Gerardo Berbeglia

Curriculum Vitae

Professional Experience

2019–Present **Associate Professor**, *Melbourne Business School, The University of Melbourne*.
Teaching
- Operations Management (MBA)
- Optimisation and Decision Making (Master in Business Analytics)
- Supply Chain Analytics (Master in Business Analytics)

Main research areas
- Choice modelling
- Revenue management

2012–2018 **Assistant Professor**, *Melbourne Business School, The University of Melbourne*.

2011 **Postdoctoral fellow**, *Department of Mathematics and Statistics, McGill University*.

2009–2011 **Senior Scientist**, *ExPretio Technologies*, Montreal.
- Development of discrete choice models for air carriers and railway firms
- Pricing optimisation and Data analytics

Education

2004–2009 **Doctor of Philosophy (Operations Research)**, *HEC Montreal*, Université de Montreal, Canada, Thesis title: Complexity Analyses and Algorithms for Pickup and Delivery Problems.
Advisors: Jean-François Cordeau and Gilbert Laporte

1999–2003 **B. Sc and M.Sc. in Computer Science**, *Universidad de Buenos Aires, Argentina*.

Awards

2020 MBS Teaching Excellence Award

2019 MBS Teaching Excellence Award

2018 MBS Teaching Excellence Award

2018 International Fellowship Chair 2018, LUISS University, Italy.

2011 Postdoctoral Fellowship Award (Mathematics - 2 years), Natural Sciences and Engineering Research Council of Canada

2010 Cecil Graham Award for the best doctoral dissertation in applied mathematics in Canada, given by the Canadian Applied and Industrial Mathematics Society (CAIMS)

2010 Mercure Prize, HEC Montréal, for the best Ph.D. thesis of the year at HEC Montréal

2005 Excellence scholarship for foreign Ph.D. students (3 years), Government of Québec, Canada (10 scholarships given among the study fields and universities. Ranking position: 3rd

Journal publications

2021 G. Berbeglia, A. Garassino and G. Vulcano. A Comparative Empirical Study of Discrete Choice Models in Retail Operations, *Management Science*. Forthcoming.

2019 G. Berbeglia and G. Joret. Assortment optimisation under a general discrete choice model: A tight analysis of revenue ordered assortments. *Algorithmica* (A 1-page abstract published at the proceedings of the 18th ACM Conference on Economics and Computation (EC), 2017)

2019 G. Berbeglia, P. Sloan , A. Vetta. The Finite Horizon, Undiscounted, Durable Good Monopoly Problem with Finitely Many Consumers, *Journal of Mathematical Economics*, 82:171-183, 2019. (An earlier version of this paper was published in the proceedings of the 10th conference on Web and Internet Economics (WINE) 2014, pages 292-293)

2019 A. Flores, G. Berbeglia and P. Van Hentenryck. Assortment Optimization under the Sequential Multinomial Logit Model. *European Journal of Operational Research*, 273:1052-1064, 2019.

2019 G. Berbeglia, G. Rayaprolu, A. Vetta. Pricing policies for selling indivisible storable goods to strategic consumers. *Annals of Operations Research*, 274:131-154, 2019.(An earlier version of this paper was published in the proceedings of the 11th conference on Web and Internet Economics (WINE) 2015, page 431)

2018 F. Maldonado, P. Van Hentenryck, G. Berbeglia and F. Berbeglia. Popularity signals in trial-offer markets with Social Influence and Position Bias *European Journal of Operational Research* 266:775-793, 2018.

2017 E. Altszyler, F. Berbeglia, G. Berbeglia and P. Van Hentenryck. Transient Dynamics in Trial-Offer Markets with Social Influence:Trade-offs between Appeal and Quality *PLOS ONE*, 12(7):e0180040, 2017.

2016 G. Berbeglia. Discrete choice models based on random walks. *Operations Research Letters*, 44:234-237, 2016.

2016 Abeliuk, G. Berbeglia, M. Cebrian and P. Van Hentenryck. Assortment optimization under a multinomial logit model with position bias and social influence. *4OR*, 14(1):57-75, 2016.

2015 A. Abeliuk, G. Berbeglia, M. Cebrian, P. Van Hentenryck. The Benefits of Social Influence in Optimized Cultural Markets. PLoS ONE 10(4), 2015.

2012 G. Berbeglia, G. Pesant, L.-M. Rousseau, 2012. Feasibility of the pickup and delivery problem with fixed partial routes: A complexity analysis. *Transportation Science* 46:359-373, 2012.

2012 G. Berbeglia, J.-F. Cordeau, G. Laporte 2012. A hybrid tabu search and constraint programming algorithm for the dynamic dial-a-ride problem. *INFORMS Journal on Computing*. 24:343-355, 2012.

2011	G. Berbeglia, G. Pesant, L.-M. Rousseau, 2011. Checking feasibility of the dial-a-ride problem using constraint programming. *Transportation Science*, 45:399-412, 2011.
2010	G. Berbeglia, J.-F. Cordeau, G. Laporte 2010. Dynamic pickup and delivery problems (with J.-F. Cordeau and G. Laporte), *European Journal of Operational Research*, 202:8-15, 2010.
2009	G. Berbeglia, 2009. Counting complexity of a simple scheduling problem, *Operations Research Letters* 37:365-367, 2009.
2009	G. Berbeglia, G. Hahn. Counting feasible solutions of the traveling salesman problem with pickups and delivery is #P-complete *Discrete Applied Mathematics* 157:2541-2547, 2010.
2007	G. Berbeglia, J.-F. Cordeau, I. Gribkovskaia and G. Laporte. Static pickup and delivery problems: A classification scheme and survey, *TOP*, 15:1-31, 2007.

Papers under review

Submitted	G. Berbeglia. A. Flores. G. Gallego. The Refined Assortment Optimization Problem, 2020.
Submitted	G. Berbeglia. S. Boodaghians and A. Vetta. Tight Bounds on the Relative Performances of Pricing Mechanisms in Storable Good Markets, 2020.
Submitted	G. Berbeglia. Towards a More Rigorous Method to Assess the Additionality of Emission-Reduction Projects, 2020.
Minor Revision	G. Berbeglia, A. Garassino and G. Vulcano. A Comparative Empirical Study of Discrete Choice Models in Retail Operations, *Management Science*, 2020.
Submitted	F. Berbeglia, G. Berbeglia and P. Van Hentenryck. The benefits of segmentation in trial-offer markets with social influence and position bias, 2019.
Submitted	A. Flores, G. Berbeglia and P. Van Hentenryck. Assortment and Price Optimization under the Two-Stage Luce Model, 2019.

Refereed conference proceedings (not appearing above)

2017	A. Abeliuk, G. Berbeglia, P. Van Hentenryck, T. Hodd, and K. Lerman. Taming the Unpredictability of Cultural Markets with Social Influence. *Proceedings of the 26th International World Wide Web Conference* (WWW), 745-754, 2017.
2016	P. Van Hentenryck, A. Abeliuk, F. Berbeglia, F. Maldonado and G. Berbeglia. Aligning Popularity and Quality in Online Cultural Markets. *Proceedings of the 10th International AAAI Conference on Web and Social Media* (ICWSM), 398-407, 2016.
2016	A. Abeliuk, G. Berbeglia, F. Maldonado and P. Van Hentenryck. Asymptotic Optimality of Myopic Optimization in Trial-Offer Markets with Social Influence. *Proceedings of the 25th International Joint Conference on Artificial Intelligence* (IJCAI) 2458-2464, 2016.

2016   A. Abeliuk, H. Aziz, G. Berbeglia, S. Gaspers, P. Kalina, N. Mattei, D. Peters, P. Stursberg, P. Van Hentenryck and T. Walsh. Interdependent Scheduling Games. *Proceedings of the 25th International Joint Conference on Artificial Intelligence* (IJCAI) 2-9, 2016.

2015   A. Abeliuk, G. Berbeglia and P. Van Hentenryck. A bargaining mechanism for one-way games. *Proceedings of the 24th International Joint Conference in Artificial Intelligence* (IJCAI), 440-446, 2015.

Recent Research Visits

March 2020	National University of Singapore - Singapore
Jan 2020	Universidad Torcuato Di Tella - Business School
Sept 2018	Department of Economics and Finance, LUISS University, Italy
Feb-Mar 2018	INSEAD Singapore
Jul-Aug 2018	Singapore Management University
June 2018	Department of Mathematics, McGill University
Jan 2018	Hong Kong University of Science and Technology
June 2017	FUQUA School of Business, Duke University
Aug 2017	Singapore Management University
Feb 2017	Department of Mathematics, McGill University
July 2016	University of Auckland, Business School
March 2016	Tepper School of Business, Carnegie Mellon University
March 2016	Department of Mathematics, McGill University
Feb 2016	Department of Industrial Engineering and Operations, Michigan University
Sept 2015	Universite Libre de Bruxelles
July 2015	Universidad Torcuato Di Tella - Business School
May 2015	Australian National University

Research Grants

2020	MBS Internal Competitive Grant (AUD 5,000)
2017	MBS Internal Competitive Grant (AUD 10,000)
2015	Centre for Business Analytics (MBS) Competitive Grant (AUD 10,000)
2015	The University of Melbourne, Early Career Competitive Grant (AUD 11,000)
2014	MBS Internal Competitive Grant (AUD 10,000)
2012	MBS Internal Competitive Grant (AUD 5,000)
2011	NSERC (Canada) 2-year postdoc fellowship grant (CAD 80,000)

Languages

Spanish	**Mothertongue**
English	**Professional**
French	**Professional**

PhD Students

2013-2016	Andres Abeliuk, University of Melbourne (co-supervision). Current position: research fellow at University of Southern California
2015-2019	Felipe Maldonado, Australian National University (co-supervision).
2015-2019	Alvaro Flores, Australian National University (co-supervision).

Service

Refereeing	Science, Management Science, Operations Research, Transportation Science, The Economic Journal, Production and Operations Management, INFORMS: Journal of Computing, European Journal of Operational Research, Review of Economic Design, Transportation Research Part D, Transportation Research Part E, Discrete Optimization, Annals of Operations Research, Networks, Journal of Global Optimization, Computers and Operations Research, Omega, RAIRO, WINE International Conference (Program committee member), AAMAS International Conference (Program committee member)

Invited Talks

2014-2019	Singapore Management University - Business School (2019), Universite de Montreal (2018), LUISS Roma (2018), Chinese University in Hong Kong - Business School (2017), Singapore University of Technology and Design (2017), University of Sydney School of Business (2017), Université Libre de Bruxelles (2015), UBC Sauders School of Business (2015), DUKE Fuqua School of Business (2014), University of Buenos Aires (2015), The University of Auckland Business School (2016), University of New South Wales (2016), CSIRO Canberra (2016), University of Melbourne - Mathematics department (2014-2015), McGill University (2016), Universidad Torcuato Di Tella (2015, 2016, 2019).