



**The Hong Kong University of Science and Technology**

**Department of Mathematics**

**Seminar on Data Science**

**Learning to Estimate 3D Human Pose and Shape  
from 2D Image**

*by*

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**Abstract**

Recovering 3D human pose is a challenging problem with many applications. It has been conditionally solved by motion capture systems or depth sensors. This talk will discuss the more challenging case of using a single RGB camera: going directly from 2D appearance to 3D geometry. While deep learning approaches have shown remarkable abilities to solve 2D vision problems, it is difficult for them to directly learn and predict 3D geometry due to the lack of training data and higher dimensionality and nonlinearity of the solution space. In this talk, I will introduce our recent efforts toward 3D human pose and shape prediction from a single image, which solve the aforementioned challenges by integrating deep learning with geometric models as well as end-to-end learning using weakly-annotated data and multi-view geometry.

**Date:                    Tuesday, 28 August 2018**

**Time:                    10:00a.m. – 11:00a.m.**

**Venue:                  Room 5566 (lift 27, 28),  
Academic Building, HKUST**

***All are welcome!***