

# Bradley Sturt

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| PERSONAL               | <b>Name:</b> Bradley Eli Sturt<br><b>Birthday:</b> October 10, 1991<br><b>Office:</b> 601 S. Morgan Street, Chicago, IL<br><b>Email:</b> bsturt@uic.edu<br><b>Phone:</b> (847) 867-1054   |                             |
| ACADEMIC<br>EMPLOYMENT | <b>University of Illinois Chicago, Chicago, IL</b><br><i>Assistant Professor of Business Analytics</i>  | <i>Aug 2020 - Present</i>   |
| EDUCATION              | <b>Massachusetts Institute of Technology, Cambridge, MA</b><br>Ph.D. in Operations Research<br>GPA: 5.00/5.00   | <i>Aug 2015 - June 2020</i> |
|                        | <b>University of Illinois Urbana Champaign, Champaign, IL</b><br>B.S. in Computer Engineering, minor in Technology and Management<br>GPA: 3.97/4.00<br>Graduated with Highest Honors and University Honors (Bronze Tablet)  | <i>Aug 2010 - June 2014</i> |
| INDUSTRY               | <b>BallotIQ, Ann Arbor, MI</b><br><i>Co-Founder</i>   | <i>June 2024 - Present</i>  |
|                        | <b>Facebook, Menlo Park, CA</b><br><i>Data Scientist Intern</i>   | <i>June 2015 - Aug 2015</i> |
|                        | <b>Google, Mountain View, CA</b><br><i>Software Engineering Intern</i>  | <i>June 2013 - Aug 2013</i> |
|                        | <b>Garmin, Olathe, KS</b><br><i>Software Engineering Intern</i>   | <i>June 2012 - Aug 2012</i> |
| SELECTED<br>AWARDS     | <b>Operations Research Meritorious Service Award, 2024</b><br>Awarded to a select number of reviewers that have “gone above and beyond normal expectations”.  |                             |
|                        | <b>WDSM Test of Time Paper Award, 2024</b><br>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”. |                             |
|                        | <b>Management Science Meritorious Service Award, 2023</b><br>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

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| SUBMITTED           | <ol style="list-style-type: none"><li><b>1. The Blessing of Strategic Customers in Personalized Pricing</b><br/>Co-authored with: Zhi Chen, Weijun Xie</li><li><b>2. Group Fairness in Dynamic Refugee Assignment</b><br/>Co-authored with: Daniel Freund, Thodoris Lykouris, Elisabeth Paulson, Wentao Weng</li></ol>  |
| JOURNAL<br>ARTICLES | <ol style="list-style-type: none"><li><b>3. On the Sparsity of Optimal Linear Decision Rules for a Class of Robust Optimization Problems with Box Uncertainty Sets</b><br/>Co-authored with: Haihao Lu<br/><i>Operations Research</i>, 2025</li><li><b>4. Improving the Security of United States Elections with Robust Optimization</b><br/>Co-authored with: Braden L. Crimmins, J. Alex Halderman<br/><i>Operations Research</i>, 2024</li><li><b>5. The Value of Robust Assortment Optimization under Ranking-Based Choice Models</b><br/>Sole author<br/><i>Management Science</i>, 2024</li></ol> |

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
  
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 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
  
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 Norick, Jiawei Han  
*Proceedings of the 7th ACM Conference on Recommender Systems*, 2013

PEER-  
 REVIEWED  
 CONFERENCE  
 PAPERS

## Invited Talks

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

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| 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

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

## Service

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| 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 |