

Title:

Multimedia Content Security and Privacy Protection

Abstract:

Multimedia signal processing are omnipresent in our daily lives, however, a lot of relevant security issues have emerged as well, such as covert communication using multimedia files, copy-move forgery in digital images and videos, biometric spoofing. To address these issues, many multimedia information security techniques were proposed utilizing the methods in areas like deep learning, signal and image processing in encrypted domain, and privacy protection. Nevertheless, there are some notable shortcomings in research methodologies. Current studies for the multimedia content security are often based on the strict conditions that are nearly impossible to meet up in real world. Furthermore, the high computational complexity of the current methods makes it hard to handle the big data in the cloud computing environment. All these drawbacks limit the applications of the secure techniques in practice. This Workshop will focus on the latest research on the topics of privacy protection and multimedia content security, with a particular emphasis on novel and highly efficient methodologies that have the potential to be used in cloud environment.

Scope and Topics:

- ✧ Multimedia Fingerprinting and Traitor Tracing
- ✧ Multimedia Watermarking, Fingerprinting and Identification
- ✧ Multimedia Forensic, Authentication and Encryption
- ✧ Multimedia Privacy Protection
- ✧ Steganography and Steganalysis
- ✧ Signal Processing in the Encrypted Domain
- ✧ Coverless Information Hiding
- ✧ Biometrics Encryption and Hashing in cloud storages
- ✧ Source Device Identification and Linking
- ✧ Security of Large Multimedia System
- ✧ Covert Communications and Surveillance.

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Zhenxing Qian received the B.S. and Ph.D. degrees from University of Science and Technology of China, Hefei, China, in 2003 and 2007, respectively. Since 2008, he has been with the faculty of the School of Communication and Information Engineering, Shanghai University. Now, he is a Professor of Fudan University. His research interests include data hiding, image processing, and digital forensics. He has

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Chuan Qin received the B.S. degree in electronic engineering and the M.S. degree in signal and information processing from Hefei University of Technology, Anhui, China, in 2002 and 2005, respectively, and the Ph.D. degree in signal and information processing from Shanghai University, Shanghai, China, in 2008. Since 2008, he has been with the faculty of the School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, where he is currently an Associate Professor. He was with Feng Chia University at Taiwan as a Postdoctoral Researcher and Adjunct Assistant Professor from July 2010 to July 2012. His research interests include image processing and multimedia security. His current research works are supported by the Natural Science Foundation of China. He has published more than 90 papers in these research areas.

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Jinwei Wang was born in Inner Mongolia, China, in 1978. He received the B.A.Sc. in automatic control from Inner Mongolia Electric Power College in 2000. He was a teaching assistant at Inner Mongolia University of Technology from July 2000 to September 2002. He received the Ph.D. student in information security at Nanjing University of Science & Technology in 2007 and was a visiting scholar in Service Anticipation Multimedia Innovation (SAMI) Lab of France Telecom R&D Center (Beijing) in 2006. He worked as a senior engineer at the 28th research institute, CETC from 2007 to 2010. He worked as a visiting scholar at New Jersey Institute of Technology, NJ, USA from 2014 to 2015. Now he works as a professor at Nanjing University of Information Science and Technology. His research interests include multimedia forensics, multimedia encryption and multimedia watermarking. He has published more than 60 papers, hosted and participated in more than 10 projects.

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