

Mika Sumida

3670 Trousdale Parkway
Los Angeles, CA 90089

mikasumi@marshall.usc.edu
<http://faculty.marshall.usc.edu/Mika-Sumida/>

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| ACADEMIC APPOINTMENTS | Marshall School of Business, University of Southern California Assistant Professor of Data Sciences and Operations 2020-present |
| EDUCATION | Cornell University Ph.D., Operations Research 2020 Advisor: Huseyin Topaloglu Dissertation: <i>New Revenue Management Models for Online Retailing</i> M.S., Operations Research 2019 Yale University B.A., Mathematics 2013 |
| PUBLICATIONS | <p>My research focuses on developing efficient, provably-good policies for revenue management and resource allocation problems. I am particularly interested in problems with applications to online marketplaces, delivery systems, and the sharing economy.</p> <p>Revenue-Utility Tradeoff in Assortment Optimization under the Multinomial Logit Model with Totally Unimodular Constraints. M. Sumida, G. Gallego, P. Rusmevichientong, H. Topaloglu, and J. Davis. <i>Management Science</i>, 67:5, 2845-2869, 2021.</p> <p>An Approximation Algorithm for Network Revenue Management under Nonstationary Arrivals. Y. Ma, P. Rusmevichientong, M. Sumida, and H. Topaloglu. <i>Operations Research</i>, 68:3, 655-964, 2020.</p> <p>Dynamic Assortment Optimization for Reusable Products with Random Usage Durations. P. Rusmevichientong, M. Sumida, and H. Topaloglu. <i>Management Science</i>, 66:7, 2801-3294, 2020.</p> <p>A Constant Factor Approximation Algorithm for Capacity Allocation over a Single Flight Leg with Fare-Locking. M. Sumida and H. Topaloglu. <i>INFORMS Journal on Computing</i>, 31:1, 83-99, 2019.</p> |
| WORK-IN-PROGRESS | <p>Revenue Management with Heterogeneous Resources: Unit Resource Capacities, Advance Bookings, and Itineraries over Time Intervals. P. Rusmevichientong, M. Sumida, H. Topaloglu, and Y. Bai. Under Review.</p> <p>Can Testing Ease Social Distancing Measures? Future Evolution of COVID-19 in NYC. O. El Housni, M. Sumida, P. Rusmevichientong, H. Topaloglu, S. Ziya.</p> |

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| HONORS AND AWARDS | NSF Graduate Research Fellowship Cornell Graduate Fellowship | 2017-2020 2015-2016 |
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| TEACHING EXPERIENCE | <p>Instructor <i>University of Southern California</i></p> <ul style="list-style-type: none"> • BUAD 311: Operations Management Spring 2021, 2022 <p>Teaching Assistant <i>Cornell University</i></p> <ul style="list-style-type: none"> • NCCY 5080: Operations Management Fall 2019 • ORIE 5132: Service Systems and Online Markets Spring 2018, 2019 • ORIE 5530: Modeling Under Uncertainty Fall 2017, 2018 • CS 4820: Introduction to Analysis of Algorithms Spring 2017 • ORIE 4741: Learning with Big Messy Data Fall 2016 <p><i>Yale University</i></p> <ul style="list-style-type: none"> • CPSC 202: Mathematical Tools for Computer Science Fall 2011, 2012 • AMTH 110: Introduction to Quantitative Thinking Fall 2010 |
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| INDUSTRY EXPERIENCE | <p><i>Homer Logistics</i>, Operations Research Intern Fall 2016 Worked on order fulfillment algorithms for a real-time delivery company.</p> <p><i>Analytics Operations Engineering, Inc.</i>, Analyst 2013-2015 (acquired by McKinsey & Co. in 2016) Applied advanced quantitative methods to solve operations problems for clients. Job involved data analysis, operations modeling, software development, and client management. Clients included a major clothing retailer, faucet manufacturer, and a coffeehouse chain.</p> |
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| PRESENTATIONS | <p>Invited Talks</p> <p>2021 <i>Duke University</i> - Fuqua School of Business.</p> <p>2020 <i>Wheaton College</i> - Math Seminar; <i>Princeton University</i> - ORFE; <i>UC Berkeley</i> - IEOR; <i>UCLA</i> - Anderson School of Management; <i>USC</i> - Marshall School of Business; <i>Stanford University</i> - MS&E; <i>Stanford University</i> - Graduate School of Business; <i>NYU</i> - Stern School of Business; <i>University of Chicago</i> - Booth School of Business; <i>Northwestern University</i> - Kellogg School of Business.</p> <p>2019 <i>CU Boulder</i> - Leeds School of Business; <i>University of Michigan</i> - IOE; <i>MIT</i> - Sloan School of Business; <i>UT Austin</i> - McCombs School of Business.</p> <p>Conferences</p> <p>2021 <i>INFORMS Annual Meeting</i>, Anaheim, CA.</p> <p>2020 <i>INFORMS Annual Meeting</i>, Virtual.</p> <p>2019 <i>INFORMS Annual Meeting</i>, Seattle, WA; <i>Young Researcher's Workshop</i>, Ithaca, NY; <i>YinzOR Conference</i>, Pittsburgh, PA; <i>MSOM</i></p> |
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Conference, Singapore; *INFORMS Revenue Management and Pricing Conference*, Palo Alto, CA; *POMS Conference*, Washington, DC.

2018 *INFORMS Annual Meeting*, Phoenix, AZ; *INFORMS Revenue Management and Pricing Conference*, Toronto, OT.

2017 *INFORMS Annual Meeting*, Houston, TX.

SERVICE

Seminar co-organizer for Operations Management group within DSO.

Reviewer for *Management Science*, *Operations Research*, *MSOM*, *POMS*, and *Mathematics of Operations Research*.