Lingnan University 嶺南大學 香港 Hong Kong

LUIAS DISTINGUISHED LECTURE

by Senior Lingnan Scholar

Big Data Opportunities: Systems Health Monitoring and Management

3 June 2024 (Monday)

2:15pm-3:15pm
(Registration at 2:00pm)

MBG01, G/F, Patrick Lee Wan Keung Academic Building

Professor TSUI Kwok Leung

Grado Department of Industrial and Systems Engineering
Virginia Polytechnic Institute and State University

Professor TSUI Kwok-Leung is professor in the Grado Department of Industrial and Systems Engineering at Virginia Polytechnic and State University. Prior to that, Prof. Tsui was chair professor in the School of Data Science and Department of Systems Engineering and Engineering Management at City University of Hong Kong in 2009-2020; professor/associate professor in the School of Industrial and Systems Engineering at Georgia Institute of Technology in 1990-2011. Prof. TSUI received his Ph.D. in Statistics from the University of Wisconsin at Madison. He was a recipient of the National Science Foundation Young Investigator Award. He has been named on the list of Clarivate "Highly Cited Researchers 2023", and included in the World's Top 2% Scientists published in 2023 by Stanford University in the US. He is Fellow of the Institute for Operation Research and Management Science (INFORMS), American Statistical Association (ASA), American Society for Quality (ASQ), International Society of Engineering Asset Management, and Hong Kong Institution of Engineers; elected member and council member of International Statistical Institute (ISI); and U.S. representative to the ISO Technical Committee on Statistical Methods. Prof. Tsui was Chair of the INFORMS Section on Quality, Statistics, and Reliability and the Founding Chair of the INFORMS Society on Data Mining. His current research interests include data science and predictive analytics, surveillance in healthcare and public health, personalized health monitoring, prognostics and systems health management, calibration and validation of computer models, process control and monitoring, and robust design and Taguchi methods.

Abstract

Due to the advancement of sensor technologies, data collection devices, and data analytics methods, the field of systems health monitoring and management have been evolved in the past with different names under different application domains, including statistical process control and monitoring (SPCM), healthcare and public health surveillance, prognostics and health management (PHM), engineering asset management (EAM), personalized medicine, etc. There are tremendous opportunities in interdisciplinary research on system monitoring through integration of process monitoring, system informatics, data analytics, PHM, and personalized health management, etc. In this talk we will present our views and experiences in the evolution of systems health monitoring and management, its challenges and opportunities, as well as its applications in machine systems health management and human systems health management.

Scan to Register

ALL ARE WELCOME

EDUCATION for SERVICE 作育英才・服務社會

Enquiries
(852) 2616 8099
sds@ln.edu.hk

This lecture is sponsored by the Lingnan University Institute for Advanced Study and co-organised by the School of Data Science .