

SÉBASTIEN MARTIN

OCTOBER 2023 – MY WEBSITE CONTAINS MORE INFORMATION AND IS ALWAYS UP-TO-DATE

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ACADEMIC APPOINTMENTS

- 2020-Present** | **Kellogg School of Management**, Northwestern University, Evanston, IL, USA
Assistant Professor of Operations
- 2019-2020** | **Lyft Inc.**, New York City, NY, USA
Post-doctoral Fellow, Marketplace Labs

RESEARCH INTERESTS

Interface of **optimization, mathematical modeling, transportation, and public policy.**

EDUCATION

- 2014-2019** | **Ph.D. in Operations Research**, Massachusetts Institute of Technology, Cambridge, MA
- 2011 - 2015** | **B.Sc. / M.Sc. in Applied Mathematics**, Ecole Polytechnique, Paris, France

PUBLISHED AND SUBMITTED WORK

In decreasing order of latest update. Links to papers and not-yet-published work are available on my website.

F. Castro, J. Gao, S. Martin (2023) - Human-AI Interactions and Societal Pitfalls. **Submitted to Management Science**

S. Martin and 10+ Lyft collaborators (2023) A better match for everyone: Reinforcement Learning at Lyft. With Xabi Azagirre, Akshay Balwally, Guillaume Candeli, Nicholas Chamandy, Benjamin Han, Alona King, Hyungjun Lee, Martin Loncaric, Sébastien Martin, Vijay Narasiman, Tony Qin, Baptiste Richard, Sara Smoot, Sean Taylor, Garrett van Ryzin, Di Wu, Fei Yu, Alex Zamoshchin
To appear, INFORMS Journal on Applied Analytics -- 2023 Franz Edelman Finalist.

I. Lobel, S. Martin, H. Song (2023) Employees versus Contractors: An Operational Perspective. **Minor Revision, MSOM Frontiers in Operations**

- I. Lobel, S. Martin (2023) Detours in Shared Rides. **Minor revision, Management Science**
- A. Delarue, Z. Lian, S. Martin (2023) Algorithmic Precision and Human Decision: A Study of Interactive Optimization for School Schedules. **R&R, Management Science**
- Z. Lian, S. Martin, G. van Ryzin (2023) Labor Cost Free-Riding in the Gig Economy. **Major revision, Management Science**
- S. Martin, S. Taylor, J. Yan (2023) Trading Flexibility for adoption: Dynamic versus static walking in ridesharing. **Major Revision, Management Science**
- F. Castro, J. Gao, S. Martin (2023) Autonomous Vehicles in Ride-Hailing and the Threat of Spatial Inequalities. **To be submitted to MSOM**
- S. Chopra, P. Mishra, K. Smilowitz (2023) Mobility-on-Demand Meets Shuttles on the Same Mile. **To be resubmitted to MSOM**
- B.Han, H. Lee, S. Martin (2022) Real-Time Rideshare Driver Supply Values using Online Reinforcement Learning. **KDD 2022.**
- V. Krishnan, R. Iglesias, S. Martin, V. Pattabhiraman, S. Wang, G. van Ryzin (2022) Solving the ride-sharing productivity paradox: Priority dispatch and optimal priority sets. **INFORMS Journal on Applied Analytics -- Finalist, Daniel H. Wagner Prize.**
- D. Bertsimas, A. Delarue, W. Eger, J. Hanlon, S. Martin (2020) Bus Routing Optimization Helps Boston Public Schools Design Better Policies. **INFORMS Journal on Applied Analytics -- 2019 Franz Edelman Finalist.**
- D. Bertsimas, A. Delarue, S. Martin (2020), Optimizing schools' start time and bus routes. **Proceedings of the National Academy of Science (PNAS)**
- D. Bertsimas, A. Delarue, P. Jaillet (2019), The Price of Interpretability. **arXiv**
- D. Bertsimas, P. Jaillet, S. Martin (2019), Online Vehicle Routing: The Edge of Optimization in Large-Scale Applications. **Operations Research**
- D. Bertsimas, A. Delarue, P. Jaillet, S. Martin (2019), Travel Time Estimation in the Age of Big Data. **Operations Research**
- J. Reilly, S. Martin, M. Payer, A. Bayen (2016), Creating complex congestion patterns via multi-objective optimal freeway traffic control with application to cyber-security. **Transportation Research Part B**

PROFESSIONAL EXPERIENCE

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| 2019 - 2020 | Lyft, Inc. , San Francisco, CA. <i>Postdoctoral Fellow</i> |
| 2016 | Google , Mountain View, CA. <i>Software Engineering Intern</i> |

SELECTED HONORS

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| 2023 | Franz Edelman Award laureate (with Lyft) |
| 2021 | Wagner Award Finalist |
| 2019 | George B. Dantzig Dissertation Award (First Place)
TSL Dissertation Prize
Franz Edelman Award laureate (with Boston Public School) |
| 2018 | Doing Good With Good OR (Second Place) |