



The Chinese University of Hong Kong
Department of Statistics

Seminar

Statistical Learning for Modal Regression

By

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Abstract

The goal of supervised learning is to characterize a conditional distribution that can be used for prediction. Modal regression seeks the conditional mode of a response variable given a set of covariates, providing an alternative to mean regression and quantile regression in the presence of heavy-tailed noise, asymmetric noise or outliers. In this talk we study the modal regression estimator involving two types of kernels arising from kernel density estimation and reproducing kernel Hilbert spaces. Consistency results and learning rates are presented. Numerical results will be given to show the efficiency of the proposed method. Moreover, we will also discuss its connections to personalized medicine, outlier detection and high-dimensional robust estimation.

Date: April 17, 2018 (Tuesday)
Time: 2:30 p.m. - 3:30 p.m.
Venue: Lady Shaw Building, Room C2
The Chinese University of Hong Kong

ALL INTERESTED ARE WELCOME