

International Journal of Network Security

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Special Issue (SI) on **Multimedia Application on Information Forensics**

The rapid advancement in technology, started with VLSI design leading to small powerful devices with in-built multimedia interfaces, and ubiquitous availability of high band-width wireless network, multimedia contents are generated and distributed at an exponentially increasing rate. The popularity of multimedia contents for communication is further bolstered due to the introduction of various social network service applications, like Facebook and internet applications like utube. While researches for protecting the contents, their authenticity, like encryption is well matured, it is not enough to investigate IT crimes. One needs to trace the perpetrator. For IT related investigation, one needs to know the origin of the multimedia content, whether it is in its original form or manipulated, if manipulated when and where – footprints of the forensic information is needed during the whole life-cycle of the content. After a multimedia information is created, it is processed at different stages of its travel to destination. On this journey it should embed information, intrinsically or by extrinsic methods, from which one can trace and identify how and where irregular intervention, illegal forgeries happened. It has become more and more important, and the research area of “Information Forensics” received attention from the beginning of this century. This also includes problems like automatic identification and terminate the spread of Fake news, classify and single out manipulated video with artificially created video and voice audio etc. Multimedia forensic and security techniques for multimedia data attracted a strong research attention, trying to find solutions from different aspects – from communication to media creation and processing (like encryption, water marking, compression etc.). However, there are a lot to be done.

The goal of this special issue is to provide a proper and premier forum for researchers working on information forensic from all aspects to present their recent unpublished research results. It also provides an important opportunity for multidisciplinary studies connecting industry and creating new techniques to solve multimedia forensics and security problems with practical solution with acceptable performance. Topics of interest include, but are not limited to:

- Security and privacy in multimedia application
- Network security and data privacy
- Extreme events prevention, mitigation, preparedness, response, and recovery

using multimedia data

- Multimedia application in international cooperation
- Information forensic in all events using multimedia
- Information retrieval in all services for data forensic
- Multimedia in interagency network
- Image processing and analysis
- Data analysis in social media
- Use of social media in emergencies
- Interaction, access, authentication of multimedia

Manuscript Submission Information

Articles must be written in English. Once a manuscript is received, the article will be reviewed by experts in this field. Submitted articles should not be submitted elsewhere (except a subset of the results published in conference proceedings). Paper/s should be submitted in MSWord or pdf format to the Guest editors via Email to cyweng@mail.nptu.edu.tw by the corresponding author. The subject of the Email should be: Submission to SI: **Multimedia Application on Information Forensics**

Important dates

Paper submission due: August 31, 2020

First notification: November 30, 2020

Revision submission: December 15, 2020

Final decision: December 31, 2020

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