![IEEE Signal Processing Society]

The 20th IEEE International Conference on
Advanced Video and Signal-Based Surveillance

IEEE AVSS 2024

July 15–16, 2024

Niagara Falls Marriott on the Falls, Niagara Falls, Canada

Collocated with the IEEE International Conference on Multimedia and Expo (ICME) 2024

General Chairs
Peter Tu (GE Global Research)
Siwei Lyu (SUNY Buffalo)

TPC Chairs
Ming-Ching Chang (SUNY Albany)
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Workshop Chairs
Ifeoma Nwogu (SUNY Buffalo)
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Challenge and Demo Chairs
Zheng (Thomas) Tang (Nvidia)

Registration Chairs
Xin Wang (SUNY Albany)

Publicity Chairs
Zhedong Zheng (Univ. of Macau)
Xxx need 5-6 more

Industrial Chairs
Arslan Basharat (Kitware)
Lipeng Ke (Amazon 126 Lab.)

Web and Local Chairs
Chengzhe Sun (SUNY Buffalo)

Tutorial Chairs
Jun-Wei Hsieh (NYCU)

Call For Paper

AVSS 2024 marks the 20th edition of the IEEE International Conference on Advanced Video and Signal-Based Surveillance, 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 2024 also explores the robustness, security, privacy, and fairness issues in applying AI and machine learning algorithms for image and video analytics. AVSS 2024 will feature a main conference and multiple associated workshops, challenge contests, and tutorials. The conference solicits original and unpublished works including, but are not limited to: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

➢ **Other Signal and Multi-modal Analytics**
  - Vision-Language, LLM, Foundation Models, Fusion Approaches, Multi-model Processing, Registration, Calibration, Robust Analysis, Audio Analysis, Multi-spectrum Analysis

➢ **IoT and Signal Analytics**
  - Cybersecurity Threat Detection, Forensic Analysis of Manipulated or Generated Contents, Edge AI Computation

➢ **Surveillance Systems and Applications**
  - Smart Cities, Public Safety, Traffic Analysis, Home / Business Security, Critical Infrastructure

Submission Instructions

Prospective authors are invited to submit high-quality full papers representing original results. Submissions are limited to **six** pages in double-column IEEE format, including figures, tables, and references. The conference will also accept short papers and demo papers (**four** pages including references in the same format and with the same deadline). The CMT online submission site is at https://cmt3.research.microsoft.com/AVSS2024/. All accepted papers presented in AVSS 2024 will be published in the conference proceedings that will be also available in the IEEE Xplore digital library.

Important Dates

Submission Deadline: **March 15, 2024 AoE**
Paper Review Available: **April 30, 2024**
Acceptance Notification: **May 12, 2024**
Camera Ready Deadline: **May 19, 2024**

Please visit the Conference Website

https://avss2024.org