

YUNDUAN LIN

◦ <https://yunduanlin.github.io>, ◦ [LinkedIn](#)

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EDUCATION

University of California, Berkeley

Ph.D. in Systems Engineering, Civil and Environmental Engineering

Minor in Operations Research and Computer Science

Advisor: Zuo-Jun Max Shen

Berkeley, CA

2019 - current

University of California, Berkeley

M.S. in Systems Engineering, Civil and Environmental Engineering

Berkeley, CA

2018 - 2019

Tsinghua University

B.Eng. in Civil Engineering

Beijing, China

2014 - 2018

RESEARCH INTERESTS

- Methodology** Optimization, Data analytics, Machine learning and deep learning, Graph and network theory, Network analytics, Stochastic modeling and simulation.
- Applications** Online platforms and marketplaces, Social networks, Revenue management, Healthcare, Supply chain management, Agriculture, Smart city.

PUBLICATIONS & WORKING PAPER

Journal

1. “Nonprogressive Diffusion on Social Networks: Approximation and Applications” [\[link\]](#)
Major Revision at *Management Science*, 2022.
Yunduan Lin, Heng Zhang, Renyu Zhang, Zuo-Jun Max Shen.
 - **First-Place Prize**, the 13th POMS-HK International Conference Best Student Paper Award, 2023.
 - **Finalist**, the 18th INFORMS Data Mining and Decision Analytics (DMDA) Workshop Best Paper Competition Award (Theoretical Track), 2023.
 - **Finalist**, INFORMS Minority Issues Forum Poster Competition, 2023.
 - Accepted to INFORMS Workshop on Data Science, 2023.
2. “Content Promotion for Online Content Platforms with Diffusion Effect” [\[link\]](#)
Minor Revision at *Manufacturing & Service Operations Management*, 2023.
Yunduan Lin, Mengxin Wang, Zuo-Jun Max Shen, Heng Zhang, Renyu Zhang.
 - **Winner**, INFORMS Social Media Analytics Best Student Paper Award, 2022.
 - **Second place**, OR/MS Tomorrow Mini-poster Competition, 2022.
3. “Daily Physical Activity Monitoring—Adaptive Learning from Multi-source Motion Sensor Data”
To be Submitted to *Journal of Operations Management*, 2023.
Haoting Zhang, Donglin Zhan, **Yunduan Lin**, Jinghai He, Qing Zhu, Zuo-Jun Max Shen, Zeyu Zheng.
4. “Real-time Traffic Accidents Post-impact Prediction: Based on Crowdsourcing Data” [\[link\]](#)
Accident Analysis & Prevention, 2020.
Yunduan Lin, Ruimin Li.

Refereed Conference Proceedings

1. “Collimatorless Scintigraphy for Imaging Extremely Low Activity Targeted Alpha Therapy (TAT) with Weighted Robust Least Squares (WRLS)” [\[link\]](#)
Twenty-third International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2020.
Yifan Zheng, Yoonsuk Huh, Qianqian Su, Jiaming Wang, **Yunduan Lin**, Kai Vetter, Youngho Seo.

Work-in-Progress

1. “Learning User Behavior in a Social Network: Calibration and Generalization”
In preparation, target *Management Science*, 2023.
Yunduan Lin, Haoting Zhang, Zeyu Zheng, Zuo-Jun Max Shen.
2. “Inventory Management of Livestream E-commerce with Social Network Information”
Work in progress, 2023+.
Yunduan Lin, Zuo-Jun Max Shen.
3. “The Value of Public Health Awareness in Organic Farming”
Work in progress, 2023+.
Lingfei Zhong, **Yunduan Lin**, Zuo-Jun Max Shen.

TEACHING EXPERIENCES

Individual Instructor

IEOR 253/CEE 258: Supply Chain and Logistics Management

Spring 2023

Instructor Ratings: 6.80/7.00 (Department average: 6.06).

- Ph.D./Master course for IEOR and CEE departments. Enrollment: 35.
- Students include Ph.D., M.S., M.Engineering, and M.Analytics programs.

Graduate Student Instructor

E 120: Principles of Engineering Economics

Fall 2021

- Undergraduate course for College of Engineering. Enrollment: 138.
- Students include B.S. from 11 departments (e.g., Business Administration, Mechanical Engineering, and IEOR, etc.) and B.A. from 5 departments (e.g., Data Science, Economics and Statistics, etc.).

IEOR 242: Applications in Data Analytics

Spring 2020 & Fall 2020

- M.Engineering course for IEOR and Graduate Certificate in Applied Data Science. Enrollment: 70 & 50.

INDUSTRY & INTERNSHIP EXPERIENCE

Amazon

06/2021 - 08/2021

Research Scientist Intern II @ Middle Mile Product Team, Seattle, WA.

Manager: Ivan Oliveira; Mentor: Golbarg Tutunchi.

- Developed algorithms that significantly optimize idle truck miles in middle-mile delivery routes.

Kwai Inc

06/2019 - 06/2020

Kwai is a social network for short videos and trends.

Data Scientist Intern @ Data Science and Economist Team, Beijing (Remote after August 2019).

- Developed an analytical model to assess the profit rendered by online videos with different popularity levels.
- Conducted large-scale data analysis to analyze the value of user connections for online platforms.

SELECTED HONORS & AWARDS

Finalist , the 18th INFORMS DMDA Workshop Best Paper Competition Award (Theoretical Track)	10/2023
Finalist , INFORMS Minority Issues Forum Poster Competition	10/2023
INFORMS Workshop on Data Science 2023 Student Scholarship	10/2023
Departmental Award, IEOR Department, UC Berkeley	04/2023
First-Place Prize , the 13th POMS-HK International Conference Best Student Paper Award	01/2023
Second Place , OR/MS Tomorrow Mini-poster Competition	12/2022
Winner , INFORMS Social Media Analytics Best Student Paper Award	10/2022
Graduate Division Conference Travel Grant, UC Berkeley	08/2022
China National Scholarship (top 1%)	10/2015
Outstanding Student Leader, Tsinghua University	10/2015
First Prize, China High School Biology Olympiad (Provincial)	06/2013
Second Prize, National Olympiad in Informatics in Provinces	03/2012

TALKS & PRESENTATIONS

“Nonprogressive Diffusion on Social Networks: Approximation and Applications”

- Invited talk, *INFORMS Annual Meeting*, Phoenix, AZ 10/2023
- Competition presentation, *the 18th INFORMS DMDA Workshop*, Phoenix, AZ 10/2023
- Invited talk, *INFORMS Workshop on Data Science*, Phoenix, AZ 10/2023
- Flash talk, *YinzOR Student Conference*, Pittsburgh, PA 08/2023
- Invited talk, *The Fifteenth International Annual Conference of CSAMSE*, Shenzhen 07/2023
- Contributed talk, *POMS International Conference in China*, Hangzhou 07/2023
- Invited talk, *POMS Annual Meeting*, Orlando, FL 01/2023
- Competition presentation, *The 13th POMS-HK International Conference*, Hong Kong 01/2023

“Content Promotion for Online Content Platforms with the Diffusion Effect”

- Poster, *YinzOR Student Conference*, Pittsburgh, PA 08/2023
- Contributed talk, *POMS International Conference in China*, Hangzhou 07/2023
- Invited talk, *INFORMS M&SOM Conference*, Montréal, QC 06/2023
- Invited talk, *The 13th POMS-HK International Conference*, Hong Kong 01/2023
- Competition presentation & Invited talk, *INFORMS Annual Meeting*, Indianapolis, IN 10/2022
- Poster presentation, *Marketplace Innovation Workshop*, virtual 05/2022
- Invited talk, *POMS International Conference in China*, virtual 06/2022
- Invited talk, *The Thirteenth International Annual Conference of CSAMSE*, virtual 07/2021

SERVICE & LEADERSHIP

Ad-Hoc Reviewer

Management Science, Management Science Reproducibility Project, Accident Analysis and Prevention

Professional Service

- Session co-chair, “Social Network and Platform Operations”. *INFORMS Annual Meeting* 10/2023
- Session chair, “Experiment design”. *INFORMS M&SOM Conference* 06/2023
- Session co-chair, “Information Design and Platform Operations”, *POMS Annual Meeting* 05/2023

University and Departmental Service

- Co-founder & Secretary, Representation of Asian and Pacific Islanders, CEE department *since 05/2023*
- Student Representative (1/2), Graduate Studies Committee, College of Engineering *since 10/2022*
- Contributor, PhD Mentor/Mentee Relationship Workshop, CEE department *05/2023*
- Member, PhD Student Meetings with Faculty Search Candidates, IEOR department *02/2023*
- Mentor, SWENext Mentorship Program (for high school students), UC Berkeley *since 02/2023*
- Member, Society of Women Engineers (SWE), UC Berkeley *since 09/2022*

Volunteer Activities

- Overnight Host Program, 51 women and non-binary new Berkeley engineering students *04/2023*
- Tech Day, ~ 30 middle school girls and non-binary students, interested in engineering *04/2023*
- SWE Science Saturdays, ~ 80 elementary & middle school students in total *02,03/2023*
- SWE Mini University, 85 underserved high school students, interested in STEM *11/2022*
- Green Energy Pathway, ~ 30 high school students, focused on sustainability *10/2022*

SKILLS

Python, R, SQL, Java, Matlab, Gurobi, Tensorflow, PyTorch

Last updated in October, 2023