2016년 제2회 통계세미나 개최 안내

통계연구소에서는 다음과 같이 통계 세미나를 개최하오니 많은 참여 바랍니다.

일시: 2016년 3월 23일 (수) 오후 5시
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Bayesian Restricted Likelihood Methods

〈Abstract〉

Bayesian methods have proven themselves to be enormously successful across a wide range of scientific problems, with analyses ranging from the simple one-sample problem to complicated hierarchical models. They have many well-documented advantages over competing methods. However, Bayesian methods run into difficulties for two major and prevalent classes of problems—handling data sets with outliers and dealing with model misspecification. In both cases, standard Bayesian analyses fall prey to the hubris that is an integral part of the Bayesian paradigm. The large sample behavior of the analysis is driven by the likelihood. We propose the use of restricted likelihood as a single solution to both of these problems. When working with restricted likelihood, we summarize the data, x, through a set of (insufficient) statistics T(x) and update our prior distribution with the likelihood of T(x) rather than the likelihood of x. By choice of T(x), we retain the main benefits of Bayesian methods while reducing the sensitivity of the analysis to selected features of the data. The talk will motivate the blended paradigm, discuss properties of the method and choice of T(x), cover the main computational strategies for its implementation, and illustrate its benefits. This is joint work with Yoonkyung Lee and John Lewis.

고려대학교 통계연구소