

14th International Conference on Image Processing
Theory, Tools & Applications
October 13-16, 2025
Istanbul, Türkiye

IPTA
2025



Special Session Chairs:

Sheli Sinha Chaudhuri
Computer Vision and Data
Analytics Lab, ETCE
Department, Jadavpur University
sheli.sinha@jadavpuruniversity.in

Sos Agaian,
Computational Vision and
Learning Lab
Computer Science Department
College of Staten Island, CUNY
sos.agaian@csi.cuny.edu

Khalifa DJEMAL
IBISC Lab, University Evry
Paris-Saclay
khalifa.djemal@univ-evry.fr

Special session title:

*Advanced Computer Vision Techniques for Object
Detection, Tracking and Segmentation*

Brief description of the proposed topic (150-300 words):

Vision techniques based on machine learning have achieved remarkable advances today, providing solutions to numerous technological challenges across various fields. Indeed, we are continuously confronted with critical environmental issues affecting both humans and our planet. However, several challenges may arise and hinder the development of such systems, including nighttime scenes, low-light environments, haze, fog, and rain.

In this context, this special session focuses on the latest technological advances in segmentation, detection, classification, and prediction, of images and video, captured under visually challenged conditions in order to implement intelligent vision systems. This may involve either improving existing solutions or developing new processes capable of detecting, identifying, and assisting in strategic decision-making within the relevant field.

Papers are invited in relevant applications mentioned below but are not restricted to:

- Waste detection and segregation
- Autonomous navigation
- Surveillance and Rescue Operations
- Smart Farming
- Smart Traffic Management
- Underwater Object Detection and Tracking
- Any other related area

Email(s) of chairs :

- Sheli Sinha Chaudhuri (sheli.sinha@jadavpuruniversity.in)
- Khalifa Djemal (khalifa.djemal@univ-evry.fr)
- SoS Agaian (sos.agaian@csi.cuny.edu)