Low-Light and AI-Enhanced Night Vision.
- Computer Vision for Edge Devices Using Embedded AI.
- Deep Learning and Explainability in Vision Systems.
- Large Datasets and AI-Based Data Annotation for Vision.

SUBMISSION

Papers must be submitted electronically for peer review by: January 31, 2025 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).