Call for Papers

Special Topic

Model-Based Design of Trustworthy Health Information Systems

in

Methods of Information in Medicine

While many information-intensive industries have developed and deployed standards-based information infrastructures, healthcare has been characterized as a 'trillion dollar cottage industry' that, in its current state, is heavily dependent on paper records and fragmented, error-prone approaches to service delivery. In response, Health Information Systems (HIS) and especially Electronic health record (EHR) systems are emerging as a new and significant application domain for information technologies to capture and promote interactions between patients and healthcare providers. However, the integration of information systems into the complex world of healthcare generates unique technology challenges. A primary concern is that privacy and security requirements for HIS are frequently expressed in vague, as well as contradictory, complex laws and regulations. To address this problem, model-based methods offer a revolutionary way to formally and explicitly integrate privacy and security goals into HIS architectures. End-to-end architecture modeling, integrated with formal privacy and security models, offer new opportunities for HIS system designers and end users.

This special issue invites contributions discussing new results in model-based design methods for trustworthy health information systems. Specific topics of interest include, but are not limited to:

- HIS/EHR Model-based platform design
- HIS/EHR Model-based generators
- HIS/EHR Modeling languages
- HIS/EHR Model verification tools
- HIS/EHR privacy modeling
- Service-oriented architectures for HIS/EHR
- Security architectures and models for HIS/EHR
- Integration of HIS /EHR with business processes

Guest Editors

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Author Information

- Papers must be written in a scientifically rigorous manner with adequate references to related work

- Submitted papers must not have been published in, nor have been submitted to, any other journal.

- Submitted papers do not need to adhere to a particular format, but should adhere to the standard structure of scientific papers, typically comprising: Title Page, Summary and Keywords, Main Text (typically with Introduction, Methods, Results, Discussion, Outlook), References, Acknowledgements. The number of characters (without blanks) should not exceed 30.000.

- For detailed instructions for authors, please consult http://www.schattauer.de/fileadmin/assets/zeitschriften/methods/instructions_to_authors_10_2 006.pdf. Please note that for accepted papers for this special issue, no page charges will be charged by Methods of Information in Medicine.

- Each paper will be peer-reviewed by three international reviewers.

- Please send your submission in pdf format by email to mothis@uibk.ac.at

Deadline for submission: February, 29th, 2008