



ACM Transactions on Internet Technology (TOIT)

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Special Issue on Security and privacy of medical data for smart healthcare

Overview:

Recently the prevalent appearance of smart networks as well as the attractiveness of electronic supervision of medical reports made it feasible for digital medical images to be distributed all over the world for smart healthcare services. Further, implementing these services has become an emerging trend at global level. In these services, medical data are exchanged between health care professionals for better diagnosis purpose. The information and communication technology (ICT) has been potentially useful for cost effective and speedy transmission of electronic medical record (EMR) over open channels for smart healthcare applications. However, transmission of medical images/EMR over open networks needs high degree of security. The modified, altered or corrupted medical data can make wrong diagnoses and create serious health issues for any individual. In addition, medical identity theft is a growing concern and has contributed to large amount of e- fraud cases across the world. Research established that watermarking based methods are the best traceability technique in the healthcare domain.

The objective of this special issue is to attract high-quality research and survey articles that promote research and reflect the most recent advances in addressing the security and privacy issues of the medical data for smart healthcare applications. We welcome researchers from both academia and industry to provide their state-of-the-art technologies and ideas covering all aspects of security and privacy solutions for the applications.

Topics:

Potential topics include but are not limited to following:

- Watermarking, steganography, hidden data
- Multimedia big data analytics for smart healthcare
- Health data management
- Cryptographic algorithms/protocols
- Security and privacy of smart healthcare media data
- Privacy in the Internet of Things for smart healthcare
- Protection systems against person identity theft
- Bio-signal Processing
- Media cloud applications for healthcare
- display or secure transmission of images
- Medical images processing
- Biometrics
- Imaging
- Medical Image data compression
- Cyber Security for healthcare
- Blockchain for medical record

Important Deadlines

- Manuscript Submission : February 1, 2020
- First Notification: June 15, 2020
- Submission of revised manuscript: July 30, 2020
- Final notification: August 31, 2020
- Final (Camera-ready): September 30, 2020
- Publication Date: to be scheduled in late 2020

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Please select "Special Issue on Security and privacy of medical data for smart healthcare" in the TOIT Manuscript Central Website

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