

Buyun Li

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ACADEMIC APPOINTMENT

College of Business, Lehigh University
Assistant Professor

Bethlehem, Pennsylvania
Aug 2026 - Present

EDUCATION

Indiana University
PhD in Operation Management and Decision Sciences; Kelley School of Business

Bloomington, Indiana
Aug 2020 - May 2026

Cornell University
Master of Science; SC Johnson College of Business

Ithaca, New York
May 2018 - May 2020

University of Queensland
Bachelor of Administration; School of Business, Economics and Law

Queensland, Australia
Sep 2015 - Dec 2017

Beijing International Studies University
Bachelor of Science

Beijing, China
Sep 2013 - May 2015

RESEARCH INTEREST

Healthcare Operations - Chronic Pain Operation Management, Infection Aware Nurse Staffing, Empirical Healthcare;
Service Operations, Big Data & Machine Learning, Sequential Decision-Making, Stochastic Modeling, Bayesian Learning.

PUBLICATION

[A1] Capacity Planning for Resource Turnaround Operations

Co-Author: Vince Slaugh

M&SOM

- Link: <https://doi.org/10.1287/msom.2025.0395>

PAPERS UNDER REVIEW OR REVISION

[A2] Does Early Pain Management Pay Off? Evidence on Utilization, Costs, and Surgeries

Co-Authors: Mohammad Zhalechian, Christopher Chen,
Henry Lee (DO), Nick Vaughn (MD)

Rejected, Resubmission Invited – Management Science

- Selected to present: 2025 Midwest Health Economics Conference
- Preprint: [Available Online](#)
- Grant Under Review: Research Grant – National Institute of Health Care Management (NIHCM)

[A3] Infection Aware Nurse Staffing Using Random Graphs with Hidden Health Status

Co-Authors: Jonathan Helm, Kurt Bretthauer

In Preparation for POM

- Selected to present: 2025 Life sciences and Healthcare Research Conference
- Preprint: [SSRN](#)

[A4] Dynamic Scheduling with Bayesian Updating of Customer Characteristics

Co-Authors: Xiaoshan Peng, Owen Wu

Major Revision – POM

- Preprint: [SSRN](#)

WORK IN PROGRESS PAPERS

[W1] Maximizing Early Pain Management Intervention Effectiveness via Heterogeneous Treatment Effects

Co-Authors: Mohammad Zhalechian, Christopher Chen

Work in Progress

[W2] Optimal Nurse Staffing with Infection Awareness: A Random Graph and ML Approach

Co-Authors: Jonathan Helm, Kurt Bretthauer

Work in Progress

TEACHING EXPERIENCES

BUS-K303 Technology & Business Analytics

Instructor

Indiana
FA 2023, SP 2024, FA 2025 (Two Sections)

- **Course Organization:** Refined course materials, assignments, exams, and reading list; managed course delivery through Canvas. Organized TA and Peer Tutor orientation and coordinated task assignments.
- **Evaluations:** 6.9/7 for overall instructor evaluation, 6.8/7 for support offered to students, 6.9/7 for the material preparation.

HADM 6070 Hospitality Operations and Consulting

Teaching Assistant

New York
FA 2018

- **Evaluation:** 8.9/10 for overall Teaching Assistant evaluation.

EDITORIAL SERVICES

- **Management Science:** Reviewer
- **Manufacture and Service Operation Management:** Reviewer
- **Production and Operation Management:** Reviewer
- **Health Care Management Science:** Reviewer

FELLOWSHIP & AWARDS

- **Finals list, 2025 Midwest Health Economics Conference**
- **Finals list, 2025 Life sciences and Healthcare Research Conference**
- **Ashok and Sarita Soni Fellowship (2023, 2024, 2025),** Kelley School of Business, Indiana University
- **Academic Excellence Scholarship,** SC Johnson College of Business, Cornell University
- **The McLennan Howes Outstanding Honours Scholarship,** School of Business, Economics and Law, University of Queensland
- **Academic Distinction Award,** Beijing International Studies University

CONFERENCE PRESENTATIONS

- Does Early Pain Management Pay Off? Evidence on Utilization, Costs, and Surgeries*** Li, B.; Zhalechian, M.; Chen, C.; Lee, H.; Vaughn, N.
- **2025:** POMS Annual Conference, Atlanta, GA
 - **2025:** Midwest Health Economics Conference, Notre Dame, IN
 - **2025:** INFORMS Annual Meeting, Atlanta, GA (scheduled)
- Infection Aware Nurse Staffing Using Random Graphs with Hidden Health Status*** Li, B.; Helm, J.; Bretthauer, K.
- **2025:** POMS Annual Conference, Atlanta, GA
 - **2024:** INFORMS Annual Meeting, Seattle, WA
 - **2023:** INFORMS Annual Meeting, Phoenix (Flash Session), AZ
 - **2023:** POMS Annual Conference, Orlando, FL
- Dynamic Scheduling with Bayesian Updating of Customer Characteristic*** Li, B.; Peng, X.; Wu, O.
- **2023:** INFORMS Annual Meeting, Phoenix, AZ
 - **2023:** Purdue Operations Conference, Lafayette, IN
- Capacity Planning for Resource Turnaround Operations*** Li, B. & Slaugh, V.
- **2022:** POMS Annual Conference, Online
 - **2021:** INFORMS Annual Meeting, Anaheim, CA

VOLUNTEER EXPERIENCE AND ENTREPRENEURSHIP

Earlybirds (Revenue Management) New York, USA
Co-founder, Chief Operation Officer Aug 2018 - Sep 2019

Stars and Rain Beijing, China
Palliative Care Volunteer Aug 2013 - May 2014

REFERENCES

Prof. Jonathan Helm Indiana University
Professor of Operations & Decision Technologies, Kelley School of Business helmj@iu.edu

Prof. Kurt Bretthauer Indiana University
Professor of Operations & Decision Technologies, Kelley School of Business kbrettha@iu.edu

Prof. Mohammad Zhalechian Indiana University
Assistant Professor of Operations & Decision Technologies, Kelley School of Business mzhale@iu.edu

Prof. Vince Slaugh Cornell University
Assistant Professor of Applied Services, SC Johnson College of Business vws8@cornell.edu