

International Conference on Image Processing Theory, Tools & Applications



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Special session title:

Processing and Protection of Encrypted Multimedia Data

Aims & Scope

The digital world has become a confrontational space characterized by the resurgence of unfair competition, espionage, disinformation, terrorism and cyber-crime. Thus, faced with the increase in attackers' capabilities and the proliferation of attack scenarios, multimedia security has become a major security issue. Multimedia data is especially vulnerable to various threats due to its abundance on networks. According to CISCO, it represents more than 80% of the total volume of data in transit, especially on social networks and cloud computing platforms. In this context, methods to protect multimedia content have been developed. In particular, encryption is used to ensure the visual privacy of the original data and to prevent an unauthorized person from viewing their content (automatic recognition and identification, tracking, tracing...).

In this special session, we will focus on the processing and protection of encrypted multimedia data, motivated by five technical challenges:

- 1. ensuring privacy protection,*
- 2. preserving the original format of the data,*
- 3. enabling the visualization of encrypted data,*
- 4. preserving the size of the clear data,*
- 5. ensuring the reversibility of the operations performed.*

Topics of interest

- Multimedia data encryption (image, video, 3D objects...)*
- Security evaluation of encrypted multimedia data*
- Data hiding in the encrypted domain*
- Secret sharing*
- Correction of noisy encrypted multimedia data*
- Research and indexing in the encrypted domain*
- Compression of encrypted multimedia data*
- Forensics in the encrypted domain*