Bradley Sturt

PERSONAL	**Name**: Bradley Eli Sturt **Birthday**: October 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 Business Analytics — *2020 - Present*

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA — *2015 - 2020*
Ph.D. in Operations Research
GPA: 5.00/5.00

University of Illinois Urbana Champaign, Champaign, IL — *2010 - 2014*
B.S. in Computer Engineering, minor in Technology and Management
GPA: 3.97/4.00
Graduated with Highest Honors and University Honors (Bronze Tablet)

INDUSTRY EMPLOYMENT

Facebook, Menlo Park, CA
Data Scientist Intern — *2015*

Google, Mountain View, CA
Software Engineering Intern — *2013*

Garmin, Olathe, KS
Software Engineering Intern — *2012*

SELECTED AWARDS

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".

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. **Improving the Security of United States Elections with Robust Optimization**
   Co-authored with: Braden L. Crimmins, J. Alex Halderman
   Operations Research (invited for first round revision - major revision)

2. **On the Sparsity of Optimal Linear Decision Rules in Robust Optimization**
   Co-authored with: Haihao Lu
   Operations Research (invited for first round revision - major revision)

3. **Group Fairness in Dynamic Refugee Assignment**
   Co-authored with: Daniel Freund, Thodoris Lykouris, Elisabeth Paulson, Wentao Weng
   Preliminary versions: *EC 2023, FORC 2023, 2023 Marketplace Innovation Workshop*

JOURNAL
ARTICLES

4. **The Value of Robust Assortment Optimization under Ranking-Based Choice Models**
   Sole author
   Management Science, 2024

5. **A Nonparametric Algorithm for Optimal Stopping based on Robust Optimization**
   Sole author
   Operations Research, 2023, 71(5):1530-1557
   Second Place in the INFORMS Junior Faculty Interest Group Paper Competition, 2021

6. **Dynamic Optimization with Side Information**
   Co-authored with: Dimitris Bertsimas, Chris McCord
   European Journal of Operational Research, Vol. 304, No. 2, 2023

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. **Two-stage sample robust optimization**
Co-authored with: Dimitris Bertsimas, Shimrit Shtern
Operations Research, Vol. 70, No. 1, 2022

9. **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

10. **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

11. **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 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**
Co-authored with: Xiao Yu, Xiang Ren, Yizhou Sun, Urvashi Khandelwal, Quanquan Gu, Brandon Norick, Jiawei Han
Proceedings of the 7th ACM Conference on Recommender Systems, 2013

Invited Talks and Conferences

SEMINARS & WORKSHOPS		
Robust Optimization Webinar	*December 2023*
INSEAD, Workshop on Information and Learning in Decisions and Operations	*July 2023*
Northwestern University, Industrial Engineering and Management Science	*September 2022*
Virginia Tech, Industrial and Systems Engineering	*May 2022*
University of Texas Austin, Operations Research and Industrial Engineering	*November 2021*
Washington University in St. Louis, Olin Business School	*November 2021*
Robust Optimization Webinar	*November 2020*
University of Wisconsin Madison, Industrial and Systems Engineering	*January 2020*
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 (USA East Office), ML Research Seminar Series	*November 2019*
MIT Operations Research Center, ORC Seminar	*September 2019*
CMU Tepper School of Business, YinzOR Workshop	*August 2019*
Technion Industrial Engineering, Quant Seminar	*January 2019*
BIRS Workshop on "Models and Algorithms for Sequential Decision-Making under Uncertainty", Banff	*January 2019*

CONFERENCES	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*
	Election Verification Network Conference on "Bridging Trust Across Divides", Washington DC	*March 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*

Teaching

INSTRUCTOR	**University of Illinois Chicago**	
	IDS 532, Introduction to Operations Management	*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, Mathematics of Operations Research, Manufacturing & Service Operations Management, SIAM Journal on Optimization, Mathematical Programming, Production and Operations Management, INFORMS Journal on Optimization, INFORMS Journal on Computing, Journal of Optimization Theory and Applications	
CONFERENCE AND AWARD REVIEWER	ACM Conference on Economics and Computation, Program Committee	*2024*
	INFORMS Pierskalla Best Paper Award, Committee Member	*2023*

UIC	UIC Business Workshop on Diversity and Effective Teaching, Panel Speaker	*October 2023*
ACTIVITIES	UIC IDS PhD Committee Member	*2023-Present*
	UIC Business Analytics Organization, Invited Speaker	*April 2022*