Yunlong Wang

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EDUCATION

Shanghai Jiao Tong University, Shanghai

2020 - present

Ph.D. Candidate in Management Science

Antai College of Economics and Management (ACEM)

Advisor: Ying Rong, https://www.acem.situ.edu.cn/en/faculty/rongving.html

University of Colorado Boulder, Leeds School of Business, USA

2023 - present

Visiting Scholar

Operations Management Group

Advisor: Rui Zhang, https://rui-zhang.org/

University of Shanghai for Science and Technology, Shanghai

2017 - 2020

M.S. in Operational Research

Science College Advisor: Chungen Shen, https://scholar.google.com/citations?user=Bz1GaPwAAAAJ&hl=en

Shanghai Lixin University of Accounting and Finance, Shanghai

2013 - 2017

B.Ec. in Economic Statistics (Minor in Accounting)

College of Statistics and Mathematics

Research Interests

Methodologies:

Integer Programming, NonLinear Convex Programming, Sparse Optimization.

Applications:

Revenue Management, Discrete Choice Models, Social Network Influence Problems.

Research Experience

Under Review

• An Integer Programming Approach for Quick-Commerce Assortment Planning, Yajing Chen, TaoTao He, Ying Rong, Yunlong Wang. (Alphabetical order) (Management Science, accepted)

(PDF)

• Assortment Optimization for Online Video Games.

(PDF)

Yunlong Wang, Fan You, Thomas Vossen, Rui Zhang. (First author)

(Production and Operations Management (POM), second-round revise and resubmit)

Publications

• Omnichannel Product Selection and Shelf Space Planning Optimization,

Yajing Chen, Zhimin Wu, Yunlong Wang, *Omega*, 103074, 2024. (JCR Q1, ABS 3)

• Proximal Gradient/Semismooth Newton Methods for Projection onto a Polyhedron via the Duality Gap Active Set Strategy. (Code)

Yunlong Wang, Chungen Shen, Leihong Zhang, Weihong Yang, Journal of Scientific Computing, 97(1): 3, 2023.

(JCR Q1)

Computational Optimization and Applications, 78(1): 1-42, 2021.

(Code)

Chungen Shen, Yunlong Wang, Wenjuan Xue, Leihong Zhang,

(JCR Q1, ABS 3)

• Limited Memory BFGS Algorithm for the Matrix Approximation Problem in Frobenius Norm,

• An Accelerated Active-Set Algorithm for a Quadratic Semi-Definite Program with General Constraints,

(Code)

Chungen Shen, Changxing Fan, Yunlong Wang, Wenjuan Xue,

Computational and Applied Mathematics, 39: 1-25, 2020. (JCR Q1)

Working in Progress

• Dynamic Assortment Optimization with Sequential Consideration Sets, with Rui Zhang.

- Joint Optimization of Assortment and Service Capacity Allocation in Centralized Service Systems, with Bipan Zou, Rui Zhang.
- New Formulations and Valid Inequalities for the Least Cost Influence Problem on Social Networks, with S. Raghu Raghavan, Rui Zhang.
- Gap Safe Detection Rules of Active Set for Convex Programs and Application in an Augmented Lagrangian Algorithm, with Chungen Shen.

Conferences & Workshops

Presenter

- Assortment Optimization for Online Video Games.
 - * 2025 INFORMS Revenue Management and Pricing Section Conference, New York, July 2025.
 - $\ast~2025$ INFORMS International Meeting, Singapore, July 2025.
 - * 2025 Purdue Supply Chain and Operations Management Conference, Purdue, August 2025.
 - * 2025 INFORMS Annual Meeting, Atlanta, October 2025.
- New Formulations and Valid Inequalities for the Least Cost Influence Problem on Social Networks.
 - * 2024 INFORMS Telecommunications and Network Analytics Conference, Online, May 2024.
 - * 2024 Purdue Operations Conference, Purdue University, August 2024.
 - * 2024 INFORMS Annual Meeting, Seattle, October 2024.
- Integer Programming Approach for Quick-Commerce Assortment Planning.
 - * Doctoral Forum of Antai College of Economics and Management, Shanghai Jiao Tong University, July 2023.
 - * Invited talk at the National University of Singapore (NUS), August 2025.
- Proximal Gradient/Semismooth Newton Methods for Projection onto a Polyhedron via the Duality-Gap-Active-Set Strategy.
 - * Annual Meeting of the Mathematical Optimization Society Operations Research Society of China (ORSC-MOS23), Chengdu, May 2023.
- An Accelerated Active-set Algorithm for Semi-definite Programs with General Constraints.
 - * The 3rd Statistics and Operations Research Young Scholars Forum, Operations Research Association in Shanghai, December 2019.

Teaching

Teaching Assistant

- Courses I have assisted include:
 - * Supply Chain and Operations Analytics, University of Colorado Boulder, Spring 2025.
 - * Business Analytics, NYU Shanghai, Spring 2023.
 - * Principles of Economics, Shanghai Jiao Tong University, Spring 2021, Fall 2021.
 - * Appreciation of Tang and Song Poetry (MBA), Shanghai Jiao Tong University, Fall 2022, Spring 2023 I-II.
- I also worked as (part-time) Academic Advisor & Program Coordinator for the Master Program in Management Science & Engineering, Shanghai Jiao Tong University, 2021 2024.

Industrial Experience

Huawei, Intelligent Planning and Scheduling for 5G Base Station Operations, Dongguan	2021 - 2022
ZY-BANK, Financial Risk Manager (Intern), Henan Province	2019 - 2020
Tencent, Algorithm Researcher Assistant (Intern) in TEG, AI Lab, Shenzhen	2018 - 2019

SERVICE

- Reviewer of Networks.
- Session chair of 2025 INFORMS Annual Meeting, Atlanta, October 2025.
- Session chair of 2025 INFORMS International Meeting, Singapore, July 2025.
- Session chair of 2024 INFORMS Annual Meeting, Seattle, October 2024.
- Coordinator and Team Leader, Doctoral Forum of Antai College of Economics and Management, Shanghai Jiao Tong University, July 2023.
- Member of the Graduate Union, University of Shanghai for Science and Technology, 2017-2020.
- Chairman of the College Student Union, Shanghai Lixin University of Accounting and Finance, 2015-2017.
- Co-director of the Freshman Welcome Party and New Year Gala, Shanghai Lixin University of Accounting and Finance, 2015.
- Director of the Mathematics Culture Festival, Shanghai Lixin University of Accounting and Finance, 2015.

Honors and Awards

Outstanding Paper Award in the Doctoral Forum of ACEM, Shanghai Jiao Tong University.	2023
First Prize for Excellent Paper in the 3rd Statistics and Operations Research Young Scholars Forum.	2019
Second Prize in the National Post-Graduate Mathematical Contest in Modeling.	2018
First Prize in the Chinese College Students' Statistical Modeling Competition.	2017
Graduation with Honor: Distinctive Graduate Award of Shanghai.	2017
Exceptional Person (Student) of the Yearly Scholarly Atmosphere Cultivating, Lixin.	2015

TECHNICAL SKILLS

Programming Tools: Julia, Python, Matlab, R.

Optimizer Tools: Gurobi, CPLEX, IPOPT, Mosek; JuMP, Pyomo, YALMIP.

Certified **FRM** (Financial Risk Manager) of **GARP** (Global Association of Risk Professionals).

References

Prof. Ying Rong (Advisor of my Ph.D. program)

Distinguished Professor, Antai College of Economics and Management, Shanghai Jiao Tong University

✓ email: yrong@sjtu.edu.cn

https://www.acem.situ.edu.cn/en/faculty/rongying.html

Prof. Rui Zhang (Advisor of my Visiting program)

Associate Professor, Leeds School of Business, University of Colorado Boulder

✓ email: rui.zhang@colorado.edu

https://rui-zhang.org/

Prof. Dan Zhang

Professor, Leeds School of Business, University of Colorado Boulder

✓ email: dan.zhang@colorado.edu

thtps://danzhang.com/

Prof. Taotao He

Associate Professor, Antai College of Economics and Management, Shanghai Jiao Tong University

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