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
Assistant Professor of Information and Decision Sciences   *Aug 2020 - Present*

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA   *Aug 2015 - June 2020*
Ph.D. in Operations Research

University of Illinois Urbana Champaign, Champaign, IL   *Aug 2010 - June 2014*
B.S. in Computer Engineering, minor in Technology and Management
Graduated with Highest Honors and University Honors (Bronze Tablet)

INDUSTRY

BallotIQ, Ann Arbor, MI
Co-Founder   *June 2024 - Present*

Facebook, Menlo Park, CA
Data Scientist Intern   *June 2015 - Aug 2015*

Google, Mountain View, CA
Software Engineering Intern   *June 2013 - Aug 2013*

Garmin, Olathe, KS
Software Engineering Intern   *June 2012 - Aug 2012*

SELECTED AWARDS

SPS Junior Researcher Best Paper Prize in Stochastic Programming, Finalist, 2025
The competition is held every three years by the Stochastic Programming Society (SPS) in recognition of the most outstanding paper in stochastic programming authored by a junior researcher. Awarded for solo-author paper titled "A nonparametric algorithm for optimal stopping based on robust optimization". *Winner to be announced at ICSP in August 2025.*

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 select group of reviewers for consistently writing "timely, unbiased, and thoughtful" reports.

INFORMS Junior Faculty Interest Group (JFIG) Paper Competition, Second Place, 2021
The competition is held each year 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 to B. Sturt for paper titled "A data-driven approach to multi-stage stochastic linear optimization".

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 to B. Sturt for paper titled "Computation of the bootstrap: complexity, exact algorithms and deterministic approximations".

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.

Publications

> All authorship listed alphabetical by last name (except for 10-12)
> Corresponding author for 1-4, 7, 14

1. **On the Sparsity of Optimal Linear Decision Rules for a Class of Robust Optimization Problems with Box Uncertainty Sets**
   Haihao Lu and Bradley Sturt
   Operations Research, 2025

2. **Improving the Security of United States Elections with Robust Optimization**
   Braden L. Crimmins, J. Alex Halderman, Bradley Sturt
   Operations Research, 2024

3. **The Value of Robust Assortment Optimization under Ranking-Based Choice Models**
   Bradley Sturt
   Management Science, 2024

4. **A Nonparametric Algorithm for Optimal Stopping based on Robust Optimization**
   Bradley Sturt
   Operations Research, Vol. 71, No. 5, 2023
   — Finalist in the SPS Junior Researcher Best Paper Competition (winner TBA), 2025
   — Second Place in the INFORMS Junior Faculty Interest Group Paper Competition, 2021

5. **A Data-Driven Approach to Multistage Stochastic Linear Optimization**
   Dimitris Bertsimas, Shimrit Shtern, Bradley Sturt
   Management Science, Vol. 69, No. 1, 2023
   — First Place in the MIT ORC Student Paper Competition (awarded to Sturt), 2019

6. **Group Fairness in Dynamic Refugee Assignment**
Daniel Freund, Thodoris Lykouris, Elisabeth Paulson, Bradley Sturt, Wentao Weng
Proceedings of the 24th ACM Conference on Economics and Computation (extended abstract), 2023

7. **Dynamic Optimization with Side Information**
Dimitris Bertsimas, Chris McCord, Bradley Sturt
European Journal of Operational Research, Vol. 304, No. 2, 2023

8. **Two-Stage Sample Robust Optimization**
Dimitris Bertsimas, Shimrit Shtern, Bradley Sturt
Operations Research, Vol. 70, No. 1, 2022

9. **Computation of Exact Bootstrap Confidence Intervals: Complexity and Deterministic Algorithms**
Dimitris Bertsimas and Bradley Sturt
Operations Research, Vol. 68, No. 3, 2020
— Second Place in the INFORMS George Nicholson Paper Competition (awarded to Sturt), 2017

10. **The Path Most Traveled: Travel Demand Estimation Using Big Data Resources**
Jameson Toole, Serdar Colak, Lauren Alexander, Bradley Sturt, Alexandre Evsukoff, Marta González
Transportation Research Part C: Emerging Technologies, Vol. 58, 2015

11. **Personalized Entity Recommendation in Heterogeneous Information Networks with Implicit User Feedback**
Xiao Yu, Xiang Ren, Yizhou Sun, Quanquan Gu, Bradley Sturt, Urvashi Khandelwal, Brandon Norick, 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

12. **HeteRec: Entity Recommendation in Heterogeneous Information Networks with Implicit User Feedback**
Xiao Yu, Xiang Ren, Yizhou Sun, Bradley Sturt, Urvashi Khandelwal, Quanquan Gu, Brandon Norick, Jiawei Han
Proceedings of the 7th ACM Conference on Recommender Systems, 2013

WORKING PAPERS

13. **Group Fairness in Dynamic Refugee Assignment**
Daniel Freund, Thodoris Lykouris, Elisabeth Paulson, Bradley Sturt, Wentao Weng

14. **The Blessing of Strategic Customers in Personalized Pricing**
Zhi Chen, Bradley Sturt, Weijun Xie

PATENTS

1. **Single-Ballot Logic and Accuracy Testing**
Bradley Sturt, J. Alex Halderman, Braden L. Crimmins
U.S. Patent Application No. 18/905,050, filed April 3, 2025.

2. **Robust Election Logic and Accuracy**
Braden L. Crimmins, J. Alex Halderman, Bradley Sturt.
U.S. Patent Application No. 18/394,391, filed June 27, 2024.

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

	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*

INSTRUCTOR **University of Illinois Chicago**

IDS 532, Introduction to Operations Management (Instructor Evaluation: **4.73/5**)	*Spring 2025*
IDS 435, Optimization for Analytics (Instructor Evaluation: **4.48/5**)	*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*

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*

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 AI Council Member	*2025-Present*
UIC Information and Decision Sciences Seminar Organizer	*Spring 2025*
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*