

THE CHINESE UNIVERSITY OF HONG KONG

Department of Information Engineering

Seminar

JPEG 2000: From Research to Standardization

by
Dr. Daniel Lee
General Manager
eBay China Development Center
Shanghai
China

Date : 24 March, 2010 (Wed.)

Time : 2:30pm - 3:30pm

Venue: Room 1009, William M.W. Mong Engineering Building

The Chinese University of Hong Kong

<u>Abstract</u>

Image coding is one of the most popular fields of research. Researchers are attracted to image coding research for many reasons. It is a very stimulating field requiring firm groundings on image science, digital signal processing, information theory and systems concepts. The industry also sees the attractiveness of imaging as a significant market potential. Having attractive products, however, is not good enough to ensure market success. The market success of the imaging products will depend on the adoption of well defined imaging standards to support the interoperability of features and functions among the imaging products. This talk gives an overview of the successful development of the JPEG 2000 Imaging Standard which was developed under the auspices of ISO/IEC JTC1/SC29/WG1 (commonly know as the JPEG committee – "Joint Photographic Experts Group"). The objective is to highlight how researchers and imaging technologists made use of advances in compression technology to deliver a standard that achieves superior compression performance and provides many advanced features in scalability, flexibility and systems functionalities. Since its publication, JPEG 2000 has seen successful adoptions in many areas – digital cinemas, security applications, video surveillance, defense imaging, remote sensing, medical imaging, digital culture imaging, broadcast applications, etc. The importance of standardization process, the timing on when to develop a standard, and the value of standards participation will also be addressed.

Biography

Daniel T. Lee is a seasoned technology executive with over 25 years of management experience in the high-tech industry. He is the General Manager of eBay China Development Center in Shanghai, China. Prior to eBay, he was the CTO of Yahoo! Asia, and before that he was with HP, where he held a number of management positions at HP Labs as Manager of Imaging Technology and at HP Internet Imaging Operation where he led the development of OpenPix imaging software and a photo hosting service. He also worked at IBM Research where he worked on image compression. In Standardization, he serves as the Convener of ISO/IEC JTC1 SC29/WG1 – JPEG Standards Committee, a position he has held since 1996. As Convener, he works with over 100 experts from 16 countries in developing the highly successful JPEG 2000 family of imaging standard that has been adopted by many groups in the imaging industry.

Dr. Lee received a BS degree from Cornell University and the MS and PhD degrees from Stanford University. He completed the Executive Development Program at Kellogg School of Management, Northwestern University. He has published over 70 publications and serves on the Advisory Committee, Information Engineering, of the Chinese University of Hong Kong.

** ALL ARE WELCOME **

*** Light Refreshment will be served at 3:30pm - 4:30pm ***

Host: Professor Raymond W.H. Yeung (Tel: 2609-8375, Email: whyeung@ie.cuhk.edu.hk) Enquiries: Information Engineering Dept., CUHK (Tel.: 2609-8385)