Secure Task Recommendation in Crowdsourcing

**Speaker**: Mr SHU Jiangang  
PhD Student  
Department of Computer Science  
City University of Hong Kong  
Hong Kong

**Date**: 30 November 2016 (Wednesday)  
**Time**: 9:00 am - 10:00 am  
**Venue**: CS Seminar Room, Y6405, 6th Floor  
Yellow Zone, Academic 1  
City University of Hong Kong  
83 Tat Chee Avenue  
Kowloon Tong

**Abstract**

Many crowdsourcing platforms have been developed, which enable workers to complete a broad range of complex tasks published by task requesters. Existing task recommendation systems require sensitive information such as task content and interests of workers, which has raised serious privacy concerns. In order to preserve users’ privacy in crowdsourcing, we propose a secure task recommendation scheme that achieves the preservation of task privacy and worker privacy simultaneously. Based on proxy cryptography, we realize the encrypted keyword-based matching between task specification and worker interest, and the encryption and decryption of task content, both in the multi-user environment. Moreover, user revocation is also supported. Through rigorous security analysis and performance evaluation, our scheme is secure and feasible.

This paper will be presented in IEEE GLOBECOM 2016, December 4-8, 2016, Washington, DC, USA.

Supervisor: Prof Xiaohua Jia

Research Interest: Security and Privacy in Crowdsourcing

All are welcome!