Electrical & Computer Engineering

SEMINAR

Louisiana State University

Recent advances in computational techniques for solving large-scale power system operational problems

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Abstract—In this talk, we will present some recent results on solving large-scale power system operational problems including optimal power flow, unit commitment, and their uncertain counterparts motivated by renewable integration. We will discuss strong convexification techniques and stochastic sampling algorithms that significantly outperform existing methods in both accuracy and the scale of the problems.

Bio—Dr. Andy Sun is an assistant professor in the H. Milton Stewart School of Industrial & Systems Engineering at Georgia Institute of Technology. Dr. Sun is a senior member of IEEE. He has developed one of the first robust optimization models and algorithms for the unit commitment problem in collaboration with the ISO New England. Recently, Dr. Sun has worked on various computational and modeling aspects of the optimal power flow (OPF) problem, and developed one of the strongest convex relaxations for OPF, and new formulations for transmission switching problems. Dr. Sun received B.E. in Electronic Engineering from Tsinghua University in Beijing, and PhD in Operations Research from MIT.

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Where: Room 117 EE Building

Info: http://www.lsu.edu/eng/ece/seminar

