Colloquium announcement

"Deterministic Sampling Techniques for Bayesian Computation"

Presented by
Roshan Joseph, Georgia Tech

Thursday, March 23, 2017
300 Seitz Hall
3:30 p.m.

Abstract: The state-of-the-art technique for solving Bayesian computational problems is to use Markov chain Monte Carlo (MCMC) sampling. But MCMC becomes infeasible when the likelihood or prior is expensive to evaluate or when we need to compute some posterior quantities that are expensive to evaluate. In this talk, I will explain a deterministic sampling technique known as minimum energy design, which try to sample and approximate the posterior with few evaluations of the likelihood and prior. I will also explain another deterministic technique known as support points, which can compact a large posterior sample to a small set of representative points. The support points are much more efficient for reducing the posterior computational effort than the commonly used approach of throwing away samples, a procedure known as thinning.

Hosted by the
Department of Statistics
Virginia Tech
Please join us after the colloquium for refreshments at
Top of the Stairs (217 College Ave.)