



香港浸會大學  
HONG KONG BAPTIST UNIVERSITY

## Centre for Mathematical Imaging and Vision

### Distinguished CMIV Lecture

#### *Image Processing and Computational Intelligence Methods for Computer-assisted Skin Cancer Diagnosis*



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IEEE Fellow*

*President of the IEEE Circuits and Systems Society (2008)  
Editor-in-Chief of the Circuits and Systems Magazine (2004-2007)  
Hertie Foundation Fellowship at The Goethe University  
Frankfurt-am-Main (2005)*

**Date:** 4 November 2010, Thursday

**Time:** 5:00 p.m. - 6:00 p.m. (Preceded by Tea Reception at 4:30 p.m.)

**Venue:** RRS905, Sir Run Run Shaw Building,  
Ho Sin Hang Campus, Hong Kong Baptist University

#### Abstract

Digital photography provides powerful tools for computer-assisted diagnosis systems in dermatology. Dermoscopy is a special photography technique which enable taking photos of skin lesions in chosen lighting conditions. Computer-assisted techniques and image processing methods are used for feature extraction and pattern recognition in the selected images. Special techniques used in skin-image processing are discussed in detail. Feature extraction and classification techniques based on statistical learning and model ensembling techniques provide very powerful tools which can assist the doctors in taking decisions. Performance of classifiers will be discussed in specific case of melanoma cancer diagnosis. The techniques have been tested on a large data set of images.

✦ ✦ ✦ All are welcome ✦ ✦ ✦

For enquires please contact Ms. Candy Li, 3411 5056.

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