

Bradley Sturt

PERSONAL	Name: Bradley Eli Sturt Birthday: October 10, 1991 Office: 601 S. Morgan Street, Chicago, IL Email: bsturt@uic.edu Phone: (847) 867-1054	
ACADEMIC EMPLOYMENT	University of Illinois Chicago , Chicago, IL <i>Assistant Professor of Business Analytics</i>	<i>Aug 2020 - Present</i>
EDUCATION	Massachusetts Institute of Technology , Cambridge, MA Ph.D. in Operations Research GPA: 5.00/5.00 University of Illinois Urbana Champaign , Champaign, IL B.S. in Computer Engineering, minor in Technology and Management GPA: 3.97/4.00 Graduated with Highest Honors and University Honors (Bronze Tablet)	<i>Aug 2015 - June 2020</i> <i>Aug 2010 - June 2014</i>
INDUSTRY	BallotIQ , Ann Arbor, MI <i>Co-Founder</i> Facebook , Menlo Park, CA <i>Data Scientist Intern</i> Google , Mountain View, CA <i>Software Engineering Intern</i> Garmin , Olathe, KS <i>Software Engineering Intern</i>	<i>June 2024 - Present</i> <i>June 2015 - Aug 2015</i> <i>June 2013 - Aug 2013</i> <i>June 2012 - Aug 2012</i>
SELECTED AWARDS	Operations Research Meritorious Service Award, 2024 Awarded to a select number of reviewers that have “gone above and beyond normal expectations”. WDSM Test of Time Paper Award, 2024 Awarded by the ACM International Conference on Web Search and Data Mining (WSDM’24) for 2014 paper on recommendation systems titled “Personalized entity recommendation in heterogeneous information networks with implicit user feedback”. Management Science Meritorious Service Award, 2023 Awarded to a select group of reviewers for consistently writing “timely, unbiased, and thoughtful” referee reports.	

INFORMS Junior Faculty Interest Group (JFIG) Paper Competition, Second Place, 2021

The competition is held each year to encourage research among junior faculty and to increase the visibility of research conducted by junior faculty within the fields of operations research and management science. Awarded for solo-author paper titled “A nonparametric algorithm for optimal stopping based on robust optimization”.

MIT Operations Research Center Student Paper Competition, First Place, 2019

Awarded to one paper written by students each year in the MIT ORC PhD Program, recognizing outstanding achievement in operations research. Awarded for paper titled “A data-driven approach to multi-stage stochastic linear optimization” with D. Bertsimas and S. Shtern.

INFORMS George Nicholson Student Paper Competition, Second Place, 2017

The competition is held each year to honor outstanding papers in the field of operations research and the management sciences written by a student. Awarded for paper titled “Computation of the bootstrap: complexity, exact algorithms and deterministic approximations” with D. Bertsimas.

MIT Sloan Outstanding Teaching Assistant Award, 2017

Awarded to one graduate student in the MIT Sloan School of Management each academic year for excellence in MBA teaching. Nominated and selected by MBA students as a teaching assistant in Fall 2016 for the class “15.060: Data, Models and Decisions”.

UIUC Campus Honors Program Outstanding Senior Award, 2013

Awarded to select undergraduates in the Campus Honors Program at UIUC, which is comprised of 125 top students in each academic year.

Research

SUBMITTED

1. **The Blessing of Strategic Customers in Personalized Pricing**
Co-authored with: Zhi Chen, Weijun Xie
2. **Group Fairness in Dynamic Refugee Assignment**
Co-authored with: Daniel Freund, Thodoris Lykouris, Elisabeth Paulson, Wentao Weng
3. **On the Sparsity of Optimal Linear Decision Rules for a Class of Robust Optimization Problems with Box Uncertainty Sets**
Co-authored with: Haihao Lu
Operations Research (invited for second round revision - minor revision)

JOURNAL ARTICLES

4. **Improving the Security of United States Elections with Robust Optimization**
Co-authored with: Braden L. Crimmins, J. Alex Halderman
Operations Research, 2024
5. **The Value of Robust Assortment Optimization under Ranking-Based Choice Models**
Sole author
Management Science, 2024

6. **A Nonparametric Algorithm for Optimal Stopping based on Robust Optimization**

Sole author

Operations Research, Vol. 71, No. 5, 2023

– Second Place in the INFORMS Junior Faculty Interest Group Paper Competition, 2021

7. **A Data-Driven Approach to Multistage Stochastic Linear Optimization**

Co-authored with: Dimitris Bertsimas, Shimrit Shtern

Management Science, Vol. 69, No. 1, 2023

– First Place in the MIT ORC Student Paper Competition, 2019

8. **Dynamic Optimization with Side Information**

Co-authored with: Dimitris Bertsimas, Chris McCord

European Journal of Operational Research, Vol. 304, No. 2, 2023

9. **Two-Stage Sample Robust Optimization**

Co-authored with: Dimitris Bertsimas, Shimrit Shtern

Operations Research, Vol. 70, No. 1, 2022

10. **Computation of Exact Bootstrap Confidence Intervals: Complexity and Deterministic Algorithms**

Co-authored with: Dimitris Bertsimas

Operations Research, Vol. 68, No. 3, 2020

– Second Place in the INFORMS George Nicholson Student Paper Competition, 2017

11. **The Path Most Traveled: Travel Demand Estimation Using Big Data Resources**

Co-authored with: Jameson Toole, Serdar Colak, Lauren Alexander, Alexandre Evsukoff, Marta C. González

Transportation Research Part C: Emerging Technologies, Vol. 58, 2015

PEER-
REVIEWED
CONFERENCE
PAPERS

12. **Group Fairness in Dynamic Refugee Assignment**

Co-authored with: Daniel Freund, Thodoris Lykouris, Elisabeth Paulson, Wentao Weng

Proceedings of the 24th ACM Conference on Economics and Computation (extended abstract), 2023

13. **Personalized Entity Recommendation in Heterogeneous Information Networks with Implicit User Feedback**

Co-authored with: Xiao Yu, Xiang Ren, Yizhou Sun, Quanquan Gu, Urvashi Khandelwal, Brandon Norrick, Jiawei Han

Proceedings of the 7th ACM Intl. Conference on Web Search and Data Mining, 2014

– Recipient of the Test of Time Paper Award in WSDM'24

14. **HeteRec: Entity Recommendation in Heterogeneous Information Networks with Implicit User Feedback**

Co-authored with: Xiao Yu, Xiang Ren, Yizhou Sun, Urvashi Khandelwal, Quanquan Gu, Brandon Norrick, Jiawei Han

Proceedings of the 7th ACM Conference on Recommender Systems, 2013

Invited Talks

SEMINARS & WORKSHOPS	2025	
	Oxford, Saïd Business School, Operations and Technology Management	<i>June 2025</i>
	University of Maryland, Workshop on AI and Analytics for Social Good	<i>May 2025</i>
	CUHK, Systems Engineering and Engineering Management	<i>May 2025</i>
	UCLA, Anderson School of Management, Decisions Operations & Technology Management	<i>April 2025</i>
	2024	
	MIT, Operations Research Center	<i>October 2024</i>
	Cornell University, Operations Research and Information Engineering	<i>October 2024</i>
	University of Southern California, Industrial and Systems Engineering	<i>September 2024</i>
	Microsoft Research, Security Privacy and Cryptography	<i>June 2024</i>
	University of Illinois Chicago, Workshop on Frontiers of AI in Business and Society	<i>May 2024</i>
	2023	
	Robust Optimization Webinar	<i>December 2023</i>
	INSEAD, Workshop on Information and Learning in Decisions and Operations	<i>July 2023</i>
	Northwestern University, Industrial Engineering and Management Science	<i>September 2022</i>
	2022	
	Virginia Tech, Industrial and Systems Engineering	<i>May 2022</i>
	University of Illinois Chicago, Business Analytics Organization Speaker Series	<i>April 2022</i>
	2021	
	University of Texas Austin, Operations Research and Industrial Engineering	<i>November 2021</i>
	Washington University in St. Louis, Olin Business School	<i>November 2021</i>
	2020	
	Robust Optimization Webinar	<i>November 2020</i>
	University of Wisconsin Madison, Industrial and Systems Engineering	<i>January 2020</i>
	2019	
	University of Michigan, Industrial and Operations Engineering	<i>December 2019</i>
	Indiana University, Kelley School of Business	<i>December 2019</i>
	University of Illinois Chicago, College of Business Administration	<i>December 2019</i>
	Princeton University, Operations Research and Financial Engineering	<i>November 2019</i>
	University of Illinois Urbana-Champaign, Gies College of Business	<i>November 2019</i>
	Oracle Labs, ML Research Seminar Series	<i>November 2019</i>
	CMU Tepper School of Business, YinzOR Workshop	<i>August 2019</i>
	MIT, Operations Research Center	<i>September 2019</i>
	Technion Industrial Engineering, Quant Seminar	<i>January 2019</i>
	BIRS Workshop on “Models and Algorithms for Sequential Decision-Making under Uncertainty”, Banff	<i>January 2019</i>
CONFERENCES	INFORMS Annual Meeting, Seattle	<i>October 2024</i>
	International Symposium on Mathematical Programming (ISMP), Montreal	<i>July 2024</i>
	Election Verification Network Conference, Washington DC	<i>March 2024</i>
	International Conference on Stochastic Programming (ICSP), Davis	<i>July 2023</i>
	Statewide Certification Testing of Election Systems National Conference, Huntsville	<i>June 2023</i>
	SIAM Conference on Optimization (OP23), Seattle	<i>June 2023</i>
	INFORMS Annual Meeting, Indianapolis	<i>October 2022</i>
	INFORMS Revenue Management and Pricing (RMP) Section Conference, Virtual	<i>June 2022</i>
	INFORMS Annual Meeting, Virtual	<i>October 2021</i>

SIAM Conference on Optimization (OP21), Virtual	July 2021
INFORMS Annual Meeting, Virtual	October 2020
International Conference on Continuous Optimization (ICCOPT), Berlin	August 2019
INFORMS Annual Meeting, Seattle	October 2019
INFORMS Annual Meeting, Phoenix	November 2018
International Symposium on Mathematical Programming (ISMP), Bordeaux	August 2018
INFORMS Annual Meeting, Houston	October 2017

Teaching

INSTRUCTOR	University of Illinois Chicago	
	IDS 532, Introduction to Operations Management	Spring 2025
	IDS 435, Optimization for Analytics	Spring 2025
	IDS 532, Introduction to Operations Management (Instructor Evaluation: 4.87/5)	Fall 2024
	IDS 532, Introduction to Operations Management (Instructor Evaluation: 4.67/5)	Spring 2024
	IDS 532, Introduction to Operations Management (Instructor Evaluation: 4.72/5)	Fall 2023
	IDS 516, Data Analytics for Business Professionals (Instructor Evaluation: 4.80/5)	Fall 2022
	IDS 270, Statistics I for Business Scholars (Instructor Evaluation: 4.19/5)	Fall 2022
	IDS 472, Business Data Mining (Instructor Evaluation: 4.77/5)	Spring 2022
	IDS 516, Data Analytics for Business Professionals (Instructor Evaluation: 4.75/5)	Fall 2021
	IDS 270, Statistics I for Business Scholars (Instructor Evaluation: 3.63/5)	Fall 2021
	IDS 472, Business Data Mining (Instructor Evaluation: 4.61/5)	Spring 2021
	IDS 270, Statistics I for Business Scholars (Instructor Evaluation: 4.38/5)	Fall 2020
	Massachusetts Institute of Technology	
	15.S60, Computation in Optimization and Statistics	January 2017, 2018, 2019
TEACHING ASSISTANT	Massachusetts Institute of Technology	
	15.097, Robust Optimization (TA Evaluation: 6.5/7)	Spring 2019
	15.778, Introduction to Operations Management (TA Evaluation: 6.7/7)	Summer 2018
	15.093, Optimization Methods (TA Evaluation: 7.0/7)	Fall 2017
	15.060, Data Models and Decisions (TA Evaluation: 6.7/7)	Fall 2016

Service

JOURNAL REVIEWER	Management Science, Operations Research, Manufacturing & Service Operations Management, Mathematics of Operations Research, SIAM Journal on Optimization, Mathematical Programming, Production and Operations Management, INFORMS Journal on Computing, INFORMS Journal on Optimization, Journal of Optimization Theory and Applications	
CONFERENCE AND AWARD REVIEWER	INFORMS Pierskalla Best Paper Award, Committee Member	2024
	ACM Conference on Economics and Computation, Program Committee	2024
	INFORMS Pierskalla Best Paper Award, Committee Member	2023
UIC ACTIVITIES	UIC Business Workshop on Frontiers of AI in Business and Society, Co-organizer	May 2024
	UIC Business Ad Hoc Committee on Business Analytics and Artificial Intelligence	Summer 2024
	UIC Business Workshop on Diversity and Effective Teaching, Panelist	October 2023
	UIC Information and Decision Sciences PhD Committee Member	2023-Present