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

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 Rama Chellappa, Mubarak Shah, Xiaoming Liu, 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 bio-inspired 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:**