DEAN'S LEADERSHIP IN INNOVATION SEMINAR SERIES Faculty of Engineering and Information Technology University of Technology, Sydney

TOPIC: "Distributed Multi-Camera Networks: Graphs, Grammars, and Tensors"

The Dean's seminar series was established in 2011 to provide the opportunity for distinguished researchers to initiate conversation around relevant high impact research that demonstrates leadership in Engineering and IT innovation.

When: Wednesday 4 July 2012

Time: 12:00 noon – 2:00 p.m. (light lunch will be available from 12:00 noon)

Venue: Building 10, Level 5, Room 214

Speaker: Professor Dan Schonfeld Professor, Department of Electrical & Computer Engineering, University of Illinois at Chicago Co-Director, Multimedia Communication Laboratory, University of Illinois at Chicago Chicago, Illinois USA

Abstract:

Tremendous efforts have been made over the past decade to install large camera networks in sensitive facilities and metropolitan areas. The aim of the deployed camera networks is to enhance surveillance, security, traffic monitoring, and emergency management. The critical limitation of camera networks is the enormous volume of data generated, rendering large-scale real-time imaging efforts ineffective. In this talk, we introduce a new design methodology for distributed signal processing based on complex-structure representation models of multi-camera visual data. We demonstrate the proposed approach to distributed multi-camera systems in various applications such as target tracking, pose estimation, event detection, and image rendering and reconstruction.

About the Speaker:

Dan Schonfeld received the B.S. degree in Electrical Engineering and Computer Science from the University of California at Berkeley, and the M.S. and Ph.D. degrees in Electrical and Computer Engineering from The Johns Hopkins University, in 1986, 1988, and 1990, respectively. In 1990, he joined the University of Illinois at Chicago, where he is currently a Professor in the Departments of Electrical and Computer Engineering, Computer Science, and Bioengineering. Dr. Schonfeld has been elected University Scholar of the University of Illinois. He has authored over 200 technical papers in various journals and conferences. Dr. Schonfeld has been elevated to the rank of Fellow of the IEEE "for contributions to image and video analysis." He was also elevated to the rank of Fellow of the SPIE "for specific achievements in morphological image processing and video analysis." He is currently serving as Deputy Editor-in-Chief of the IEEE Transactions on Circuits and Systems for Video Technology and Area Editor for Special Issues of the IEEE Signal Processing Magazine. His current research interests are in signal processing, image and video analysis, video retrieval and communications, multimedia systems, computer vision, medical imaging, and genomic signal processing.

All Welcome

Contact:

Jian Zhang PhD, Associate Professor Advanced Analytics Institute Faculty of Engineering and Information Technology University of Technology, Sydney (UTS) T:61-2-95143829 Mob:0408626200 http://www-staff.it.uts.edu.au/~jianzhan/