TINGHAN (JOE) YE

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EDUCATION

Georgia Institute of Technology, Atlanta, GA

Ph.D. in Industrial Engineering   *May 2028 (expected)*

Department: H. Milton Stewart School of Industrial and Systems Engineering (ISyE)

Cornell University, Ithaca, NY

B.S. (with Honors) in Operations Research and Engineering, *summa cum laude*   *May 2023*

Department: School of Operations Research and Information Engineering (ORIE)

WORKING PAPERS

- *LISTEN to Your Preferences: An LLM Framework for Multi-Objective Selection*
  Adam Jovine[†], Tinghan Ye[†], Francis Bahk, Jingjing Wang, David Shmoys, and Peter Frazier
  Under review at **AISTATS, 2026**.
  Preliminary version in **Neurips 2025 ML×OR Workshop** and **AutoML 2025 Workshop**.

- *Deep Learning-Driven Contextual Stochastic Optimization for Real-Time Order Fulfillment*
  Tinghan Ye[*], Shuaicheng Tong, Chuangkun Guan, Beste Basciftci, and Pascal Van Hentenryck
  In preparation for **INFORMS Journal on Computing**.
  Preliminary version in **Neurips 2025 ML×OR Workshop**.

- *Decision-Focused Contextual Online Resource Allocation with Bandit Feedback*
  Wyame Benslimane[†] Tinghan Ye[†], Paul Grigas, and Pascal Van Hentenryck
  In preparation for **Management Science**.

- *Paratransit Optimization with Constraint Programming: A Case Study in Savannah, Georgia*
  Liam Jagrowski, Kevin Dalmeijer, Tinghan Ye, and Pascal Van Hentenryck
  In preparation for **CPAIOR, 2026**.

PUBLICATIONS

[*] Corresponding author   [†] Equal contribution

- *Contextual Stochastic Optimization for Omnichannel Multi-Courier Order Fulfillment Under Delivery Time Uncertainty*
  Tinghan Ye[*], Sikai Cheng, Amira Hijazi, Pascal Van Hentenryck
  Manufacturing & Service Operations Management, 2025.
  - Honorable Mention, M&SOM Practice-based Research Competition, 2025.

- *Conformal Predictive Distributions for Order Fulfillment Time Forecasting*
  Tinghan Ye[*], Amira Hijazi, and Pascal Van Hentenryck
  International Conference on Computational Logistics, 2025.

- *Boosting Column Generation with Graph Neural Networks for Joint Rider Trip Planning and Crew Shift Scheduling*
  Jiawei Lu, <u>Tinghan Ye</u>*, Wenbo Chen, and Pascal Van Hentenryck
  Transportation Research Part E, 2025.

- *Cornell University Uses Integer Programming to Optimize Final Exam Scheduling*
  <u>Tinghan Ye</u>*, Adam Jovine, Willem van Osselaer, Qihan Zhu, and David Shmoys
  textbfINFORMS Journal on Applied Analytics, 2025.
  - Finalist, INFORMS Undergraduate Operations Research Prize, 2023.

- *Evaluating Solvers For Linearly Constrained Simulation Optimization*
  Natthawut Boonsiriphatthanajaroen, Rongyi He, Litong Liu, <u>Tinghan Ye</u>, and Shane G. Henderson
  Winter Simulation Conference, 2024.
  - Code available at SimOpt.

- *Managed Residential Electric Vehicle Charging Minimizes Electricity Bills while Meeting Driver and Community Preferences*
  <u>Tinghan Ye</u>, Shanshan Liu, and Eleftheria Kontou
  Transport Policy, 2024.
  - 2nd Place, INFORMS Mini Poster Competition, 2021.

- *A Min-max Theorem for the Minimum Fleet Size Problem*
  <u>Tinghan Ye</u> and David Shmoys
  Operations Research Letters, 2023.

AWARDS AND RECOGNITION

- Atlanta Air Cargo Association PhD Student Fellowship for Research Excellence in the area of Supply Chain Engineering by GaTech ISyE (2025)
- Byron W. Saunders & the Allen H. Mogensen Awards for Outstanding Students by Cornell ORIE (2023)
- Cornell Engineering Learning Initiatives Undergraduate Research Award (2022, 2023)
- Tau Beta Pi Scholarship (2022)
- Research Support Grant from Illinois Office of Undergraduate Research (2021)

TEACHING

Georgia Institute of Technology
Grader/Tutor

- Seth Bonder Camps Level 3 & 4—Introduction to Deep Learning and Generative AI (High-School): Summer 2025
- ISYE 3232 - Stochastic Manufacturing and Service Systems (B.S.): Fall 2023

Cornell University
Teaching Assistant

- ORIE 3510/5510 - Stochastic Processes (B.S. / M. Eng.): Spring 2023

- ORIE 4580/5580/5581 - Simulation Modeling and Analysis (B.S. / M. Eng.): Fall 2022
- SYSEN 5200 / ORIE 5125 - Systems Analysis Behavior and Optimization (M. Eng.): Spring 2022

University of Illinois at Urbana-Champaign

Course Assistant

- CS 125 - Introduction to Computer Science (B.S.): Fall 2020

WORK EXPERIENCE

Fulfillment Analytics, Best Buy *May 2024 - May 2025*

Data Science Researcher

- Designed a stochastic optimization model for multi-item home delivery that co-optimizes fulfillment operations and delivery performance, achieving a projected 18% reduction in combined costs
- Built a machine learning model to generate probabilistic delivery-time windows, improving promise date accuracy by up to 14% and reducing late deliveries by 75%

ACADEMIC SERVICE

Reviewer

- AISTATS 2026
- Transportation Research Part E: Logistics and Transportation Review
- Electric Power Systems Research
- INFORMS Workshop on Data Science 2024, 2025

Session Chair

- INFORMS Workshop on Data Science 2024

CONFERENCE AND WORKSHOP PRESENTATIONS

Contextual Stochastic Optimization for Omnichannel Multi-Courier Order Fulfillment Under Delivery Time Uncertainty

- INFORMS Annual Meeting 2025, Atlanta, GA
- IISE Annual Conference & Expo 2025, Atlanta, GA
- ISyE-MS&E-IOE Joint Rising Stars Workshop 2025, Atlanta, GA
- INFORMS Workshop on Data Science 2024, Seattle, WA

Boosting Column Generation with Graph Neural Networks for Joint Rider Trip Planning and Crew Shift Scheduling

- INFORMS Annual Meeting 2024, Seattle, WA

Cornell University Uses Integer Programming to Optimize Final Exam Scheduling

- INFORMS Annual Meeting 2023, Phoenix, AZ

A Min-max Theorem for the Minimum Fleet Size Problem

- INFORMS Annual Meeting 2022, Indianapolis, IN
- Young Researchers Workshop 2022, Ithaca, NY