

# Alexandria Schmid

Massachusetts Institute of Technology  
Operations Research Center  
77 Massachusetts Ave, Bldg E40-103  
Cambridge, MA 02139

Email: [aschmid@mit.edu](mailto:aschmid@mit.edu)  
Website: <https://alexschmid3.github.io>  
Citizenship: USA  
Pronouns: she/her

## EDUCATION

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**Massachusetts Institute of Technology**  
PhD in Operations Research  
Advisor: Alexandre Jacquillat

Cambridge, MA  
Aug. 2020 – Feb. 2026

**Georgia Institute of Technology**  
B.S. Industrial & Systems Engineering

Atlanta, GA  
Aug. 2012 – May 2016

## PUBLISHED PAPERS

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- C. Barnhart, A. Jacquillat, and A. Schmid, “Robotic warehousing operations: a learning-enhanced large-scale neighborhood search approach”. *INFORMS Journal on Optimization*.

## UNDER REVIEW

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- B. Martin-Iradi, A. Schmid, K. Cummings, and A. Jacquillat, “A double decomposition algorithm for network planning and operations in deviated fixed-route microtransit”. Major revision at *Operations Research*.
- A. Jacquillat, A. Schmid and K. Wang, “Optimizing relay operations toward sustainable logistics”. Major revision at *Manufacturing & Service Operations Management*.

## IN PREPARATION

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- C. Barnhart, F. Cordera, A. Jacquillat, A. Schmid, “Order picking in large-scale robotic mobile fulfillment systems”. Working paper.
- A. Jacquillat, S. Karam, A. Schmid, K. Wang, and W. Zhang. “Vehicle-Customer Coordination for High Capacity Microtransit”.
- T. Cao, A. Jacquillat, A. Schmid, and L. Zhao. “Service Network Design in Intra-City Express Delivery”.

## AWARDS AND FELLOWSHIPS

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- Finalist for **TSL Student Paper Prize Competition** (winner announced in October) 2025
- Accepted to **Cornell Young Researchers Workshop** 2025
- **Goodwin Medal**, MIT’s highest teaching award for a graduate instructor “who performed above and beyond the norm, and whose teaching efforts can truly be characterized as conspicuously effective” 2024
- **Dick and Jerry Smallwood Fellowship**, for graduate students who are applying mathematical models to problems of sustainability and climate 2024 - 2025
- **First Place in Georgia Tech Industrial Engineering Senior Design Competition** 2016
- **President’s Undergraduate Research Award** 2015
- **Stamps President’s Scholarship** 2012 - 2016

## TALKS

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- Optimizing relay operations toward sustainable logistics
  - 2021 INFORMS Transportation and Logistics Workshop
  - 2022 Triennial Symposium on Transportation Analysis XI
  - 2024 INFORMS Annual Meeting
- Robotic warehousing operations: a learning-enhanced large-scale neighborhood search approach
  - 2022 INFORMS Annual Meeting
  - 2023 Manufacturing and Service Operations Management Conference
  - 2023 INFORMS Annual Meeting
- A double decomposition algorithm for network planning and operations in deviated fixed-route microtransit
  - 2025 INFORMS Computing Society Conference
  - 2025 ISyE-MS&E-IOE Rising Stars Workshop
  - 2025 Manufacturing and Service Operations Management Conference
  - 2025 Cornell Young Researchers Workshop (*upcoming*)
  - 2025 INFORMS Annual Meeting (*upcoming*)

## TEACHING EXPERIENCE

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- **Universal AI** (Online course material through MIT Learn) May 2025 - Aug. 2025  
Teaching Assistant
  - Designed and taught online recitation modules on integer optimization and transportation applications, including new case studies on microtransit operations and shared bicycle infrastructure
- **Analytics Edge** (15.071) Feb. 2025 - May 2025  
Teaching Assistant
  - Designed and taught weekly recitations, prepared assignments, held office hours, and supervised final projects for a class of MBA students. Student rating: **6.5/7.0**
- **Optimization Methods** (15.093) Sept. 2023 - Dec. 2023  
Teaching Assistant
  - Designed and taught recitation sessions, held office hours, and supervised final projects for a class of undergraduate, masters, and PhD students. Student rating: **6.9/7.0**
  - Introduced poll questions to create opportunities for interaction in large (100+ students) recitation sessions, which have been incorporated into subsequent iterations of the class
- **Computing for Optimization and Statistics** (15.S60) Jan. 2023  
Instructor of Record
  - Coordinated an eight session course on computational research pipeline design: data and visualization in R, machine learning in Python, optimization in Julia, high-performance computing, and version control. Student rating: **4.9/5.0**
  - Designed and taught sessions on Git and high-performance computing
- Session Instructor Jan. 2022
  - Designed and taught a workshop on Git, Github, and distributing computing. Student rating: **6.9/7.0**
- **Integer Programming and Combinatorial Optimization** (15.083) Jan. 2022 - May 2022  
Teaching Assistant
  - Designed and taught weekly recitations, held office hours, and supervised final projects for a class of PhD students. Student rating: **6.9/7.0**

INDUSTRY EXPERIENCE

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- **Amazon Robotics** North Reading, MA  
Research Science Intern May 2023 - Aug. 2023
  - Developed a robust optimization model to schedule robots to deliver work to stations, with dependence between tasks and highly variable robot travel times
  - Solved the model via an adversarial scenario generation algorithm, providing efficiency benefits of 10-20% over baseline heuristics in a high-fidelity simulation
  
- **The Home Depot** Atlanta, GA  
Senior Analyst - Supply Chain Analytics May 2016 - Aug. 2020
  - Wrote order quantity logic for a new in-house replenishment system to unify and replace existing supply chain management systems
  - Designed new order aggregation logic to reduce inventory by \$70 million, targeting slow-moving inventory
  - Completed a comprehensive analysis of replenishment system usage and identified company-wide inventory process issues

SERVICE

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- **MIT ORC Spring Seminar Student Co-coordinator** 2024
- **MIT Teaching Development Fellow** 2022 - 2023
- **Social and Ethical Responsibilities of Computing Scholar** 2022
- **Reviewer:** *Transportation Science, INFORMS Journal on Applied Analytics*

PROGRAMMING SKILLS

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**Languages:** Julia, Java, Python, SQL, R