

## THE CHINESE UNIVERSITY OF HONG KONG

Department of Information Engineering

Seminar

## **Next Generation Trusted Platform Modules (TPM2.0)**

by

Dr. Liqun Chen Hewlett-Packard Laboratories United Kingdom

**Date** : 11 April, 2014 (Friday)

Time : 3:00pm - 4:00pm

Venue: Room 1009 William M.W. Mong Engineering Building

The Chinese University of Hong Kong

## **Abstract**

This talk is about trusted computing, the next generation of trusted platform modules (TPM2.0) and the cryptographic algorithms that are supported by them. After briefly describing the background of trusted computing and trusted platforms, we will discuss TPM2.0 and the cryptographic algorithms that it supports. The design target for TPM2.0 was high performance in hardware and we illustrate the design process used to achieve this by considering the development of the TPM2.0 digital signature primitive. This is a simple elliptic curve signature scheme and can be used to generate different types of signatures. Two known applications of this primitive are direct anonymous attestation (DAA) and U-Prove.

## **Biography**

Liqun Chen is a researcher at Hewlett-Packard Laboratories. She has developed several cryptographic schemes adopted by International Standards and some of them have been implemented in Trusted Platform Modules (TPM). She has an extensive publication record and holds 46 granted US patents in cryptography and information security. Liqun has served as editor, or co-editor, for six ISO/IEC standard documents. She also serves as an associate editor of IEEE Transactions on Information Forensics and Security and an editorial board member of International Journal of Information Security. Liqun obtained her BSc, MSc and PhD in Engineering from Southeast University. Prior to joining HP, she worked at Southeast University, the University of Oxford and Royal Holloway, University of London.

\*\* ALL ARE WELCOME \*\*

Host: Professor Sherman Chow (Tel: 3943-8376, Email: smchow@ie.cuhk.edu.hk) Enquiries: Information Engineering Dept., CUHK (Tel.: 3943-8385)