XIAOCHENG LI

(+1) 650 285 7049 ⋄ chengli1@stanford.edu
https://web.stanford.edu/~chengli1/
475 Via Ortega, 143, Stanford, CA, 94305

EDUCATION

Ph.D. in Operations Research, Stanford University *Sept. 2014 - June 2020*
Department of Management Science and Engineering

B.S. in Mathematics and Statistics, Peking University *Sept. 2010 - June 2014*
School of Mathematical Sciences

RESEARCH INTEREST

Online learning and sequential decision making; Big data analytics in operations management; Stochastic modeling

PUBLICATIONS & SUBMITTED PAPERS

1. **Online Linear Programming: Dual Convergence, New Algorithms, and Regret Bounds.**
   Authors: **X. Li**, Yinyu Ye
   Outlet: In preparation for submission to *Operations Research*

2. **Dynamic Pricing with External Information and Inventory Constraint.**
   Authors: **X. Li**, Zeyu Zheng
   Outlet: In preparation for submission to *Operations Research*

3. **Demand Prediction, Predictive Shipping, and Product Allocation for Large-Scale E-Commerce.**
   Authors: **X. Li**, Yufeng Zheng, Zhenpeng Zhou, Zeyu Zheng
   Finalist: *M&SOM* Data-driven Research Challenge, 2018

4. **Quantile Markov Decision Processes.**
   Authors: **X. Li**, Huaiyang Zhong, Margaret L. Brandeau
   Outlet: Revise and resubmit to *Operations Research*
   Runner Up: INFORMS Decision Analysis Society Best Student Paper Award, 2019.

5. **Data-Driven Ranking and Selection: High-Dimensional Covariates and General Dependence.**
   Authors: **X. Li**, Xiaowei Zhang, Zeyu Zheng
   Outlet: Proceedings of the Winter Simulation Conference (WSC) 2018

6. **Recurrent Autoregressive Networks for Online Multi-Object Tracking.**
   Authors: Kuan Fang, Yu Xiang, **X. Li**, Silvio Savarese
   Outlet: Proceedings of IEEE Winter Conf. on Applications of Computer Vision (WACV) 2018

7. **Optimizing Chemical Reactions with Deep Reinforcement Learning.**
   Authors: Zhenpeng Zhou, **X. Li**, Richard N. Zare
   Outlet: American Chemical Society (ACS) Central Science 2017.

8. **Deep Gaussian Process for Crop Yield Prediction Based on Remote Sensing Data.**
   Authors: Jiaxuan You, **X. Li**, Melvin Low, David Lobell, Stefano Ermon
   Outlet: Proceedings of Association for the Advancement of Artificial Intelligence (AAAI) 2017.

9. **Closed-form Expansion Approach for Pricing Discretely Monitored Variance Swaps.**
   Authors: Chenxu Li, **X. Li**
   Outlet: Operations Research Letters 43.4 (2015): 450-455.

WORKING PAPERS

1. **Machine Learning Estimator for Corporate Credit Risk.**
   With Markus Pelger and Kay Giesecke
   In collaboration with Swiss Re
2. **Online Linear Programming in a Bi-Layer Network.**
   With Michael Fairley and Yinyu Ye
3. **Constrained Online Learning with $O(1)$ Regret.**
   With Chunlin Sun and Yinyu Ye
4. **Negative Results on Inventory Management via Deep Reinforcement Learning with Empirical Evidence from JD.com.**
   With Chonghuan Wang and Zeyu Zheng

SELECTED AWARDS

Runner Up, INFORMS Decision Analysis Society Best Student Paper Award, 2019

Finalist, *MS&OM* Data-driven Research Challenge, 2018

Second Place, Citadel Data Open Stanford Datathon, October 2018

Third Place, Citadel Data Open West Coast Summer Invitational, July 2018

Winner (Best Solution Prize), World Bank Big Data Innovation Challenge, 2016

Winner, INFORMS Sygenta Crop Data Challenge, 2016

TEACHING EXPERIENCE

Stanford University Teaching Assistant

MS&E 211 (2015 Fall/2018 Spring): Linear and Non-linear Optimization

MS&E 310 (2016 Fall/2019 Fall): Linear Optimization

CS 228 (2016 Winter/2017 Winter): Probabilistic Graphical Models

MS&E 213 (2017 Spring): Introduction to Optimization Theory

MS&E 321A (2017 Spring): Stochastic System

MS&E 240: (2017 Summer): Accounting for Managers and Entrepreneurs

MS&E 245A (2017 Fall/2018 Fall): Investment Science

MS&E 221 (2018 Winter/2019 Winter): Stochastic Modeling

OTHER EXPERIENCES

Association of Chinese Students and Scholars at Stanford (ACSSS), Co-President (2016-2017)
Association of Chinese Students and Scholars at Stanford (ACSSS), Vice President (2015-2016)

Graduate Student Council of Stanford University, Voting Member/Representatives at Large (2016-2017)

Student Chapter of INFORMS at Stanford University, CFO (2017-2018)

Consulting Experiences:

- Swiss Re (Sept. 2018 - Apr. 2019)
  Develop a machine learning/deep learning model for corporate credit risk modeling.
- Haulistix (Aug. 2019 - Present)
  A stealth mode start-up company on data-driven logistics management
- Afresh Technologies Inc. (July 2018)
  A start-up company on perishable product inventory management
- Data Scientist Internship at Apple (Summer 2016)
  Design and implement two machine learning based modules for optimizing hardware production and anomaly detection on web log.