

# Spring 2015 Seminar Series

Presented by the CS Division

## CAMERA-BASED CYBER ATTACKS ON ANDROID MOBILE PHONES

WEDNESDAY APRIL 8, 2015

11:00 AM – HEC 450

Today's smartphones are very powerful and are widely used. Android is the most popular mobile operating system and over 80% mobile phones use Android. Android security has been extensively studied by researchers. However, few works have studied mobile phone multimedia security. In this work, we focus on security issues related with mobile phone cameras. Specifically, we discover several new cyber attacks that exploit phone cameras. We implement the attacks on real Android phones and demonstrate the feasibility and effectiveness of the attacks. Furthermore, we propose a lightweight defense scheme that can effectively detect the attacks. This work has been published in the IEEE Communications Magazine in March 2014.

**DR. JAMES DU**  
Temple University

Dr. Xiaojang (James) Du is an associate professor in the Department of Computer and Information Sciences at Temple University, Philadelphia, PA. Dr. Du received his B.S. and M.S. degree in electrical engineering from Tsinghua University, Beijing, China in 1996 and 1998, respectively. He received his M.S. and Ph.D. degree in electrical engineering from the University of Maryland College Park in 2002 and 2003, respectively. His research interests are security, networking, and systems. He has published over 150 journal and conference papers in these areas. Dr. Du has been awarded more than 3 million US dollars research grants from the US National Science Foundation (NSF), Army Research Office, Air Force, NASA, the State of Pennsylvania, and Amazon. He serves on the editorial boards of four international journals. Dr. Du serves as the lead Chair of the Communication and Information Security Symposium of the IEEE International Communication Conference (ICC) 2015, and a Co-Chair of Mobile and Wireless Networks Track of IEEE Wireless Communications and Networking Conference (WCNC) 2015. He is (was) a Technical Program Committee (TPC) member of several premier ACM/IEEE conferences such as INFOCOM (2007 - 2016), IM, NOMS, ICC, GLOBECOM, WCNC, BroadNet, and IPCCC. Dr. Du is a Senior Member of IEEE and a Life Member of ACM.

*Hosted by: Dr. Cliff Zou*

