

## The Chinese University of Hong Kong Department of Electronic Engineering

Time: 15:30 - 16:30, 4 May 2018 (Fri)
Venue: Room 418, Ho Sin Hang Engineering Bldg, CUHK



## Inverse Reinforcement Learning from Sparse High-Dimensional Motion Data in Robotic Applications

Kun Li Postdoctoral Scholar, California Institute of Technology

## Abstract:

This talk presents the application of inverse reinforcement learning to evaluating human motion and teaching robot tasks. The main difficulties are the high-dimensional and insufficient data. To solve the problem, this talk introduces two algorithms to handle the data dimensions and data sparsity. The resultant algorithms are used to evaluate the skills of surgical robot operators, quantify the effects of therapies, and teach robot simple grasping tasks. At last, some ongoing and future works are presented.

## **Biography:**

Kun Li got his BS degree from Jilin University, China in 2010, and his PhD degree from The Chinese University of Hong Kong in 2015. Since then, he is a postdoctoral scholar in California Institute of Technology. His main research interests are robot learning and robot vision, especially 3D visual data processing and robot imitation learning via inverse reinforcement learning.

\*\*\* All are welcome to attend \*\*\*

For inquiries, please contact Prof. Max Meng, Department of Electronic Engineering, Tel. No. 3943 8282