

Seminar

Neural Modeling : Computation to Application

Dr. Rosa H. M. CHAN

Assistant Professor

*Department of Electronic Engineering,
City University of Hong Kong*

Date: ~~20 April 2017 (Thursday)~~ **28 April 2017 (Friday)**
Time: **12:00 nn–1:30 pm (Reception with light lunch starts at 11:45 am. To facilitate the order of lunch, please register through email yfung2222@cityu.edu.hk.)**
Venue: **B6605, G5314, Academic 1, City University of Hong Kong**
Language: **English**

Abstract

In the last century, we have witnessed astounding technical advances in neuroscience studies. As the amount of experimental data made accessible has gradually increased in recent years, it is now possible to reconsider many of the longstanding questions in neuroscience. However, the biological processes underlying signal transmission across neural circuits are difficult to quantify. This is because such multi-input, multi-output system is highly nonlinear dynamical and is often time-varying during development and learning. In this talk, I will introduce our team's research on the mathematical models of biological neural systems and novel neural interface applications.

Biography



Dr. Rosa H. M. Chan is currently an Assistant Professor in the Department of Electronic Engineering at City University of Hong Kong. She received her B.Eng. (1st Hon.) degree in Automation and Computer-Aided Engineering from the Chinese University of Hong Kong in 2003. She was later awarded the Croucher Scholarship and Sir Edward Youde Memorial Fellowship for Overseas Studies in 2004. She received her Ph.D. degree in Biomedical Engineering in 2011 at the University of Southern California, where she also received her M.S. degrees in Biomedical Engineering, Electrical Engineering and Aerospace Engineering. Her co-authored paper on a nonlinear model for the study of memory process in animals was recognized by an Outstanding Paper Award of IEEE Transactions on Neural Systems and Rehabilitation Engineering in 2013. Dr. Chan served IEEE EMBS as the Chair of the Hong Kong-Macau Chapter in 2014. Her current research interests include brain-machine interface, computational neuroscience, and neural prosthesis.

**** ALL ARE WELCOME ****