Alexandria Schmid

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Citizenship: USA

EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

PhD in Operations Research, GPA: 5.0/5.0

Aug. 2020 – May 2025 (exp.)

Advisor: Alexandre Jacquillat

Georgia Institute of Technology

Atlanta, GA

B.S. Industrial & Systems Engineering, GPA: 3.9/4.0

Aug. 2012 - May 2016

EXPERIENCE

• Massachusetts Institute of Technology

Cambridge, MA

Graduate Research Assistant

Sept. 2020 - Present

• Conducting research in optimization, machine learning, and routing

• The Home Depot

Atlanta, GA

Senior Analyst – Supply Chain Analytics

May 2016 – Aug. 2020

- Built logic and strategy 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, primarily targeting slow-moving inventory
- Completed a comprehensive analysis of replenishment system usage and identified multiple company-wide inventory process issues that have since been addressed

• Georgia Institute of Technology

Atlanta, GA

Undergraduate Research Assistant

Aug. 2015 - May 2016

 Created an integer optimization model to automate class scheduling and instructor assignment for the School of Industrial and Systems Engineering

Publications

In Preparation

- Vehicle routing optimization with relay: an arc-based column generation approach (with Alexandre Jacquillat and Kai Wang)
- Task assignment and route planning in robotic warehousing: a learning-enhanced large-scale neighborhood search approach (with Cynthia Barnhart, Alexandre Jacquillat, and Riley Lenaway)

Presentations

- Vehicle routing optimization with relay
 - o 2021 INFORMS Annual Meeting
 - 2021 INFORMS Transportation and Logistics Workshop

TEACHING EXPERIENCE

• Integer Programming and Combinatorial Optimization (15.083)

Feb. 2022 - May 2022

Teaching Assistant

- o Prepare and teach weekly recitation sessions, hold office hours, and supervise final projects
- Computing for Optimization and Statistics (15.S60)

Jan. 2022

Session Instructor

- Designed and taught a workshop to Sloan graduate students on computing literacy in operations research, covering Git, Github, distributing computing, and LaTeX
- Georgia Tech Center for Academic Success

Aug. 2015 - May 2016

1-on-1 tutor

o Tutored undergraduate students in calculus, statistics, computer science, and physics courses

AWARDS AND FELLOWSHIPS

• Social and Ethical Responsibilities of Computing Scholar	2022
• First Place in Georgia Tech Industrial Engineering Senior Design Competition	2016
• President's Undergraduate Research Award	2015
• Stamps President's Scholarship	2012
Programming Skills	

Programming Skills

Languages: Julia, Python, SQL, R