**Department of Systems Engineering and Engineering Management**

Seminar Series

# New Trends of Mobile Health (mHealth) and Secure Integration with Electronic Health Record (EHR)

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| Date | 16 December 2015 (Wednesday) |
| Time | 11:30am - 12:30pm |
| Venue | P6921, 6/F, AC1 |

## Abstract

Mobile Health (mHealth), which refers to the use of mobile technologies to improve the quality of health care, has attracted increasing attention thanks to the continuous growth of mobile devices and smartphones. It is desirable to integrate mHealth with Electronic Health Record (EHR), the preferred new method to store patients' health records. However, several security properties need to be satisfied to make the integration practical, such as data privacy, fine-grained access control and scalable access between different clouds. In this talk, we first introduce latest trends of mHealth technologies and applications, and present a secure and scalable framework for EHR data sharing, which combines Identity-based Encryption and Attribute-based Encryption together to enforce a fine-grained access control scheme on EHR and to enable scalable access between multiple clouds.

## About the Speaker

**Dr. Chin-Tser HUANG** is an Associate Professor in the Department of Computer Science and Engineering at University of South Carolina at Columbia. He received the B.S. degree in Computer Science and Information Engineering

from National Taiwan University, Taipei, Taiwan, in 1993, and the M.S. and Ph.D. degrees in Computer Sciences from the University of Texas at Austin in 1998 and 2003, respectively. His research interests include network security, network protocol design and verification, and distributed systems. He is the director of the Secure Protocol Implementation and Development (SPID) Laboratory at the University of South Carolina. He is the author (along with Mohamed Gouda) of the book ‘‘Hop Integrity in the Internet,’’ published by Springer in 2005. His research has been funded by DARPA, AFOSR, AFRL, and NSF.

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