THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

Securing Mobile Application Ecosystem: Threats and Defenses

by

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Date : **5 March, 2015 (Thursday)**
Time : **11:00am – 12:00noon**
Venue : **Room 833 Ho Sin Hang Engineering Building**
The Chinese University of Hong Kong

Abstract
Nowadays, smartphones have become an essential part of our daily life and work. Unfortunately, hreats to smartphones and the relevant ecosystem are also growing at a staggering rate. For instance, vulnerabilities in mobile apps might be leveraged by attackers to steal private user data and cause financial loss to enterprises. Malicious apps could penetrate into centralized app stores and infect a large number of users in a short time period.

In this talk, I will present our research efforts to systematically secure the mobile application ecosystem against current and emerging threats. First, I will discuss the work of detecting malicious apps in various app stores (e.g., Google Play) and understanding the overall health. Then I will present the work of discovering two types of vulnerabilities existing in a large number of popular mobile apps. After that, I will talk about my latest work ARMlock, which aims to confine untrusted software components and protect mobile devices from being tampered with. At last, I will discuss possible directions for future research.

Biography
Yajin Zhou is a Ph.D. candidate in the Department of Computer Science at North Carolina State University. His research focuses on proposing and developing practical solutions to improve mobile security and privacy, mainly from the aspect of enriching the app ecosystem. Based on his research, he has cofounded the Android Malware Genome Project (http://www.malgenomeproject.org) and shared the dataset of representative Android malware with more than 400 universities, research labs and companies worldwide.

** ALL ARE WELCOME **