ΟΙΚΟΝΟΜΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ

ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS EXOAH ETIIETHMON & TEXNOAOTIAE THE TAHPOOOPIAE SCHOOL OF INFORMATION SCIENCES & TECHNOLOGY

TMHMA ΣΤΑΤΙΣΤΙΚΗΣ DEPARTMENT OF STATISTICS

ΚΥΚΛΟΣ ΣΕΜΙΝΑΡΙΩΝ ΣΤΑΤΙΣΤΙΚΗΣ ΙΟΥΝΙΟΣ 2017

Feng Liang

Associate Professor, Department of Statistics University of Illinois at Urbana-Champaign

Scalable Approximation Algorithms for Bayesian Variable Selection

ПЕМПТН 8/6/2017 12:15

ΑΙΘΟΥΣΑ 607, 6^{ος} ΟΡΟΦΟΣ, ΚΤΙΡΙΟ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ (ΕΥΕΛΠΙΔΩΝ & ΛΕΥΚΑΔΟΣ)

ΠΕΡΙΛΗΨΗ

There has been an intense development on the estimation of a sparse regression/classification model in statistics, machine learning and related fields. In this talk, we focus on the Bayesian approach to this problem, where sparsity is incorporated by the so-called spike-and-slab prior on the coefficients. Instead of replying on MCMC for posterior inference, we have developed scalable algorithms that approximate the posterior distribution and can process data batch by batch without loading all the data into memory. Asymptotic analysis of our approach, as well as empirical evaluation, will be presented.

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AUEB STATISTICS SEMINAR SERIES JUNE 2017

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ROOM 607, 6th FLOOR, POSTGRADUATE STUDIES BUILDING (EVELPIDON & LEFKADOS)

ABSTRACT

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