Anton Braverman

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Education	**Ph.D. in Operations Research**, Cornell University — May 2017
	Thesis: "Stein's method for steady-state approximations of stochastic systems". Advisor: Jim Dai.
	M.S. in Operations Research, Cornell University — May 2015
	B.S. in Math and Statistics, University of Toronto — June 2012

Professional Experience

Kellogg School of Management, Northwestern University July 2017 - present
Assistant Professor.

Publications

1. A. Braverman, J.G. Dai and J. Feng (2016). Stein's method for steady-state diffusion approximations: An introduction through the Erlang-A and Erlang-C models. *Stochastic Systems* 6(2), 301–366. `https://dx.doi.org/10.1214/15-SSY212`

2. A. Braverman and J.G. Dai (2017). Stein's method for steady-state diffusion approximations of $M/Ph/n + M$ systems. *Annals of Applied Probability*, 27 (1), 550–581. `https://dx.doi.org/10.1214/16-AAP1211`

3. A. Braverman, J.G. Dai and M. Miyazawa (2017). Heavy traffic approximation for the stationary distribution of a generalized Jackson network: The BAR approach. *Stochastic Systems* 7(1), 143–196. `https://dx.doi.org/10.1214/15-SSY199`

4. A. Bendikov, A. Braverman, and J. Pike. Poisson statistics of eigenvalues in the hierarchical Dyson model (2018). *Theory of Probability and its Applications* 63(1), 94–116. `https://doi.org/10.1137%2FS0040585X97T988939`

5. A. Braverman, J.G. Dai, X. Liu, L. Ying (2019) Empty-car routing in ridesharing systems. *Operations Research* 67(5), 1437–1452. `https://doi.org/10.1287/opre.2018.1822`

6. A. Braverman, A. Minca. Networks of common asset holdings: aggregation and measures of vulnerability. *Journal of Network Theory in Finance*, 4 (3), 53-78.

7. A. Braverman, I. Gurvich, J. Huang (2020), "On the Taylor Expansion of Value Functions". *Operations Research* 68(2), 631-654. `https://doi.org/10.1287/opre.2019.1903`

8. A. Braverman, "Steady-state analysis of the Join the Shortest Queue model in the Halfin-Whitt regime" (2020). *Mathematics of Operations Research* 45(3), 1069-1103. `https://doi.org/10.1287/moor.2019.1023`

9. A. Braverman "The prelimit generator comparison approach of Stein's method" (2021). *Stochastic Systems*, published online ahead of print. `https://doi.org/10.1287/stsy.2021.0085`

Working Papers	1. A. Braverman, "The join-the-shortest-queue system in the Halfin-Whitt regime: rates of convergence to the diffusion limit" (2022). `https://arxiv.org/abs/2202.02889`
	2. A. Braverman, J.G. Dai, X. Fang "High order steady-state diffusion approximations" (2021). Submitted for publication. `https://arxiv.org/abs/2012.02824`

Presentations

a. **Invited Conference and Workshop Presentations**

- INFORMS annual meeting, Minneapolis, MI, October 2013.
- SIAM Conference on Financial Mathematics & Engineering, Chicago, IL, November 2014.
- Workshop on New Directions in Stein's Method, Singapore, May 2015.
- INFORMS annual meeting, Philadelphia, PA, October 2015.
- Young Researchers Workshop on Data-Driven Decision Making, Cornell University, Ithaca, NY, October 2016.
- INFORMS annual meeting, Nashville, TN, November 2016.
- INFORMS APS meeting, Evanston, IL, July 2017.
- Annual SPA meeting, Goteborg, Sweden, June 2018.
- International workshop on recent progress in data, models and decisions, CUHKSZ, Shenzhen, July 2018.
- INFORMS annual meeting, Zoom, November 2020.

b. **Invited Tutorial Presentations**

- 35th International Symposium on Computer Performance, Modeling, Measurements and Evaluation at Columbia University, November 2017.

c. **Invited Seminar Presentations**

- The Department of Mathematics, Cornell University, Ithaca, NY, February 2015.
- Operations, Information & Technology Group, Stanford University, April 2021.
- Industrial & Enterprise Systems Engineering, UI Urbana-Champaign, April 2021.

d. **Poster Presentations**

- ORIE Workshop on Data-Driven Decision Making, Cornell University, Ithaca, NY, October 2014.
- Reflected Brownian Motions, Stochastic Networks, and their Applications, Institute for Mathematics and its Applications, Minneapolis, MI, June 2015.
- Second annual Young Researchers Workshop on Data-Driven Decision Making, Cornell University, Ithaca, NY, October 2015.

Honors and Awards	The Best Publication Award, Applied Probability Society of INFORMS, October 2017.
Professional Service	Referee: Stochastic Models, QUESTA, Operations Research, Math of Operations Research, Stochastic Systems, Journal of Applied Probability, Annals of Applied Probability, Bernoulli Journal, Management Science.