

Special Issue on
Emerging Security Approaches in Healthcare

CALL FOR PAPERS

When a patient accesses information regarding a medication at a pharmacy through an unsecure WIFI connection while using a smartphone, the amount of data, type of request, security risks, and visualization characteristics are not the same than when a patient is at a consultation and wants to show part of her/his medical record to the doctor, by accessing the hospital's private network with her/his tablet. If these two access scenarios have very different characteristics, also in terms of security risks, the way information is processed and displayed to the user should always take into consideration the entire interactional ecosystem. There is the need for a new paradigm in terms of models and mechanisms for securing human computer interactions such as authentication mechanisms, access control models, and visualization techniques in healthcare. New technologies such as Internet of Things (IoT) and cloud services and new environments such as ambient assisted living (AAL) and access to healthcare data anytime/everywhere can also bring new security challenges. Furthermore, adequate methods to evaluate the usability and user experience as well as the security and privacy compliance requirements of healthcare information systems (HIS) are essential to validating current and new developments.

The aim of this special issue is to review and publish high quality research papers in the areas of security, privacy, and usability in the healthcare context as well as studies that focus on healthcare systems' compliance with legal and regulatory requirements, to provide solutions that can support and improve patients' privacy and trust.

Potential topics include but are not limited to the following:

- ▶ Adaptable, context, and profiling-based access control models applied to healthcare, including cloud services, IoT, and AAL
- ▶ Security and data privacy regulations in health informatics
- ▶ Security visualization for mobile health applications
- ▶ Seamless authentication: healthcare use-cases
- ▶ Human factors and usability issues in healthcare security research
- ▶ Secure and unambiguous human computer interactions in health informatics
- ▶ Profiling techniques to improve security and usability in healthcare
- ▶ HIS standardization and modeling approaches for enhanced security and usability in healthcare

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jhe/esah/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Submission Deadline

Friday, 20 April 2018

Publication Date

September 2018