DEPARTMENT of INDUSTRIAL ENGINEERING UNIVERSITY of HOUSTON FRIDAY SEMINAR SERIES

BROADEN HORIZONS | EXTEND MINDS



Dr. Bo Zeng Dept. of Industrial Engineering and ECE University of Pittsburgh Date: Friday, April 9, 2021 Time: 1 - 1:50 pm Zoom Meeting ID: 970 7656 5407 Password: 477211

Robust and Chance Constrained Optimization in Power and Logistics Systems

Abstract: In this talk, we cover our research on algorithm development for optimization with uncertainties, including difficult two-stage robust and chance-constrained optimization. Recent exact algorithms and their extensions will be discussed and analyzed. Then, a few applications to address challenges arising in power and logistics systems will be described, and new modeling capacity along with non-trivial management insights will be presented. Finally, we highlight the superior computational performance over traditional approaches on computing large-scale real instances.

Biography: Dr. Bo Zeng is an associate professor of Dept. of Industrial Engineering and Dept. of Electrical & Computer Engineering at the University of Pittsburgh. Prior to that, Dr. Zeng served as a faculty member of Dept. of Industrial and Management Systems Engineering at the University of South Florida. He received Ph.D. of Operations Research from the School of Industrial Engineering at Purdue University. Dr. Zeng's research focuses on optimization theory and methodology, particularly on discrete and multilevel optimization, and their applications in power, transportation, healthcare and other cyber-physical systems.

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