## Applications of optimization in Alibaba

Sen Yang, Ph.D. Staff Engineer Alibaba Group

**Abstract:** An important application of optimization concerns how to manage and how to effectively use scarce resources to increase productivity. In Alibaba, those applications include e-commerce optimization such as online advertising, traffic allocation, etc., logistics optimization such as path planning, facility modeling, warehouse management, etc., as well as computational resource optimization such as app deployment and scheduling. In this talk, Dr. Yang will talk about the applications of optimization in Alibaba.

**Bio:** *Sen Yang* received his Ph.D. in Computer Science from Arizona State University, with a research focus on optimization, statistical machine learning, and data mining. His research has been published in top-tier journals and conferences in these fields, including SIAM Journal on Optimization, NIPS, ICML, KDD, among others. He joined Alibaba in January 2015 and has been a core team member in the algorithm development for recommendation. Since 2016, Dr. Yang has been devoted to the development and implementation of cutting-edge optimization methods and techniques to more efficiently use and allocate public and private resources, and has taken a leading role in the development of Optimization engine. This optimization engine has been successfully deployed in many important applications such as logistics, e-commerce, and computational resource allocation, resulting in optimal resource allocation, efficiency enhancement, and cost reduction.

Tuesday, May 16, 2017 1:30 – 2:20 p.m. MEB 235