

Statistical Problems of Big Data with some Applications in Finance

Dr. Rituparna Sen,
Indian Statistical Institute Chennai

Big Data refers to the large volume of data that are becoming increasingly common recently. These pose new challenges as traditional methods often break down due to the enormity of either the dimension or the sample size or both. In this talk, I shall demonstrate how some standard statistical procedures like hypothesis testing, dimension reduction, variable selection, parameter estimation etc. need a new methodology as the dimension grows. I shall then concentrate on a particular application of portfolio selection in finance with huge number of stocks and present my ongoing Bayesian work on this topic.