Seminar Series: Exploring Statistical Sciences

Date: Wednesday, September 21, 2016
Time: 4:30 pm – 5:30 pm
Location: REC 114

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Affiliation/Organization: Department of Statistics, Purdue University

BAYESIAN CONCEPT, INFERENCE AND COMPUTATION

Abstract: In this tutorial talk, I will introduce the concept of Bayesian probability and inference, Computation of Bayesian methodology, and challenge of the modern Bayesian analysis. The Bayesian statistics introduce the concept of prior probability, and lead to automatic uncertainty quantification based on posterior information, which is totally different to the classical statistical theory. Although certain connection between Bayesian and classical statistical theory has been established such as posterior consistency and Bernstein Von Mises theorem, it receive many doubts due to the prior subjectivity. The rapid development of computational equipment facilitate the implement of Bayesian analysis, and in practice, Bayesian approaches gain huge success in practice especially with complex modeling. However in the modern era, more and more challenges remain unsolved for Bayesian statistician.

Reference: