

THE HONG KONG POLYTECHNIC UNIVERSITY Department of Electronic and Information Engrg.

香港理工大學 電子及資訊工程學系



Jointly presents

SEMINAR SERIES ON COMPLEX SYSTEMS, NETWORKS, CONTROL AND APPLICATIONS

Computer-aided Automatic Medical Image Analysis with Machine Learning

Dr. Yixuan Yuan City University of Hong Kong

Date and Time: Friday, 30 November 2018, 4:30-5:30pm Venue: Room **B**6605, City University of Hong Kong Reception starts at 4:15pm (Language: **English**)

Abstract

Medical image analysis is going through great changes with tremendous new opportunities showing up. The rise of machine learning, the rise of big data analytics and the rise of high performance computational resourses have brought wonderful opportunities to invent a new generation of medical image analysis. This talk will share my experience in developing state-of-the-art methods to help doctors analyze huge growing medical data and make accurate and early decisions.

Topics of this talk will include abnormality recognition and segmentation for Wireless Capsule Endoscopy (WCE) images and prostate MRI images. Validation results will be presented to demonstrate the effectiveness of our methods to deal with medical problems.

About the Speaker

Dr. Yixuan Yuan is an assistant professor in the Electronic Engineering Department of City University of Hong Kong since April 2018. She obtained the B.S. degree in Automation from Northwestern Polytechnical University, China in 2010 and the Ph.D. degree in Electronic Engineering from the Chinese University of Hong Kong in 2016 with Hong Kong Postgraduate Fellowship (HKPFS). She was a Postdoctoral Fellow in Stanford Cancer Center, Stanford University during 2017-2018. Her research focuses on automatic image classification, segmentation and object detection in medical videos.