

**THE CENTRE FOR PATTERN ANALYSIS AND MACHINE INTELLIGENCE IN ASSOCIATION WITH  
IEEE SYSTEMS, MAN & CYBERNETICS, COMPUTATIONAL INTELLIGENCE, AND  
SIGNAL PROCESSING CHAPTERS OF KW SECTION PRESENTS:**

## **New Methods for Criminal and Victim Identification**

**Speaker:** Dr. Adams Kong, Assistant Professor and Director of the Cyber Security Laboratory  
Nanyang Technological University, Singapore

**Date:** Monday June 3, 2013

**Time:** 2:30 pm – 3:30 pm

**Place:** University of Waterloo, William G. Davis Centre, DC-1304 *\*Refreshments will be served*

### **Abstract:**

With recent advances in internet and multimedia technology, the involvement of digital images in crimes has been increasing significantly. In cases of child sexual abuse, child pornography, masked gunmen, and violent protesters (e.g., the London and the Rome riots in 2011), evidence for identifying criminals or victims are often in the form of digital images. Identifying individuals from this digital evidence can be very challenging because the criminals are usually careful to hide or cover their faces. In a child sexual offense case in U.S., Dr. Kong, who served as an expert witness, faced this challenging identification problem. The U.S. Department of Justice requested Dr. Kong to verify a criminal in evidence images with a suspect, but the face of the criminal was not observable and tattoos were no found. In this talk, Dr. Kong will present a set of computational methods for this problem.

### **Bio:**

Dr. Adams Wai Kin Kong received the Ph.D. degree from the University of Waterloo, Canada. Currently, he is an assistant professor at the Nanyang Technological University, Singapore and director of the Cyber Security Laboratory. His papers have been published in TPAMI, TIP, TIFS, TSMC, TCSVT, CVPR and Pattern Recognition. One of his papers was selected as a spotlight paper by TPAMI and another one was selected as Honorable Mention by Pattern Recognition. With his students, he received Honeywell Best Student Paper Award in The IEEE Fifth International Conference on Biometrics: Theory, Applications and Systems, 2012. In the summer of 2008, he served as an expert witness to the U.S. Department of Justice for a case of child sexual abuse. He has developed seven patents; four of his patents have been approved, and the others have been filed. His research interests include biometrics, forensics, image processing and pattern recognition.

