JASON PHILLIP LU

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EDUCATION

University of Michigan *Expected May 2028*
Doctor of Philosophy, Civil Engineering GPA: 3.95/4.0
Advisor: Prof. Neda Masoud
Specialization in Next Generation Transportation Systems

University of Michigan *Expected May 2026*
Master of Science, Industrial and Operations Engineering GPA: 3.95/4.0

Georgia Institute of Technology *Dec. 2022*
Bachelor of Science, Industrial Engineering GPA: 3.93/4.0
Research Advisor: Prof. Pascal Van Hentenryck *Graduated with Highest Honors*
Minor in Scientific and Engineering Computing

PUBLICATIONS

Peer-Reviewed Journals

Lu, J., Trasatti, A., Guan, H., Dalmeijer, K., Van Hentenryck, P. (2024). The Impact of Congestion and Dedicated Lanes on On-Demand Multimodal Transit Systems [Special Issue: Multimodal Public Transport, Travel Behaviour and Social Equity]. *Travel Behaviour and Society.* Volume 36, 100772. https://doi.org/10.1016/j.tbs.2024.100772

RESEARCH EXPERIENCE

Graduate Research Assistant **University of Michigan**
Next Generation Mobility Systems Lab *Aug. 2023 -*
Supervisor: **Prof. Neda Masoud**

- Designing incentives to promote equitable transit systems.
- Investigating sensor assignments for autonomous vehicles.

Research Assistant **Georgia Institute of Technology**
Artificial Intelligence Institute for Advances in Optimization *Jan. 2023 - Jul. 2023*
Supervisor: **Prof. Pascal Van Hentenryck**

- Worked in the supply chain division to optimize fuel delivery for trucks in a project with an industrial partner.

Undergraduate Research Assistant **Georgia Institute of Technology**
Socially Aware Mobility Lab *Feb. 2021 - Jul. 2023*
Supervisor: **Prof. Pascal Van Hentenryck**

- Extended On-Demand Multimodal Transit Systems (ODMTS) to include dedicated bus lanes and congestion, undertook a case study in the Metropolitan Atlanta area.
- Investigated a six-month pilot of ODMTS in collaboration with the Metropolitan Atlanta Rapid Transit Authority.

PRESENTATIONS

Conference Presentations

Lu, J., Masoud, N. Designing Incentive Bundles for Multimodal Transportation Systems. *2024 INFORMS Annual Meeting*, Seattle, Washington, October 20-23, 2024.

Akhlaghi, V.E., Guan, H., **Lu, J.**, Van Hentenryck, P. Optimizing Truck Fleet Scheduling for Fuel Deliveries. *2023 INFORMS Annual Meeting*, Phoenix, Arizona, October 15-18, 2023.

HONORS AND AWARDS

Rackham Conference Travel Grant *Aug. 2024*
Rackham Graduate School, University of Michigan

Seth Bonder Fellowship *Jun. 2022, Jun. 2023*
H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

Stewart Topper Fellowship (Declined) *Feb. 2023*
H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

Senior Design Capstone Finalist *May 2022*
H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

SERVICE - INTERNAL

Michigan Transportation Student Organization
Vice President *May 2024 -*

- Organize the Civil and Environmental Engineering Career Fair and other professional networking events for students.
- Guide undergraduate students on trips to professional conferences.

The Seth Bonder Camp in Computational and Data Science for Engineering
Instructor *Summer 2022, 2023*

- Led four week-long camps for underrepresented minority high school students.
- Organized logistics, guided interactive activities, and managed teaching assistants.
- Taught computer and data science principles through Snap!, a visual programming language.

SERVICE - EXTERNAL

Reviewer for Academic Journals and Conferences

- Transportation Research Board (1)

ADVISING

Masters Students

Yuyang Liu, University of Michigan *May 2024 -*
M.S. Electrical Engineering (Expected 2026)

Undergraduate Students

Yi Ling Wu, University of Michigan *May 2024 -*
B.S. Computer Engineering (Expected 2025)

TEACHING

Head Teaching Assistant **Georgia Institute of Technology**

ISYE 4134 - Constraint Programming *Spring 2023*
Instructors: Mr. Tejas Santanam, Prof. Pascal Van Hentenryck

Undergraduate Teaching Assistant **Georgia Institute of Technology**

ISYE 3044 - Simulation Analysis and Design *Summer 2022*
Instructor: Prof. Seong-Hee Kim

ISYE 4034 - Decision and Data Analytics *Spring 2022*
Instructor: Prof. Jye-Chyi Lu

ISYE 3770 - Statistics and Applications *Spring 2021*
Instructor: Dr. Tuba Ketenci

MEDIA COVERAGE AND RECOGNITION

"AI4OPT's Impact at INFORMS 2023 Annual Meeting," AI4OPT, Oct. 2023.

"The Monthly Opt-In," AI4OPT Newsletter, Jul. 2023, Vol. 1, Issue 7, Page 4.

"Engineering for Human Needs," The H. Milton Stewart School Alumni Magazine, May 2023, Vol. 16, No. 1, Page 21.

INDUSTRY EXPERIENCE

Process Improvement Intern, Convoy *Jan. 2022 - May 2022*

- Mitigated conflicting appointment time errors from Convoy's shipment processes by analyzing shipment data, developing machine learning models, and providing systematic recommendations.
- Saved Convoy over $1 million annually, 4.3 hours/shipment, and 190000 miles/year.

Industrial Engineering Intern, Yokogawa *May 2021 - Dec. 2021*

- Automated recording and display processes from over 100 engineering data files, eliminating errors in manual reporting and saving 300 hours annually.
- Created an algorithm to generate product numbers, eliminating manual reporting.
- Improved an existing UI to include additional features, digitalizing display and preventing errors.

Industrial Engineering Intern, Yokogawa *May 2020 - Jul. 2020*

- Created a UI in VB and SQL that transformed manufacturing line boards to a digital format with live display, moving the company to a paperless model.
- UI saved 1500 hours annually, eliminated fines for insufficient displays, and was selected for Yokogawa's Global Manufacturing Engineering Competition.