<u>Advanced Analytics Seminar Series on 16/12/2011</u>

Seminar Title: Sample Covariance Matrices in High Dimensional Data
Speaker: Mr. Cheng Wang, PhD student of Department of Statistics and Finance, University of Science and Technology of China

Date and Time: 1:30pm to 3:00pm, 16th December 2011 (Friday)
Seminar Room: CC05.GD.02, UTS Blackfriars Campus (5 minutes walk from Tower Building CB01 of UTS)
Street Address: 2-12, Blackfriars Street, Chippendale, NSW 2008
Seminar Chairman: Prof Longbing Cao (longbing.cao@uts.edu.au)

Abstract: This talk presents recent results on population covariance matrices of p variables from n observations. For example, accurate covariance estimation and its inverse are becoming increasingly important in the high-dimensional setting where the dimension p can be much larger than the sample size n. What's more, for high dimensional data, classical limiting theories and statistics based on fixed p and large n are no longer applicable and we need to remedy them. Some related areas are principal components analysis, linear/quadratic discriminant analysis, graphical models and so on.

Short biography of the speaker: Cheng Wang is currently a Ph.D. candidate at the Department of Statistics and Finance, University of Science and Technology of China. His research interests include Large Random Matrix Theory, High Dimensional Data Reduction, and Time Series Analysis. He was honoured with the Astronautics Scholarship in 2009 and 2010, and the Zhu Li Yue Hua Scholarship in 2011.

Overview to This Seminar Series
The Advanced Analytics Seminar Series presents the latest theoretical advancement and empirical experience in a broad range of interdisciplinary and business-oriented analytics fields. It covers topics related to data mining, machine learning, statistics, bioinformatics, behavior informatics, marketing analytics and multimedia analytics. It also provides a platform for the showcase of commercial products in ubiquitous advanced analytics. Speakers are invited from both academia and industry.

It opens regularly on every Friday afternoon at the garden-like UTS Blackfriars Campus. Each seminar is followed by a 30-minute afternoon tea, and then a open graduate study session teaching basic components in artificial intelligence, machine learning, data mining, business analytics and statistics.

You are warmly welcome to attend this seminar series.

Jinyan Li, Seminar Coordinator

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