

PH.D. PROGRAM IN EMPOWERMENT INFORMATICS

2016 THE 1ST MEETING OF EMP SEMINAR SERIES

Program for Leading Graduate Schools
Held by Ph.D. Program in Empowerment Informatics
Host: Jun Izawa, Associate Professor,
Faculty of Engineering, Information and Systems



Statistical Machine Learning and Motor Control



Humans are remarkable in their ability to achieve complex dynamic tasks that require memory, planning and optimal use of their body. Most importantly, we seem to be extremely good at adapting to changes in the environment or to our own bodies; re-learning at various timescales ranging from milliseconds to days and months. Would it not be great to have machines that are as versatile and robust?

In our group, we study all aspects of robot motion synthesis, from planning and representation to actuator design and control. We employ techniques from the fields of probabilistic inference and learning, stochastic optimal control, reinforcement (and apprenticeship) learning and large-scale optimization to tackle real world, real-time problems in anthropomorphic robotic systems. A cornerstone of our approach is data driven methods for learning and adaptation.

Date & Time

June 10, 2016 (FRI.)

3:30 p.m. - **4:30** p.m.

Venue

3B213 (2nd floor, Bldg. 3B)

Presenter

Sethu Vijayakumar

Professor, University of Edinburgh