Title: Business models for the digital economy
Date: Thursday, November 2, 2017

Abstract:
Business operations in the digital domain requires an understanding of the basic properties of the digital economy. New technologies based on the Internet and smart and mobile devices have enabled new business opportunities. These new businesses have challenged existing industries, as well as created new business spaces. In order to be successful in this new business landscape, there is a need to develop new business models. In this talk I will introduce digital business models. I will show how digital business models are different from traditional business models, and outline the most common types of digital business models. Examples from successful industries in the digital age will be given.
Title: Virtual Reality Integrating Information Technologies for Healthcare

Date: Thursday, November 2, 2017

Abstract:
Along with the numerous fast growing emerging technologies, such as virtual reality, wearable sensing and computing intelligence, we have attempted to propose a framework that employed and integrated these technologies to address a pressing need for novel, pervasive and easily deployable technology applications in neuro-motor rehabilitation, cognitive training and psychological exposure-therapy. In this talk, we will demonstrate a full-scale research pathway addressing a list of urging aspects in healthcare applications as below: 1) the development of task-oriented virtually reality systems integrated with wearable sensors; 2) the examination of therapeutic efficacy by clinical experiments; 3) the establishment of data-driven assessment model or diagnosis method using computational intelligence; 4) the design of an ubiquitous service in healthcare through a cloud platform. We will present our work regarding a variety of diseases which include stroke, Alzheimer’s disease, attention deficit and hyperactivity disorder (ADHD), and anxiety disorder.
Title: Cryptography-based Solutions for security and privacy in eHealth environment

Date: Friday, November 3, 2017

Abstract:
Nowadays, the rapid growth of big data processing and its circulation among multiple medical organizations bring both promising prospects and security challenges for the corresponding technologies, such as secure data management, privacy-preserving data analysis and so on. In this talk, the speaker introduce their recent research in solving the security and privacy problems in eHealth environment. The content of this speech contains how to construct an efficient and secure data traceability for big data circulation for cloud service medical applications which are not fully trusted and the risk of leakage of sensitive personal information, as well as secure data outsourced analysis, privacy-preserving data mining and data management and so on. It also covers their novel human-interactive authentication scheme for IoT networks in eHealth environment.
Abstract:
Cloud storage offers an on-demand data outsourcing service and is gaining popularity. However, due to the data outsourcing, cloud storage requires data audit and data repair to ensure data availability and data integrity in the cloud. Proof Of Retrievability (POR) is a protocol that supports a data owner to check whether the data stored in the cloud servers is available, intact and retrievable. In this talk, I present the design of a network-coding- based POR scheme, which achieves a lightweight data auditing and data repair. In particular, it supports `direct repair" mechanism in which the client can be free from the data repair process. Simultaneously, it also supports the task of allowing a third-party auditor, on behalf of the client, to verify the availability and integrity of the data stored in the cloud servers without the need of an asymmetric-key setting. The client can be thus free from the data audit process. Finally, I present some application examples using our POR scheme.