Mathematics, Statistics, and Computer Science **@ UIC**

Graduate Statistics Seminar

Nonparametric Interaction Selection

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Abstract: Variable selection has been well studied in the recent literatures due to the surge of enormous high dimensional data. Interaction between predictors is commonly expected to exist in all kinds of real applications. Recently some parametric interaction selection methods have been proposed. In this talk, we will present a new method to perform nonparametric interaction selection and screening, based on the measurement error selection likelihood approach. This method uses local constant smoothing and backfitting algorithm to perform main and interaction selection for additive model. Resulting solution path will exhibit the importance of predictors. Finite-sample simulation shows this method performs well.

Wednesday, January 29 at 3:00 PM in 712 SEO