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