

1st Call for Papers

Hybrid 29 Nov – 2 Dec, 2022















18th IEEE Int. Conf. on Advanced Video and Signal-Based Surveillance

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M. G. Aguilella, S. Rengifo, J.C.

Ruiz-Garcia, P. Melzi, G.

Stragapede, S. Romero, L. F. Gomez and M. Ghafourian

AVSS-2022 is the 18th edition of the IEEE International Conference on Advanced Video and Signal-Based Surveillance, a premier forum for the presentation of new advances and research results in the field of video and signal-based surveillance. The goal is to provide a game-changing and cross-disciplinary forum that brings together experts from academia, industry, and government to advance the frontiers of theories, methods, systems, and applications. AVSS-2022 is sponsored by the IEEE Computer Society (PAMI TC) and the IEEE Signal Processing Society.

AVSS-2022 will be held under a **virtual format** but, if allowed by the pandemic situation, the opportunity of **casual in-person interactions and discussions** for a limited number of persons (40 ~ 50) joining physically at Universidad Autónoma de Madrid will be given.

Conference proceedings: published in IEEE Xplore digital library.

Keynote speakers: previous AVSS editions include <u>Rama Chellappa</u>, <u>Mubarak Shah</u>, <u>Xiaoming Liu</u>, etc. (*Still in progress for AVSS-2022*.)

Location: Both virtually and at Universidad Autónoma de Madrid.

Topics of interest include (but are not limited to):

- SENSOR-CENTRIC PROCESSING: Sensors (visible/infrared/3D/mm and wave/audio/radio, etc.) | Ground, airborne, satellite based (fixed/mobile /UAV) | Crowdsourcing (cellular/social networks) | Calibration and positioning (GPS, etc.) | Communications and networked sensing | Distributed Camera Networks and Smart Cameras | Participatory Sensing
- PROCESSING, DETECTION, TRACKING & RECOGNITION: Modelling and feature selection | Detection and estimation (change/motion/anomaly/saliency/pattern) | Data association and (multi) target tracking | Classification and recognition | Multi-modal fusion
- VISUALIZATION AND INTERACTION CONCEPTS FOR SURVEILLANCE SYSTEMS: Compression and summarization | Archival, search and retrieval | Human-computer interfaces | Visualization algorithms | Mobile and distributed interaction
- ANALYTICS, SITUATION AWARENESS & DECISION MAKING: Activity/interaction analysis and monitoring |
 Intention estimation and situation awareness | Crowdsourcing-based methods | Cognitive dynamic systems and bioinspired methods
- SECURITY & PRIVACY: Data authenticity | Privacy in surveillance | Attacks on Surveillance Vulnerabilities | Forensics | Biometrics (standoff, multi-modal, voice, etc.) | Cybersecurity for surveillance (wireless, network, computer) | Advanced Biometrics at a Distance
- SURVEILLANCE SYSTEMS AND APPLICATIONS: Hardware and software architectures | Research prototypes | Simulators | Civilian, industrial, and military | Transportation (road, rail, air, maritime) | Performance evaluation

Important Dates:

Paper Submission: June 30, 2022

Decision to Authors: Sept 20, 2022

Camera Ready: Sept 30, 2022

Workshop Proposals: May 5, 2022

Challenge Proposals: May 5, 2022

Sponsors:





http://atvs.ii.uam.es/avss2022/