Privacy & Health Information Management in the Technological Era

Muaz A. Niazi, Department of Computer & Software Engineering, Bahria University, Islamabad, Pakistan

If we were to examine our lives from the technological perspective, we certainly live in a very exciting era. Even though our ancestors have inhabited this planet for a considerable amount of time, it is only recently that certain inventions and discoveries have impacted our planet significantly resulting in a completely immersive technological experience for our entire civilization. Unlike most of the recorded human history, these advances are recursive, recrudesce and have a tendency to even gradually trickle down the lives of people with the busiest of routines. Whether it is our everyday business communication or personal conversations with our loved ones or the way our personal information is handled by healthcare or financial companies, technology empowers as well as contributes by serving as a supporting pillar. However, as we all know from experience there is no such thing as a free lunch. While on one hand, we have learnt to embrace technology gracefully, on the other, even a fleeting look at technology news around the globe illustrates the ephemeral nature of the façade of personal security under the technology umbrella. Search engines, social networks and voluntary sharing of information in a world full of pervasive connectivity often leads to unexpected consequences highlighting the thinness of our perceived veil of personal privacy and security in this connected world. For the right price or with the right set of tools, our personal information and entire lives can be reduced to nothing more than a snippet of data accessible to complete strangers around the globe.

This new era calls for a new perspective and thus a new academic journal. It gives me great pleasure to announce the first issue of this new and exciting initiative; the International Journal of Privacy and Health Information Management (IJPHIM) is an academic journal for a readership with an interest in articles at the intersection of technology, privacy, health information and the human factor. The scope of IJPHIM is both diverse as well as multidisciplinary covering a broad and diverse set of interests ranging from security, encryption, cloud computing, body sensor networks, pervasive computing, social

networks to modeling and simulation with an underlying key focus on privacy and health information management.

Specifically, the first article of this issue examines how having a clear picture of different facets of the current situation is key in the conduct of tactical operations within a theater of operations. The article demonstrates an application of sentic computing and intention awareness techniques to develop a novel analysis framework for estimating the effects of diplomatic, informational, military, health, and economic activities in the context of a theater of operations.

The second article focuses on how natural disaster events impact both the short- and long-term health of a region's population. Due to variation in the vulnerability among population segments, over time a severe storm event can be expected to have a greater public health impact upon traditionally underserved and medically fragile populations. Using a systems dynamics modeling approach, this research illustrates the causal relationships leading to a temporal change in the prevalence of chronic conditions among black and non-black populations within U.S. Hampton Roads.

The third article is about the problems in image archiving emerging as a result of a continual accumulation of medical images in clinics

and hospitals for assistance in clinical diagnosis. This article proposes a scalable solution to archiving medical images using an independent online platform. The article presents the use of PACS using a cloud computing approach.

The last article in this issue presents a study exploring the perceptions of and attitudes towards patient safety among medical staff and patients in emergency departments. The presented results indicate that medical staff and patients significantly differ in perceptions and attitudes. Results of this study could possibly provide a valuable reference for governmental authorities and hospital managers in formulating policies aimed at clarifying perceptions and attitudes regarding patient safety among medical staff and patients in emergency departments.

In conclusion, the inaugural issue is an indicator of the highly multidisciplinary nature of IJPHIM. The journal welcomes original contributions and reviews of privacy, security as well as Health Information Management in the technological era.

Muaz A. Niazi
Editor-in-Chief
IJPHIM

Muaz A. Niazi is a Professor of Computer & Software Engineering at Bahria University, Islamabad, Pakistan. With an undergraduate degree in Electrical Engineering, specializing in Communication Systems, Dr. Niazi has an MS and a PhD in Computer Sciences from Boston University, Massachusetts and the University of Stirling, Scotland, respectively. During his doctoral research, Dr. Niazi was involved in the development of a novel framework for unifying different types of modeling and simulation methodologies in the domain of complex adaptive systems including biological, social, and engineered systems. Besides being involved in the research and academia, he has also worked in the industry for almost 9 years. Since 2002, Dr. Niazi has also been involved in various projects related to health information management. Dr. Niazi's current research entails working with researchers from different disciplines on projects ranging from biological and medical sciences to communications networks, social, and ecological sciences. Dr. Niazi is a senior member of the IEEE and is associated with several IEEE and other societies. Dr. Niazi also serves as an Associate Editor for several other journals.