Daniela H. Saban

CONTACT INFORMATION

Knight Management Center
655 Knight Way,
GSB Faculty Building E-367,
Stanford, CA 94305

E-mail: dsaban@stanford.edu
Phone: 650-723-6446
Webpage: http://www.stanford.edu/∼dsaban/

EMPLOYMENT

Stanford University, Graduate School of Business 2015–present

Associate Professor of Operations, Information, and Technology (2021–present; with tenure effective on July 1st, 2023)

Assistant Professor of Operations, Information, and Technology (2015–2020)

On leave 2022-2023, visiting the Department of Data Sciences and Operations, USC Marshall.

Simons Institute for the Theory of Computing

Visiting scholar in the program "Data-Driven Decision Processes" (Fall 2022)

Visiting scholar in the program "Online and Matching-Based Market Design" (Fall 2019)

Visiting fellow in the program "Economics and Computation" - Google Research Fellowship (Fall 2015)

EDUCATION

Columbia University 2015

Ph.D. in Operations Management
Decision, Risk, and Operations Division, Graduate School of Business

Universidad de Buenos Aires 2009

B.Sc. and M.Sc. degrees in Computer Science

RESEARCH INTERESTS

online markets, matching markets, procurement mechanisms,
market design, pricing, revenue management

JOURNAL PAPERS

Data Tracking under Competition, K. Bimpikis, I. Morgenstern, and D. Saban, *Operations Research*, Forthcoming.
Preliminary version accepted in the ACM Conference on Economics and Computation (EC '21), 2021.
Selected for a spotlight presentation at the Revenue Management and Pricing Conference, 2021.

Information Disclosure and Promotion Policy Design for Platforms, Y. Gur, G. Macnamara, I. Morgenstern, and D. Saban, *Management Science*, Forthcoming.
Preliminary version accepted in the Conference on Web and Internet Economics (WINE '21), 2021.
Selected for a spotlight presentation at the Revenue Management and Pricing Conference, 2022.

The Design of Optimal Pay-as-Bid Procurement Mechanisms, J. Choi, D. Saban, and G. Weintraub, *Manufacturing & Service Operations Management (M&SOM)*, Forthcoming.

Improving Match Rates in Dating Markets through Assortment Optimization, I. Rios, D. Saban, and F. Zheng, *Manufacturing & Service Operations Management (M&SOM)*, Forthcoming.

Preliminary version accepted in the ACM Conference on Economics and Computation (EC '21), 2021.

Honorable mention in the 2020–2021 M&SOM Practice-Based Research Competition.

Online Assortment Optimization for Two-sided Matching Platforms, A. Aouad and D. Saban, *Management Science*, Forthcoming.

Preliminary version accepted in the ACM Conference on Economics and Computation (EC '21), 2021.

Selected for a spotlight presentation at the Revenue Management and Pricing Conference, 2021.

Assortment Planning for Sequential Two-sided Matching Markets, I. Ashlagi, A. Krishnaswamy, R. Makhijani, D. Saban, and K. Shiragur, *Operations Research*, Forthcoming.

Preliminary version accepted in the Conference on Web and Internet Economics (WINE '20), 2020.

Sequential Procurement through Contractual and Experimental Learning, Y. Gur, G. Macnamara, and D. Saban, *Management Science*, 68(4), 2714–2731, 2021.

Finalist in the 2019 Jeff McGill RMP Best Student Paper Prize (Greg Macnamara).

Increased Transparency in Procurement: The Role of Peer Effects, R. Beer, I. Rios, and D. Saban, *Management Science*, 67(12), 7511–7534, 2021.

Second place in the 2018 Best Working Paper Award in Behavioral OM.

Facilitating the Search for Partners on Matching Platforms, Y. Kanoria and D. Saban, *Management Science*, 67(10), 5969–6627, 2021.

Preliminary version accepted in the ACM Conference on Economics and Computation (EC), 2017.

Featured article in the October 2021 issue.

Procurement Mechanisms for Assortments of Differentiated Products, D. Saban and G. Weintraub, *Operations Research*, 69(3), 795–820, 2021.

Preliminary version accepted in the ACM Conference on Economics and Computation (EC), 2015.

Second place in the M&SOM student paper competition.

Optimal Commissions and Subscriptions in Networked Markets, J. Birge, O. Candogan, H. Chen, and D. Saban, *Manufacturing & Service Operations Management (M&SOM)*, 23(3), 569–588, 2021.

Preliminary version accepted in the ACM Conference on Economics and Computation (EC), 2018.

Spatial Pricing in Ride-sharing Networks, K. Bimpikis, O. Candogan, and D. Saban, *Operations Research*, 67(3), 744–769, 2019.

Accepted for presentation in M&SOM Service SIG, 2017.

Preliminary version accepted in Workshop on the Economics of Networks, Systems and Computation (NetEcon), 2017.
Winner of the 2022 INFORMS Revenue Management and Pricing Section Prize.
Runner-up in the 2021 Service Management SIG Prize.

Convergence to the Core in Assignment Markets, Y. Kanoria, D. Saban, and J. Sethuraman, *Operations Research*, 66(3), 620–636, 2018.
Preliminary version accepted in the ACM-SIAM Symposium on Discrete Algorithms (SODA), 2015.

The Competitive Facility Location Problem in a Duopoly, Y. Gur, D. Saban, and N. Stier-Moses, *Operations Research*, 66(4), 1058–1067, 2018.

The Complexity of Computing the Random Priority Allocation Matrix, D. Saban and J. Sethuraman, *Mathematics of Operations Research*, 40(4), 1005–1014, 2015.
Preliminary version accepted in the Conference on Web and Internet Economics (WINE), 2013.

A Note on Object Allocation under Lexicographic Preferences, D. Saban and J. Sethuraman, *Journal of Mathematical Economics*, 50, 283–289, 2014.

A Polyhedral Study of the Maximum Edge Subgraph Problem, F. Bonomo, J. Marenco, D. Saban, and N. Stier-Moses, *Discrete Applied Mathematics*, 160(18), 2573–2590, 2012.

An Application of the Traveling Tournament Problem: The Argentine Volleyball League, F. Bonomo, A. Cardemil, G. Durán, J. Marenco, and D. Saban, *Interfaces*, 42(3), 245–259, 2012.

Analysis and Models of Bilateral Investment Treaties Using a Social Networks Approach, D. Saban, F. Bonomo, and N. Stier-Moses, *Physica A*, 389(17), 3661–3673, 2010.

Papers under Review

Online Algorithms for Matching Platforms with Multi-Channel Traffic, V. Manshadi, S. Rodilitz, D. Saban, and A. Suresh.
Major revision, *Management Science*.
Preliminary version accepted in the ACM Conference on Economics and Computation (EC '22), 2022.

The Re-design of Framework Agreement Markets for Government Procurement in Chile, with M. Olivares, G. Weintraub, E. Lara, P. Zanocco and P. Moreno.

Work in Progress

Designing Resellers' Platforms, with I. Morgenstern, D. Singhvi, and S. Singhvi.

Online Display Optimization under Quality Uncertainty, with A. Aouad and J. Choi.

Re-designing VolunteerMatch's Search Algorithm: Toward more equitable access to volunteers, with V. Manshadi, S. Rodilitz, and A. Suresh.

Refereed Conference Proceedings (not above)

Effect of Selfish Choices in Deferred Acceptance with Short Lists, H. Beyhaghi, D. Saban and E. Tardos, MATCH-UP, 2017.

House Allocation with Indifferences: A Generalization and a Unified View, D. Saban and J. Sethuraman, ACM Conference on Electronic Commerce (EC), 2013.

The Competitive Facility Location Problem in a Duopoly: Connections to the 1-median Problem, D. Saban and N. Stier-Moses, Workshop on Internet & Network Economics (WINE), 2012.

Teaching

Note: Teaching evaluations are in the 1–5 scale. Stanford GSB provides a comparison result, which is the average teaching score across all courses in the comparison set. For OIT 245, the comparison set includes all required MBA courses. For OIT 666 and OIT 644, it includes all elective Ph.D. courses.

OIT 245: Optimization and Simulation Modeling – Base (core MBA class)
- Fall 2016: Evaluations from the first teaching experience are not available.
- Fall 2018: Teaching evaluations: 4.7, 4.8, 4.8 (Comparison result: 4.3)
- Fall 2020: Teaching evaluations: 4.8, 4.9 (Comparison result: 4.3)
- Fall 2021: Teaching evaluations: 4.7, 4.7, 4.9 (Comparison result: 4.3)

OIT 666: Engineering Online Markets (Ph.D. class)
- Winter 2018: Teaching evaluation: 5.0 (Comparison result: 4.8)
- Winter 2020: Teaching evaluation: 4.8 (Comparison result: 4.7)

OIT 644: Research in Operations, Information and Technology (Ph.D. class)
- Winter 2021: Teaching evaluation: 5.0 (Comparison result: 4.7)

Other Honors & Awards

Note: Paper-related honors and awards are listed under the corresponding publication or working paper.

BGS Research Fund grant ($75,000), 2022.

Finalist for the MBA Distinguished Teaching Award, 2022.

Finalist for the MBA Distinguished Teaching Award, 2021.
Honor received by 6 instructors annually among all faculty (tenure- and non-tenure-line) teaching MBA courses.

Winnick Family Faculty Scholar for 2019–2020.

Winnick Family Faculty Scholar for 2018–2019.

Google Research Fellowship at the Simons Institute of UC Berkeley, Fall 2015.
Fellowship awarded to one visiting fellow across all semester-long programs.

Finalist for the Dantzig Dissertation Award, 2015.
Award given annually to the best doctoral dissertation in operations research and related areas.

The Paul and Sandra Montrone Doctoral Fellowship, 2014.

Columbia University–Glasgow University Exchange Program Fellowship, 2014.
Fellowship awarded to only 6 graduate students across all the university.

Deming Doctoral Research Fellowship, The W. Edwards Deming Center, 2013.

Doctoral Fellowship, Columbia Business School, 2010–2015.

Research Fellowship, Agencia Nacional de Promoción Científica y Tecnológica (equivalent to NSF), Argentina, 2009–2010.

Students

Greg Macnamara, Stanford GSB (co-advised with Yoni Gur)
- Graduation year: 2020
- First placement: Core Data Scientist at Meta, Inc.

Ignacio Rios, Stanford GSB
Graduation year: 2020
First placement: Assistant Professor at U.T. Dallas

Je-ok Choi, Stanford ICME (co-advised with Gabriel Weintraub)
Graduation year: 2022
First placement: Data Scientist at Moloco.

Ilan Morgenstern, Stanford GSB (co-advised with Kostas Bimpikis)
Expected graduation date: 2024

Scott Rodilitz, Stanford GSB.
Postdoctoral Advisor, 2021–2022.

Dissertation Reading Committee:
Jamie Kang, Stanford MS&E. Graduation year: 2022.
Mine Su Erturk, Stanford GSB. Graduation year: 2022.
Wenjia Ba, Stanford GSB. Graduation year: 2022.
Hongfan Chen, Chicago Booth, Operations Management. Graduation year: 2020.

Dissertation University Chair:
Faidra Monachou, Stanford MS&E. Graduation year: 2022.
Nikhil Garg, Stanford MS&E. Graduation year: 2020.
Rahul Makhijani, Stanford MS&E. Graduation year: 2019.
Afshin Nikzad, Stanford Economics. Graduation year: 2019.

Community Leadership

Program Co-chair of the ACM Conference on Economics and Computation (EC'24), 2024.

Chair of the Dantzig Dissertation Award Committee, 2023.

Member of the inaugural DEI committee for the INFORMS Revenue Management and Pricing Section, 2022–present.

Co-chair of the Dantzig Dissertation Award Committee, 2022.

Co-chair of M&SOM Service SIG Track for the INFORMS annual meeting, 2022.

Co-chair of the EC Workshop on the Design of Online Platforms, July 2021.

Board member of the INFORMS Revenue Management and Pricing Section, 2019–2021.

Co-organizer of "Marketplace Algorithms and Design" (along with Gagan Goel and Yash Kanoria), a weekly online seminar during summer 2020.

Co-chair of the Revenue Management and Pricing INFORMS conference, Stanford, June 2019.

Co-chair of the Revenue Management and Pricing Track for the INFORMS annual meeting, 2019.

Co-chair of the EC-AGT Mentoring Workshop (AMW), 2019.

Professional Service

Associate Editor of Operations Research, 2021–present.

Associate Editor of Operations Research Letters, 2021–present.

Associate Editor of Management Science, 2021–present.

Associate Editor of Manufacturing & Service Operations Management (M&SOM), 2021–present.

Associate Editor of Mathematics of Operations Research, 2020–present.

Co-PhD Liaison OIT Group at Stanford GSB, 2021–2022.

Track Co-Chair (Applied Modeling) in the ACM Conference on Economics and Computation (EC'23), 2023.

Senior Program Committee member in the ACM Web Conference (WWW), 2023.

Area Chair in EC'21.

Committee Member: Dantzig Dissertation Award, 2021; Revenue Management and Pricing Section Practice Award, 2022; Revenue Management and Pricing Section Student Paper Award, 2022.

Judge: Nicholson Student Paper Competition, M&SOM Student Paper Competition, 2021.

Senior Program Committee member in EC'20, EC'19.

Senior Program Committee member in WINE'18, WINE'20, WINE'21, WINE'22, WINE'23.

Program Committee member in EC'16, EC'17, EC'18.

Reviewer for Management Science, Operations Research, Mathematics of Operations Research, MSOM, Games and Economic Behavior, Journal of Economic Theory, AER.

Invited Talks

2023. Rice University; INFORMS Workshop on Market Design; UC Irvine - Algorithms, Combinatorics and Optimization Seminar (scheduled); Online Research Seminar on Digital Businesses.

2022. USC - Marshall School of Business; Harvard Business School - TOM; Yale School of Management; University of Michigan - Ross School of Business; UC Berkeley - IEOR; Bumble - Data Science Team; HEC Paris; INSEAD; Indiana University.

2021. Baruch College - Zicklin School of Business; LUISS - Economics department; Simons Institute for the Theory of Computing; UC Berkeley - Haas School of Business; Cornell - ORIE; University of Chicago - Booth School of Business; Plenary speaker at the Marketplace Innovation Workshop; Plenary speaker at the 32nd International Conference on Game Theory; UC Riverside.

2020. MIT - ORC; University of Pennsylvania - Wharton School; Duke University - Fuqua School of Business; University of Illinois at Urbana-Champaign - ISE.

I was also invited to give plenary talks at the following events which, unfortunately, were canceled due to Covid-19: Johns Hopkins University - New Tools for Markets: Information Design and Blockchains; Marketplace Innovation Workshop; 7th Workshop on Stochastic Methods in Game Theory.

2019. UT Austin - McCombs School of Business; USC - Marshall School of Business; Stanford University - RAIN seminar.

2018. Harvard Business School - TOM; Caltech - SSIL; Cornell - Johnson Graduate School of Management; Uber Marketplace Optimization and Data Science Team.

2017. University of Pennsylvania - Wharton School; Airbnb Data Science

2015. University of Michigan - IOE; UCLA - Anderson School of Management; University of Illinois at Urbana-Champaign - ISE; University of Chicago - Booth School of Business; Bocconi University; INSEAD; Yale School of Management; Carnegie Mellon University - Tepper School of Business; New York University - Stern School of Business; Duke University - Fuqua School of Business; UT Dallas - Naveen Jindal School of Management; Stanford University - Graduate School of Business; University of Michigan -

Ross School of Business; Stanford University - MS&E; Harvard University - John F. Kennedy School of Government

2014. Cornell University - ORIE; Cornell University - Johnson Graduate School of Management