Alessandro Arlotto

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The Fuqua School of Business
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Research Interests

Applied probability, stochastic modeling, stochastic dynamic programming, combinatorial optimization, and applications to management sciences and economics.

Education

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA
Ph.D. in Managerial Science and Applied Economics, December 2012
Dissertation Title: "Essays in Problems of Optimal Sequential Decisions"
Advisors: Noah Gans, J. Michael Steele

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA
A.M. in Statistics, December 2009
Thesis: "Risk-Neutral Pricing with Switching Volatility"
Advisor: J. Michael Steele

UNIVERSITY OF TORINO, Torino, Italy
Laurea Specialistica (M.S.) *cum laude* in Finance, July 2007
Thesis: "Stochastic Orders and Multinormal Distributions"
Advisors: Marco Scarsini, Igor Prünster

UNIVERSITY OF TORINO, Torino, Italy
Laurea Triennale (B.S.) *cum laude* in Economics and Business, November 2004
Thesis: "Comparisons among Electoral Systems"
Advisor: Marco Scarsini

Professional Experience

2019 – present	*Associate Professor (with tenure) of Business Administration and Mathematics* Decision Sciences, The Fuqua School of Business, Duke University Department of Mathematics (secondary), Duke University
2019 – 2020	*Visiting Research Scientist* Department of Industrial Engineering and Operations Research, Columbia University
2016 – 2019	*Associate Professor of Business Administration, Mathematics, and Statistical Science* Decision Sciences, The Fuqua School of Business, Duke University Department of Mathematics (secondary), Duke University Department of Statistical Science (secondary), Duke University

2012 – 2016	*Assistant Professor of Business Administration* Decision Sciences, The Fuqua School of Business, Duke University
2015 November	*Visiting Scholar* Department of Economics and Finance, LUISS Guido Carli
2015 January	*Visiting Scholar* CMS–EMS, Kellogg School of Management, Northwestern University
2012 June	*Visiting Scholar* Statistics Initiative, Collegio Carlo Alberto
2011 March	*Visiting Scholar* Technology & Operations Management, INSEAD
2010 September	*Visiting Scholar* Statistics Initiative, Collegio Carlo Alberto

Grants Funded

1. NATIONAL SCIENCE FOUNDATION, CAREER AWARD, "The effects of centralized and decentralized sequential decisions on system performance," award no. 1553274, amount $500,000, 5/01/2016–4/30/2021.

2. NATIONAL SCIENCE FOUNDATION, "Conference on Probability Theory and Combinatorial Optimization," award no. 1502471, amount $19,000, 2/01/2015–1/31/2016.

Current Projects

Sequential policies and the distributions of their total rewards in dynamic and stochastic knapsack problems, with Y. T. Kuo and X. Xie

Data-driven monitoring of the optimality of policies across many Markov decision problems, with A. Belloni and X. Xie

Working Papers

1. ARLOTTO, A., BELLONI, A., FANG, F. and PEKEČ, S. (2024) Ballot design and electoral cutcomes: the role of candidate order and party affiliation, *under review*.

2. ARLOTTO, A., KESKIN, I. N., and WEI, Y. (2024) Online demand fulfillment problem with initial inventory placement: a regret analysis, *under review*.

   • Finalist in the 2024 POMS College of Supply Chain Management Best Student Paper Competition (Entrant: I. N. Keskin)

Refereed Publications

3. VERA, A., ARLOTTO, A., GURVICH, I., and LEVIN, E. (2024) Dynamic resource allocation: the geometry and robustness of constant regret, *Mathematics of Operations Research*, forthcoming.

4. ARLOTTO, A. and XIE, X. (2020) Logarithmic regret in the dynamic and stochastic knapsack problem with equal rewards, *Stochastic Systems*, **10**, 170–191.

5. ARLOTTO, A. and GURVICH, I. (2019) Uniformly bounded regret in the multi-secretary problem, *Stochastic Systems*, **9**, 231–260.

   - Winner of the 2021 INFORMS Applied Probability Society Best Publication Award

6. ARLOTTO, A., FRAZELLE, A. E., and WEI, Y. (2019) Strategic open routing in service networks, *Management Science*, **65**, 735–750.

   - Winner of the 2019 M&SOM Service Management SIG Best Paper Award
   - Finalist in the 2016 M&SOM Student Paper Competition (Entrant: A. E. Frazelle)

7. ARLOTTO, A. and STEELE, J. M. (2018) A central limit theorem for costs in Bulinskaya's inventory management problem when deliveries face delays, *Methodology and Computing in Applied Probability*, **20**, 839–854.

8. ARLOTTO, A., WEI, Y., and XIE, X. (2018) An adaptive $O(\log n)$-optimal policy for the online selection of a monotone subsequence from a random sample, *Random Structures & Algorithms*, **52**, 41–53.

9. ARLOTTO, A. and STEELE, J. M. (2016) A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming, *Mathematics of Operations Research*, **41**, 1448–1468.

10. ARLOTTO, A. and STEELE, J. M. (2016) Beardwood-Halton-Hammersley theorem for stationary ergodic sequences: a counterexample, *The Annals of Applied Probability*, **26**, 2141–2168.

11. ARLOTTO, A., MOSSEL, E., and STEELE, J. M. (2016) Quickest online selection of an increasing subsequence of specified size, *Random Structures & Algorithms*, **49**, 235–252.

12. ARLOTTO, A., NGUYEN, V. V., and STEELE, J. M. (2015) Optimal online selection of a monotone subsequence: a central limit theorem, *Stochastic Processes and their Applications*, **125**, 3596–3622.

13. ARLOTTO, A., GANS, N., and STEELE, J. M. (2014) Markov decision problems where means bound variances, *Operations Research*, **62**, 864–875.

14. ARLOTTO, A. and STEELE, J. M. (2014) Online selection of an alternating subsequence: a central limit theorem, *Advances in Applied Probability,* **46**, 536–559.

15. ARLOTTO, A., CHICK, S. E., and GANS, N. (2014) Optimal hiring and retention policies for heterogeneous workers who learn, *Management Science*, **60**, 110–129, former title: "Hiring and retention of heterogeneous workers."

16. ARLOTTO, A., CHEN, R. W., SHEPP, L. A. and STEELE, J. M. (2011) Online selection of alternating subsequences from a random sample, *Journal of Applied Probability,* **48**, 1114–1132.

17. ARLOTTO, A. and STEELE, J. M. (2011) Optimal sequential selection of a unimodal subsequence of a random sequence, *Combinatorics, Probability and Computing,* **20**, 799–814.

18. ARLOTTO, A. and SCARSINI, M. (2009) Hessian orders and multinormal distributions, *Journal of Multivariate Analysis,* **100**, 2324–2330.

Conference Proceedings

19. ARLOTTO, A., CHICK, S.E., and GANS, N. (2010) Optimal employee retention when inferring unknown learning curves, *Proceedings of the 2010 Winter Simulation Conference (WSC),* 1178 – 1188.

Invited Seminars

1. *Ballot design and electoral cutcomes: the role of candidate order and party affiliation*, invited talk at The Wharton School, University of Pennsylvania, November 2023

2. *On the constant regret in dynamic resource allocation problems*, invited talk at the 4th Workshop on Information and Learning in Decisions and Operations, INSEAD, July 2023

3. *Dynamic resource allocation problems: framework, algorithms, and regret*, invited talk at KID 2023, Université Côte d'Azur, July 2023

4. *On the constant regret in dynamic resource allocation problems*, invited talk at Canergie Mellon University, Tepper School of Business, December 2022

5. *On the constant regret in dynamic resource allocation problems*, invited talk at the 3rd Workshop on Information and Learning in Decisions and Operations, IESE Business School, June 2022

6. *On the constant regret in multi-secretary and dynamic resource allocation problems*, invited talk in the SNAPP (Stochastic Networks, Applied Probability, and Performance) Seminar Series, May 2022

7. *On the regret of dynamic and stochastic knapsack problems*, invited talk at New York University, Stern School of Business, February 2020

8. *Sequential policies and the distributions of their total rewards in dynamic and stochastic knapsack problems*, invited talk at Columbia University, Applied Probability and Risk Seminar, October 2019

9. *On the regret of dynamic and stochastic knapsack problems*, invited talk at Columbia University, Columbia Business School and Department of Industrial Engineering and Operations Research, September 2019

10. *On the regret of dynamic and stochastic knapsack problems*, invited talk at the 1st Workshop on Information and Learning in Decisions and Operations, IESE Business School, September 2019

11. *On the regret of dynamic and stochastic knapsack problems*, invited talk at Stanford University, Graduate School of Business, October 2018

12. *On the regret of dynamic and stochastic knapsack problems*, invited talk at The University of Chicago, Booth School of Business, October 2018

13. *Uniformly bounded regret in the multi-secretary problem*, invited talk at Duke University, The Fuqua School of Business, April 2018

14. *Probability, optimization, and dynamic control*, invited talk at North Carolina State University, November 2017

15. *Probabilistic analysis of sequential decision problems*, invited talk at the 2017 ISSNAF Annual Event, Italian Embassy in Washington D.C., November 2017

16. *Uniformly bounded regret in the multi-secretary problem*, invited talk at Dartmouth College, Tuck School of Business, October 2017

17. *Probabilistic analysis of finite-horizon Markov decision problems*, invited talk at Université de Montréal, First Joint CRM-IMPA Workshop, July 2017

18. *Uniformly bounded regret in the multi-secretary problem*, invited talk at Università Bocconi, Department of Decision Sciences, May 2017

19. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Columbia University, Department of Industrial Engineering and Operations Research and Columbia Business School, November 2016

20. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Tsinghua University, Mostly OM Workshop, May 2016

21. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Canergie Mellon University, Tepper School of Business, April 2016

22. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Georgia Institute of Technology, School of Mathematics, January 2016

23. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Cornell University, School of Operations Research and Information Engineering, December 2015

24. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Università degli Studi di Roma Tor Vergata, Department of Mathematics, November 2015

25. *Markov decision problems where means bound variances*, invited talk at LUISS Guido Carli, Department of Economics and Finance, October 2015

26. *Markov decision problems where means bound variances*, invited talk at Duke University, The Fuqua School of Business, August 2015

27. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Duke University, The Fuqua School of Business, April 2015

28. *A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming*, invited talk at Collegio Carlo Alberto, February 2015

29. *Markov decision problems where means bound variances*, invited talk at Southern Methodist University, Cox School of Business, April 2014

30. *Markov decision problems where means bound variances*, invited talk at University of North Carolina at Chapel Hill, Department of Statistics and Operations Research, December 2013

31. *Optimal hiring and retention policies for heterogeneous workers who learn*, invited talk at Singapore University of Technology and Design, Engineering Systems and Design, November 2013

32. *Distributional results for Markov decision problems*, invited talk at National University of Singapore, Department of Statistics and Applied Probability, November 2013

33. *Markov decision problems where means bound variances*, invited talk at INSEAD, Decision Sciences, November 2013

34. *Distributional results for Markov decision problems*, invited talk at Duke University, Department of Mathematics, February 2013

35. *Online selection of an alternating subsequence: a central limit theorem*, invited talk at Università degli Studi di Torino, Department of Mathematics, December 2012

36. *Markov decision problems where means bound variances*, invited talk at Università degli Studi di Milano-Bicocca, June 2012

37. *Markov decision problems where means bound variances*, invited talk at University of Florida, Department of Industrial and Systems Engineering, March 2012

38. *Optimal hiring and retention policies for heterogeneous workers who learn*, invited talk at Universitat Pompeu Fabra, Department of Economics and Business, February 2012

39. *Optimal hiring and retention policies for heterogeneous workers who learn*, invited talk at Collegio Carlo Alberto, February 2012

40. *Markov decision problems where means bound variances*, invited talk at Università Bocconi, Department of Decision Sciences, February 2012

41. *Markov decision problems where means bound variances*, invited talk at Northwestern University, Kellogg School of Management, February 2012

42. *Optimal hiring and retention policies for heterogeneous workers who learn*, invited talk at London Business School, Management Science and Operations, February 2012

43. *Markov decision problems where means bound variances*, invited talk at Pennsylvania State University, Department of Industrial and Manufacturing Engineering, February 2012

44. *Markov decision problems where means bound variances*, invited talk at University of Minnesota, Department of Industrial & Systems Engineering, January 2012

45. *Markov decision problems where means bound variances*, invited talk at Duke University, The Fuqua School of Business, January 2012

46. *Markov decision problems where means bound variances*, invited talk at Georgetown University, McDonough School of Business, January 2012

47. *Markov decision problems where means bound variances*, invited talk at Columbia University, Columbia Business School, January 2012

48. *Markov decision problems where means bound variances*, invited talk at New York University, Stern School of Business, January 2012

49. *Markov decision problems where means bound variances*, invited talk at University of Chicago, Booth School of Business, January 2012

50. *Optimal hiring and retention policies for heterogeneous workers who learn*, invited talk at Indiana University, Kelley School of Business, January 2012

51. *Markov decision problems where means bound variances*, invited talk at Massachusetts Institute of Technology, Sloan School of Management, December 2011

52. *Markov decision problems where means bound variances*, invited talk at University of Pennsylvania, The Wharton School, December 2011

53. *Optimal hiring and retention policies for heterogeneous workers who learn*, invited talk at INSEAD, Technology & Operations Management, March 2011

54. *Hessian orders and multinormal distributions*, invited talk at George Washington University, Department of Statistics, April 2010

Conference Presentations

Sequential policies and the distributions of their total rewards in dynamic and stochastic knapsack problems
2024 Stochastic Modeling Meeting (Milan, Italy)

Ballot design and electoral cutcomes: the role of candidate order and party affiliation
2023 Workshop in Operations, Networks, and Data Analytics (Buenos Aires, Argentina)

On the constant regret in dynamic resource allocation problems
2023 INFORMS Applied Probability Society Conference (Nancy, France)

Dynamic and stochastic knapsack problems: heuristics, asymptotic performance, and limit theorems
2019 INFORMS Applied Probability Society Conference (Brisbane, Australia)

Logarithmic regret in the dynamic and stochastic knapsack problem with equal rewards
2017 Conference on Stochastic Processes and their Applications (Moscow, Russia)
2017 INFORMS Applied Probability Society Conference (Evanston, IL)

Uniformly bounded regret in the multi-secretary problem
2019 INFORMS Applied Probability Society Conference (Brisbane, Australia)
2018 INFORMS Annual Meeting (Phoenix, AZ)
2017 INFORMS Applied Probability Society Conference (Evanston, IL)

A central limit theorem for temporally non-homogenous Markov chains with applications to dynamic programming
2016 INFORMS Annual Meeting (Nashville, TN)
2015 INFORMS Annual Meeting (Philadelphia, PA)
2015 INFORMS Applied Probability Society Conference (Istanbul, Turkey)
2015 International Workshop on Sequential Methodologies (New York, NY)

A central limit theorem for costs in Bulinskaya's inventory management problem when deliveries face delays
2016 INFORMS International Conference (Waikoloa, HI)

Optimal online selection of a monotone subsequence: a central limit theorem
2015 INFORMS Applied Probability Society Conference (Istanbul, Turkey)

Markov decision problems where means bound variances
2014 Conference on Stochastic Processes and their Applications (Buenos Aires, Argentina)
2012 INFORMS Annual Meeting (Phoenix, AZ)
2012 IWAP - International Workshop in Applied Probability (Jerusalem, Israel)
2011 INFORMS Annual Meeting (Charlotte, NC)

Online selection of an alternating subsequence: a central limit theorem
2013 INFORMS Applied Probability Society Conference (San Jose, Costa Rica)
2013 Seminar on Stochastic Processes (Durham, NC)

Optimal hiring and retention policies for heterogeneous workers who learn
2014 INFORMS Annual Meeting (San Francisco, CA)
2011 INFORMS Annual Meeting (Charlotte, NC)
2011 MSOM Special Interest Group Meeting (Ann Arbor, MI)
2010 INFORMS Annual Meeting (Austin, TX)
2009 INFORMS Annual Meeting (San Diego, CA)
2009 INFORMS Applied Probability Society Conference (Ithaca, NY)
2009 MSOM Annual Conference (Cambridge, MA)

On the sequential selection of monotone, unimodal and alternating subsequences from a random sample
2011 INFORMS Applied Probability Society Conference (Stockholm, Sweden)
2010 INFORMS Annual Meeting (Austin, TX)

Hessian orders and multinormal distributions
2009 Fields–MITACS Summer School in Applied Probability (Ottawa, Canada)
2008 International Workshop on Matrices and Statistics (Tomar, Portugal)

Teaching Experience

Fall 2024	Duke University, The Fuqua School of Business, Durham, NC BA915/MATH742/STA715: Stochastic Models (Ph.D.)
Fall 2024	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Found. of Business Analytics (GEMBA)
Fall 2024	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Found. of Business Analytics (MBA, 3 sections)
Fall 2023	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Statistical Models (GEMBA)

Fall 2023	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Fall 2022	Duke University, The Fuqua School of Business, Durham, NC BA915/MATH742/STA715: Stochastic Models (Ph.D.)
Fall 2022	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Statistical Models (GEMBA)
Fall 2022	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Fall 2021	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Statistical Models (GEMBA, 2 sections)
Fall 2021	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Spring 2021	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Statistical Models (GEMBA, 2 sections)
Fall 2020	Duke University, The Fuqua School of Business, Durham, NC DECISION 516F/K: Quant. Bus. Analysis (MMS, 1.5 sections)
Fall 2020	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Spring 2020	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Statistical Models (GEMBA, 2 sections)
Spring 2019	Duke University, The Fuqua School of Business, Durham, NC BA915/MATH742/STA715: Stochastic Models (Ph.D.)
Spring 2019	Duke University, The Fuqua School of Business, Durham, NC DECISION 610G: Statistical Models (GEMBA, 2 sections)
Spring 2018	Duke University, The Fuqua School of Business, Durham, NC BA915/MATH742/STA715: Stochastic Models (Ph.D.)
Spring 2018	Duke University, The Fuqua School of Business, Durham, NC DECISION 610C: Statistical Models (CCMBA, 2 sections)
Spring 2017	Duke University, The Fuqua School of Business, Durham, NC BA915/MATH742/STA715: Stochastic Models (Ph.D.)
Fall 2016	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Fall 2015	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)

January 2015	Northwestern University, Kellogg School of Management, Evanston, IL Mini-course on Bandit Models (Ph.D.)
Fall 2014	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Fall 2014	Duke University, The Fuqua School of Business, Durham, NC BA998: Special Topics in Decision Sciences (Ph.D.)
Summer 2014	Duke University, The Fuqua School of Business, Durham, NC DECISION 516F/K: Quant. Bus. Analysis (MMS, 2 sections)
Fall 2013	Duke University, The Fuqua School of Business, Durham, NC DECISION 610: Probability and Statistics (MBA, 3 sections)
Fall 2012	Duke University, The Fuqua School of Business, Durham, NC DECISION 610W: Probability and Statistics (WEMBA, 2 sections)
Summer 2011	University of Pennsylvania, The Wharton School, Philadelphia, PA Wharton Summer Math Camp (Ph.D. course)
Summer 2010	University of Pennsylvania, The Wharton School, Philadelphia, PA Wharton Summer Math Camp (Ph.D. course)
Summer 2009	University of Pennsylvania, The Wharton School, Philadelphia, PA Wharton Summer Math Camp (Ph.D. course)
Spring 2009	University of Pennsylvania, The Wharton School, Philadelphia, PA OPIM415: Product Design (Teaching Assistant)
Fall 2008	University of Pennsylvania, The Wharton School, Philadelphia, PA OPIM690: Managerial Decision Making (Teaching Assistant)
2003 – 2006	University of Torino, Torino, Italy Calculus for Business and Economics (Teaching Assistant)

Academic Service

Member of the *Committee on Nominations*, Institute of Mathematical Statistics, 2024-2025

Member of the *Executive Committee of the Graduate Faculty*, The Graduate School, Duke University, 2021–2025

Organizer of *WORDS 2024: Workshop in Operations Research and Data Science*, Duke University, 2024

Vice-Chair of the *Executive Committee of the Graduate Faculty*, The Graduate School, Duke University, 2023–2024

Member of the *Faculty Advisory Committe*, The Fuqua School of Business, Duke University, 2022–2024

Organizer of *WORDS 2023: Workshop in Operations Research and Data Science*, Duke University, 2023

Decision Sciences Ph.D. Program Coordinator, The Fuqua School of Business, Duke University, 2020–2023

Member of the *Nicholson Prize Committee*, 2021–2023

Organizer of *WORDS 2022: Workshop in Operations Research and Data Science*, Duke University, 2022

Chair of the Decision Sciences Junior Recruiting Committee, The Fuqua School of Business, Duke University, 2021–2022

Judge for the INFORMS Applied Probability Society Student Paper Prize, 2020–2021

Member of the *Faculty Advisory Committee*, The Fuqua School of Business, Duke University, 2017–2021

Examiner for the Ph.D. defense of Amirlan Seksenbayev, Queen Mary University of London, December 2020

Organizer of *WORDS 2019: Workshop in Operations Research and Data Science*, Duke University, 2019

Organizer and Chair for the *invited session* "New Researchers in Applied Probability and Stochastic Systems," 2019 INFORMS Annual Meeting, Seattle, WA

Organizer and Chair for the *invited session* "Recent Advances in Stochastic Systems II," 2019 INFORMS Applied Probability Society Conference, Brisbane, Australia

Member of the *Program Committee*, 2019 INFORMS Applied Probability Society Conference, Brisbane, Australia

Member of the *Academic Council*, Duke University, 2017–2019

Organizer of the *Decision Sciences Seminar Series*, The Fuqua School of Business, Duke University, 2012–2019

Organizer of *WORDS 2018: Workshop in Operations Research and Data Science*, Duke University, 2018

Organizer and Chair for the *invited session* "Online Optimization and Probability," 2018 INFORMS Annual Meeting, Phoenix, AZ

Organizer of *WORDS 2017: Workshop in Operations Research and Data Science*, Duke University, 2017

Organizer and Chair for the *invited session* "Stochastic Optimization in Applied Probability,"
2017 INFORMS Annual Meeting, Houston, TX

Organizer and Chair for the *session* "Sequential Methods in Probability," 39th Conference
on Stochastic Processes and their Applications, Moscow, Russia, 2017

Organizer and Chair for the *invited session* "Sequential Decisions and Optimal Stopping,"
2017 INFORMS Applied Probability Society Conference, Evanston, IL

Member of the *Program Committee*, 2017 INFORMS Applied Probability Society Conference,
Evanston, IL

Organizer of the *2017 Southeastern Probability Conference*, Duke University

Organizer and Chair for the *invited session* "Probabilistic Combinatorial Optimization,"
2016 INFORMS Annual Meeting, Nashville, TN

Faculty sponsor for *Data+: Smart(er) Routing at Theme Parks*, undergraduate research
experience, Information Initiative at Duke University, 2016

Member of the *Faculty Advisory Committee*, The Fuqua School of Business, Duke University,
2013–2016

Organizer for the *invited session* "New Directions in Applied Probability," 2015 INFORMS
Applied Probability Society Conference, Istanbul, Turkey

Member of the *Program Committee*, 2015 INFORMS Applied Probability Society Conference,
Istanbul, Turkey

Organizer of the *Duke Conference on Probability Theory and Combinatorial Optimization*,
The Fuqua School of Business, Duke University, 2015

Organizer for the *Fuqua Summer Seminar Series*, 2014–2015

Organizer and Chair for the *invited session* "Probability Theory and Combinatorial Optimization,"
2014 INFORMS Annual Meeting, San Francisco, CA

Member of the *Decision Sciences Ph.D. Program Progress Committee*, 2012–2014

Member of the *Decision Sciences Ph.D. Admission Committee*, 2012–2014

Organizer for the *invited session* "Markov Chains and Markov Decision Problems," 2013
INFORMS Applied Probability Society Conference, San José, Costa Rica

Member of the *Program Committee*, 2013 INFORMS Applied Probability Society Conference,
San José, Costa Rica

Honors and Awards

National Science Foundation, Faculty Early Career Development (CAREER) Award, 2016–2021

Winner of the INFORMS Applied Probability Society Best Publication Award, 2021

Winner of the M&SOM Service Management SIG Best Paper Award, 2019

Finalist for the Anna Molteni Award presented by the Italian Scientists and Scholars in North America Foundation, 2017

Award for Innovation and Excellence in Teaching, Master in Management Studies, Duke-Kunshan University, 2015

Wharton Doctoral Fellowship in Decision Sciences, 2010–2011

Wharton Doctoral Fellowship, 2007–2010, 2011–2012

Wharton Ph.D. Student Travel Grant, 2008, 2011

Fields Institute Travel Grant, 2009

"Patty and Jay H. Baker" Endowed Ph.D. Fellowship, 2009

Professional Activities

Associate Editor for *Stochastic Systems*, 2019–present

Associate Editor for *Operations Research*, 2018–present

Guest Associate Editor for *Management Science*, 2021–2023

Reviewer for *Acta Applicandae Mathematicae*, *Advances in Applied Probability*, *Annals of Applied Probability*, *Bernoulli Journal*, *Cambridge University Press*, *Decision Analysis*, *European Journal of Operations Research*, *Journal of Applied Probability*, *Journal of Machine Learning Research*, *Journal of Mathematical Economics*, *Journal of the Royal Statistical Society*, *Management Science*, *Manufacturing & Service Operations Management*, *Methodology and Computing in Applied Probability*, *MSOM Sig Conference*, *Mathematical Reviews (AMS)*, *Mathematics of Operations Research*, *National Science Foundation*, *Omega*, *Operations Research*, *Operations Research Letters*, *Probability Surveys*, *Production and Operations Management*, *Random Structures & Algorithms*, *Theory and Decision*

Panelist for *National Science Foundation*

Member of Institute of Operations Research and Management Science (INFORMS), Institute of Mathematical Statistics (IMS)

Summer Schools

Cornell Probability Summer School, Cornell University, Ithaca, NY, 2009

Fields–MITACS Summer School in Applied Probability, Carleton University, Ottawa, Canada, 2009

SMI – Summer School in Mathematics, Perugia, Italy, 2006, 2007

Languages

Italian (native), English (fluent)

Computer Skills and Interests

Matlab, Mathematica, R, Visual Basic, Html, Sql, LaTeX

References

Available upon request

Immigration

Italian Citizen, U.S. Citizen