Departamento Académico de Estadística
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Seminario Aleatorio

Sesión 340

LISA for BART

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Abstract

Markov chain Monte Carlo (MCMC) sampling from a posterior distributions corresponding to a massive data set can be computationally prohibitive since producing one sample requires a number of operations that is linear in the data size. A new communication-free parallel method, the Likelihood Inflating Sampling Algorithm (LISA) is introduced. LISA significantly reduces computational costs by randomly splitting the data set into smaller subsets and running MCMC methods independently in parallel on each subset using different processors. Each processor is used to run an MCMC chain that samples sub-posterior distributions which are defined using an inflated likelihood function. We develop a strategy to combining the draws from different sub-posteriors to study the Bayesian Additive Regression Trees (BART). The performance of the method is tested using simulated data and a large socio-economic analysis.

Martes 22 de octubre de 2019, 13:00 hrs.
Aula PF101, Plantel Río Hondo

El Seminario Aleatorio está destinado tanto a profesores como a estudiantes, por lo que el Departamento de Estadística agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.

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