



School of Data Science

香港城市大學
City University of Hong Kong

**ONLINE
SEMINAR**

Statistical Learning with Accommodation of Expert Knowledge



Date: 15 July 2020 (Wednesday)

Time: 10:00am – 11:00am

Seminar link: <https://cityu.zoom.us/j/98914968431>

ABSTRACT

In certain applications of statistical learning, expert or domain knowledge about the subject needs to be accommodated to make the estimated model and prediction practically meaningful. One idea is to treat expert knowledge as constraints and incorporate them in modeling properly. This talk will present the constrained versions of two popular modeling methods, Gaussian process and varying-coefficient models, and their applications for time-course experiments in tissue engineering. Various types of expert knowledge widely existing in engineering (e.g., bound, monotonicity, censoring, convergence, baseline) are considered.



Dr Li ZENG

GUEST SPEAKER'S PROFILE

Dr Li ZENG is an Associate Professor in the Wm Michael Barnes '64 Department of Industrial and Systems Engineering of Texas A&M University. She received her B.S. in Precision Instruments and M.S. in Optical Engineering from Tsinghua University, and M.S. in Statistics and Ph.D. in Industrial Engineering from University of Wisconsin-Madison. Before joining Texas A&M, she was a faculty in the Industrial, Manufacturing, and Systems Engineering Department of the University of Texas at Arlington. Her research interests are data science/quality engineering, with applications in manufacturing, healthcare, and biomedical engineering. Her research is supported by National Science Foundation, National Institutes of Health, US Air Force, University of Texas System, etc. She is a recipient of the Best Application Paper Award and Best Paper Award of IISE Transactions. She serves as associate editor of IISE Transactions.

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All are welcome