

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Series of Lectures on Data Analytics

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RESPONSE SURFACE METHODOLOGY AND BIG DATA

Abstract

Response Surface Methodology (RSM), popularly used in finding the optimum of treatment combination, is attributed to Box and Wilson's JRSS-B paper back to 1951. In the past 60 years, since Box and Wilson (1960), statistical theory and application have been significantly developed. In this course, I will first introduce the basic concept of RSM and address two issues: (a) what kind of tools was available, and (b) what type of problems was to be solved in 1950's. I will then attempt to address the same issues for today—60 years after. Recent advances in RSM will be discussed and potential future research problems will be proposed. The last lecture has something to do with Big Data and Internet of Thing (IoT), some general research issues will be discussed.

Schedule and Venue:

Lecture 1	RSM – Introduction	October 30, 2015 (Friday) ★ 10:30 a.m. - 12:30 p.m.	Room 301, Run Run Shaw Building
Lecture 2	Design, Modeling and Optimization	November 3, 2015 (Tuesday) ★ 10:30 a.m. - 12:30 p.m.	Room 301, Run Run Shaw Building
Lecture 3	Multiple Response Problems	November 10, 2015 (Tuesday) ★ 10:30 a.m. - 12:30 p.m.	Room 301, Run Run Shaw Building
Lecture 4	Uniform Design and Latin Hypercube Design	November 17, 2015 (Tuesday) ★ 10:30 a.m. - 12:30 p.m.	Room 301, Run Run Shaw Building
Lecture 5	Big Data and Internet of Thing	November 24, 2015 (Tuesday) ★ 10:30 a.m. - 12:30 p.m.	Room 301, Run Run Shaw Building

★ *Refreshments will be served from 10:15 a.m. outside Room 301 Run Run Shaw Building*

Biography

Professor Dennis Lin is a University Distinguished Professor of Supply Chain and Statistics at Penn State University. His research interests are quality engineering, industrial statistics, data mining and Statistical Inference. He has published near 200 professional (SCI/SSCI) papers in a wide variety of prestigious journals (such as, *Technometrics*, *JQT*, *Annals of Statistics*, *Biometrika*, *Statistica Sinica*, etc). He has served as a co-editor for ASMBI as well as an associate editor for various (about 10) top journals. Professor Lin is an elected fellow of ASA, IMS and ASQ, an elected member of ISI, a fellow of RSS, and a lifetime member of ICSA. He is the recipient of the 2004 Faculty Scholar Medal Award at Penn State University. He is also an honorary chair professor for various universities, including a Chang-Jiang Scholar at Renmin University of China. His recent awards include Shewhart Medal (ASQ), Hunter Award (FTC), Don Owen Award (ASA), Youden Address (ASQ) and Loutit Lecturer (SSC).

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.

All interested are welcome