

Call For Paper

AVSS 2025 marks the 21st edition of the IEEE International Conference on Advanced Visual and Signal-Based Systems, sponsored by the IEEE Signal Processing Society (SPS). AVSS is a premier international forum in image and video processing and signal-based analytics that brings together experts from academia, industry, and government to advance the frontiers of theories, methods, systems, and applications. In addition, AVSS 2025 also explores the robustness, security, privacy, and fairness issues in applying AI and machine learning algorithms for image and video analytics. AVSS 2025 will feature a main conference and multiple associated workshops, challenge contests, and tutorials. Topics of interest include, but are not limited to:

➤ **Image and Video Analytics**

- Detection, Segmentation, Recognition, Face, Gesture, Action, Events, Synthesis, Biometrics, Tracking, Counting, Multi-view, 3D Analysis, Drone Video, Datasets and Evaluation

➤ **Model Security, Privacy, Fairness and Robustness**

- Privacy-Preserving ML, Adversarial ML, Secure Data Processing, Authentication, Security and Privacy in IoT, Trustworthy AI, Ethical Use of AI Technologies

➤ **Multi-modal Analytics**

- Vision-Language, LLM, Foundation Models, Fusion Approaches, Multi-model Processing, Registration, Calibration, Robust Analysis, Audio and Speech Analysis, Multi-spectrum Analysis, Medical Image Analysis

➤ **IoT and Signal Analytics**

- Cybersecurity Threat Detection, Forensic Analysis of Manipulated or Generated Contents, Edge AI Computation,

➤ **Systems and Application**

- Smart Cities, Public Safety, Traffic Analysis, Home / Business Security, Critical Infrastructure

Submission Instructions

Prospective authors are invited to submit

1. **Full-length**, high-quality papers presenting original research results, which should not exceed **six** pages (including references)
2. **Short** papers and **demo** papers, which should not exceed **four** pages (including references)
3. **Extended Abstracts** consisting of **one- to two-page** submissions (including references)

Submissions must adhere to the IEEE double-column format and are limited to **six** pages, including figures, tables, and references. All accepted full, short, and demo papers presented at AVSS 2025 will be included in the conference proceedings and published in the IEEE Xplore digital library. The papers in the abstract sessions will be presented at the conference but not included in the proceedings. Submissions can be made through the CMT online portal at <https://cmt3.research.microsoft.com/AVSS2025>. The paper review process will be double-blind to ensure fairness and impartiality.

Important Dates

Paper Deadline: April 15, 2025 AoE

Extended Abstract Deadline: April 22, 2025

Acceptance Notification: May 19, 2025

Camera Ready Deadline: May 26, 2025

Please visit the Conference Website



<https://avss2025.org>

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