GRADUATE SEMINAR

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Quantile Regression Approach for Homogeneous and Heterogeneous Model

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3.30 PM
Math and Stat Lounge CW 307.20

Abstract: Classical linear regression focuses on a specific location (mean) of the conditional distribution of response variable, $E(Y|X)$. Moreover, conditional mean models are very sensitive to model assumptions, such as homoscedasticity assumption. Quantile regression (QR) approach offers to study the conditional distribution of Y on X at different locations and no parametric distribution assumption is required for the error.

In this presentation, I will briefly discuss on some properties of QR and QR behavior on different homogeneous and heterogeneous models. Using simulation study, I will also try to compare the performance of OLS and QR method on such different models. The empirical distribution of quantile regression estimator in the case of i.i.d errors and i.ni.d errors will also be discussed in this seminar.

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