

SUN WENJIE

Education:

PhD student, Department of Analytics and Operations, National University of Singapore, 08/2019-Present

Master of Management Science, Management Science and Engineering, Tongji University, 09/2015-06/2019

Bachelor of Science, System Science and Engineering, University of Shanghai for Science and Technology, 09/2010-09/2014

Research Interest:

Decision-making under uncertainty

Research Experience:

- Monte Carlo Simulation based optimization
 - Propose to construct a desirable Gaussian mixture model (GMM) which is amenable for efficient sampling and at the same time also maintains the desirable property of exploitation and exploration trade-off.
 - Build global convergence of the algorithm for continuous simulation optimization problems.
- Stochastic optimization--- Chance constrained program
 - Propose to use mixture distributions to fit the data available and to model the randomness of the underlying distribution of chance constraints.
 - Develop a novel branch and bound algorithm to handle chance constrained programs with mixture distributions.

Publication:

Sun, W., Hu, Z., Hong, L. 2018. Gaussian mixture model-based random search for continuous optimization via simulation. Proceedings of the 2018 Winter Simulation Conference.

Teaching Experience:

Teaching Assistant, Advanced Multivariate Statistics (SEM 204204),
Grade exams and computer labs, Fall 2016, Fall 2017.

Presentations:

Session chair for the Stochastic Optimization session in INFORMS
International Conference, Taipei, Taiwan, June 2018.

Contributed talk for the New Methods for Efficient Simulation Optimization
session in winter simulation conference, Gothenburg, Sweden, December
2018.

Simulation I: Stochastic Optimization and Applications session in 10th
POMS-HK, January, 2019.

Computer Skills:

MATLAB, R, C/C++, LaTeX, SPSS, CPLEX, Word, Excel, SQL.

Honors & Awards:

First Class Scholarship for the Academic Excellence, Shanghai, China, 2011.

The Second Prize of National Mathematic Contest in Shanghai for
undergraduate students, 2012, 2013.

The Outstanding Undergraduate Student Award, Shanghai, China, 2013.