THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

Data Hiding and Forensic Techniques for secure communication and protection of multimedia content
by
Professor Anthony T.S. Ho
Department of Computer Science, University of Surrey, U.K.

Date : **4 February, 2016 (Thursday)**
Time : **3:00pm – 4:00pm**
Venue : **Room 1009, William M.W. Mong Engineering Building**
        The Chinese University of Hong Kong

Abstract
The tremendous growth of advanced telecommunication and Internet technologies in the past two decades has led to the proliferation of multimedia content for digital transmission and storage. The talk will give an overview of the convergence of technologies in the information forensics and security domain such as data hiding techniques and their applications to digital images. For example, image steganography for secure communication of secret messages via an open channel, and digital watermarking for protection and authentication of content integrity. Finally, the talk will also introduce forensic techniques for identification and forgery detection of images (including biometric data) and videos, which are currently attracting a great deal of attention from the research community.

Biography
Professor Anthony T.S. Ho holds a Personal Chair in Multimedia Security and served as Head of Department of Computer Science, University of Surrey from 2010 to 2015. He is also a Guest Professor of Wuhan University of Technology, China. Professor Ho was the recipient of the Institution of Engineering and Technology (IET) Innovation in Engineering Award for his research and commercialization work on digital watermarking in 2006.

Professor Ho obtained his BSc (Hons) in Physical Electronics from Northumbria University in 1979, his MSc in Applied Optics from Imperial College London in 1980 and his PhD in Digital Image Processing from King's College London in 1983. After graduation, he worked in technical management positions in industry for 11 years in the UK and Canada. From 1994 to 2005, Professor Ho was a Senior Lecturer and then Associate Professor at Nanyang Technological University (NTU), Singapore. He has published more than 140 articles in international journals and conference proceedings as well as 8 international patents granted related to watermarking and steganography.

Professor Ho is the founding Editor-in-Chief of the International Journal of Information Security and Applications (JISA) published by Elsevier. He was recently appointed Associate Editor on the Editorial Board for IEEE Transactions on Information Forensics and Security (TIFS) for three years commencing January 2016. He serves as Area Editor for Signal Processing: Image Communication and Associate Editor for EURASIP Journal of Image and Video Processing, as well as an Associate Editor for IEEE Signal Processing Letters from 2014 to 2016. Professor Ho was invited keynote speaker at the International Symposium on Information Technology Convergence (ISITC'2015), 1st ACM Workshop on Information Hiding and Multimedia Security (IHMMSec'2013) and IEEE International Conference on Advanced Infocomm Technology (ICAIT'2010). He is currently Section Secretary of IEEE UK and Ireland Section.

Professor Ho was General Chair for the 8th International Workshop on Digital Watermarking (IWDW) held at the University of Surrey in 2009 and co-Editor for two Springer Proceedings on Digital Watermarking from IWDW08 and IWDW09. He is a Fellow of Institution of Engineering and Technology (FIET), Fellow of Institute of Physics (FInstP), Fellow of British Computer Society (FBCS) and Senior Member of IEEE.

** ALL ARE WELCOME **

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