HIMS: Healthcare Information and Management Systems

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Today, it is an essential necessity for healthcare organizations to manage both internal and external knowledge effectively in order to provide the best possible healthcare by solving problems and making the most ideal and flawless decisions. In Health Information Management Systems (HIMS), information management is applied to health domain and health care. HIMS leads to an efficient healthcare system. Therefore, HIMS is an essential element to improve the quality of healthcare by insuring the best healthcare decision, to satisfy patients' expectations and also to decrease the cost in in healthcare systems. Herein, knowledge management becomes important in order to manage the healthcare data effectively. Knowledge management collects, stores, shares and ensures the effective usage of knowledge. Thereby, health data could be converted into meaningful data for a better decision-making process. Healthcare organizations must have a knowledge management strategy which will enable them to decrease their cost, to improve their services and patients' satisfaction. As health data grows in volume, the process of collecting, storing, maintaining and analyzing health data is becoming more computer-oriented. HIMS is a multi-disciplinary field that brings computer scientists and healthcare professionals together. "HIMS: Healthcare Information and Management Systems" is a special session in SEMAPRO 2016. HIMS special session is concerned about the usage and management of information in healthcare. Today, healthcare is one of the challenging domain. As healthcare become more complex, there are several challenging problems to be solved in this domain. In this special session there are four papers which discuss the recent problems in healthcare and make substantial contributions to the related research field. "*Towards a Common Data Model for the Internet of Things and Its Application in Healthcare Domain*" proposes a data model for IoT environment and the model depends on the IoT-ARM reference model. In "*Electronic Health Records for Smoking Cessation With a Web Based Software*", a web based software is developed for use of primary health care physicians and all other health professionals to implement smoking cessation for addicts. In "*Intensive Care Unit – Clinical Decision Support System*", a decision support system that collects the information from the respirator machines and makes them available for the needs of medical doctors and the nurses of the intensive care unit via web based and mobile interfaces is developed. "*Semantic Web Technogies for IoT-Based Health Care Information Systems*" proposes a Semantic Web based IoT model and describes the use of semantics and ontologies to share large amounts of distributed medical information in order to support interoperability between IoT-based health care information systems. In the light of these contributions, I hope computer scientists and health care professionals will meet and work together to improve the quality of the healthcare and the efficiency of healthcare information management systems. I believe that "HIMS: Healthcare Information and Management Systems" special session will contribute to the field with the recent changes and progresses taking place in the related research fields.

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HIMS: Organizer and Chair