SÉBASTIEN MARTIN

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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**, **analytics**, **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

The year indicates the latest update.

Xabi Azagirre, Akshay Balwally, Guillaume Candelli, 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 (2023) A better match for everyone: Reinforcement Learning at Lyft. **To appear, INFORMS Journal on Applied Analytics-- 2023 Franz Edelman Finalist.**

I. Lobel, S. Martin, H. Song (2023) Employees versus Contractors: An Operational Perspective. **Under review, MSOM**

F. Castro, J. Gao, S. Martin (2023) Autonomous Vehicles in Ride-Hailing and the Threat of Spatial Inequalities. **Under review, Management Science**

S. Chopra, P. Mishra, K. Smilowitz (2023) Mobility-on-Demand Meets Shuttles on the Same Mile. **Under review, MSOM**

A. Delarue, Z. Lian, S. Martin (2022) Algorithmic Precision and Human Decision: A Study of Interactive Optimization for School Schedules. **Under review, Management Science**

I. Lobel, S. Martin (2022) Detours in Shared Rides. **Minor revision, Management Science**

Z. Lian, S. Martin, G. van Ryzin (2022) Labor Cost Free-Riding in the Gig Economy. **Major revision, Management Science**

S. Martin, S. Taylor, J. Yan (2022) Trading Flexibility for adoption: Dynamic versus static walking in ridesharing. **Revise & Resubmit, Management Science**

B.Han, H. Lee, S. Martin (2022) Real-Time Rideshare Driver Supply Values using Online Reinforcement Learning. **KDD.**

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**

D. Bertsimas, A. Delarue, S. Martin (2020), Optimizing schools' start time and bus routes. ***Proceedings of the National Academy of Science (PNAS)***

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

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

SELECTED HONORS

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)