Department of Mathematics, Statistics and Computer Science

**Colloquium Announcement**

***Human Factors in Trustworthy Intelligent Service-based Systems***

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**3:00 PM, Friday, February 21, 2014**

Cudahy Hall, Room 401

Over the past decade, the rapid advances and growth in service-based systems in various applications, such as health care, banking, online retailing, aerospace, social networks and homeland security, have had major impacts on the economy, society, and our daily lives. Today, users are accustomed to accessing various online services from a wide range of intelligent devices, from smart phones, tablets, TVs and air-conditioners to desktop PCs, for both business and entertainments. Such a trend means that more users’ confidential information than ever is transmitted, processed and stored in intelligent service-based systems. This trend raises serious concerns on the trustworthiness of such systems. Substantial research has been devoted to developing security mechanisms, network protocols, and methods to improve the trustworthiness of intelligent systems. Human factors, however, have not been sufficiently addressed trustworthiness in intelligent service-based systems.

Human factors encompass many aspects of trustworthy intelligent service-based systems, from design of trust management for trustworthy intelligent service-based systems and analysis of tradeoff between system usability and security to evaluation of users’ confidence and the usability of the deployed smart systems. Human factors are more important in trustworthy intelligent service-based systems due to complicated interactions among infrastructure providers, service providers, application developers, and users.

In this talk, the current state of the art of human factors considered in trustworthy intelligent service-based systems will be discussed, especially in how human factors are incorporated in improving system trustworthiness. Challenges and future research directions for human factors in the development of trustworthy service-based systems will be presented.

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**For further information: see** [**http://www.marquette.edu/mscs/resources-colloquium.shtml**](http://www.marquette.edu/mscs/resources-colloquium.shtml)

**or contact Dr. Rong Ge #414-288-6344, Rong.Ge@marquette.edu.**

Pre-colloquium refreshments served in Cudahy Hall, Room 342 at 2:30 p.m.