5ᵗʰ INTERNATIONAL WORKSHOP ON RESEARCH & INNOVATION FOR SECURE SOCIETIES (RISS)

@IEEE COMM 2026

28 – 29 May 2026, Bucharest, Romania

Call for Papers:

RISS invites original research papers presenting applied and methodologically sound contributions with clear relevance to security-oriented and real-world deployment scenarios. The workshop welcomes research contributions on novel modeling approaches, system-level architectures, datasets, benchmarks, and evaluation frameworks. Submissions are expected to demonstrate methodological rigor, reproducibility, and careful consideration of real-world deployment constraints, particularly in vision-centered and multimodal learning settings.

Motivation and Scope:

Recent advances in artificial intelligence have enabled powerful models for language understanding, data-driven reasoning, and multimodal perception. However, a significant gap remains between methodological progress and the deployment of robust, scalable, and trustworthy AI systems in real-world and security-critical environments. The RISS workshop aims to bridge this gap by focusing on applied AI solutions that integrate language, data, and multimodal learning into operational systems.

The workshop targets research at the intersection of natural language processing, deep learning, multimodal representation learning, and large-scale data analytics, with an emphasis on practical system design, evaluation, and deployment. Special attention is given to low-resource languages, heterogeneous and noisy data, multimodal fusion (text, vision, audio, signals, sensors), and real-time or edge-constrained environments.

RISS is particularly relevant for public-sector, infrastructure-scale, and national-level applications, where AI systems must operate under constraints related to reliability, explainability, privacy, and accountability. We encourage contributions that address end-to-end pipelines, from data acquisition and model training to validation in realistic settings, including applications such as information analysis, misinformation detection, decision support, intelligent mobility, identification systems, and situational awareness.

The workshop welcomes research papers with strong methodological contributions and clear applicability to security-oriented domains. By bringing together researchers and practitioners from computer vision, natural language processing, machine learning, and applied AI, RISS aims to foster cross-domain collaboration and accelerate the transition of validated research outcomes from laboratory settings to deployable AI solutions for security-critical environments.

Topics of Interest (including, but not limited to):

Computer Vision and Multimodal Learning:
- Multimodal representation learning and cross-modal fusion for vision, text, audio, and sensor data
- Vision–language models for semantic interpretation of multimodal streams
- Robust visual perception in unconstrained or real-world environments (detection, classification, tracking)
- Vehicle detection, model/brand classification, and attribute recognition from video streams

Applied AI for Security-Oriented Domains:
- Vision-based identification, re-identification, and tracking of vehicles and individuals
- License plate recognition with OCR and integrated biometric driver/occupant analysis
- Trajectory prediction and behavior analysis from visual and spatio-temporal data
- Misinformation and anomaly detection from heterogeneous multimodal sources

Language, Semantic and Behavioral Analysis:
- Natural language understanding for incomplete sentence detection, sarcasm/irony, paraphrasing, and readability
- Geolocation of entities and contextual extraction from unstructured text
- Lip reading and audio-visual speech recognition from annotated audiovisual data
- Relationship detection between uni- and multi-modal entities across structured and unstructured sources, and entity re-identification.

Data Engineering, Systems and Deployment:
- Construction, annotation protocols, and benchmarking of datasets covering vision, audio, text, and sensor inputs
- Aggregation, preprocessing, and integration of heterogeneous data streams for AI training and evaluation
- Scalable system architectures for real-time deployment, containerization, and orchestration
- Standardization, interoperability, and communication protocols for multimodal AI system integration

Trustworthy and Responsible AI:
- Explainable and interpretable models tailored for high-impact applications
- Robustness to adversarial, distributional, and cross-domain shifts
- Privacy-preserving learning and GDPR-aligned data handling
- Evaluation methodologies and reproducibility standards for security-focused AI systems

Target Audience:
- Researchers in computer vision, multimodal learning, and applied AI
- Practitioners working on security-critical AI systems
- Researchers developing datasets and benchmarks for real-world deployment
- Public-sector and infrastructure-focused AI developers

Organization:

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