

Daniela H. Saban

CONTACT INFORMATION	Uris Hall 4I, 3022 Broadway, New York, NY 10027	<i>E-mail:</i> dhs2131@columbia.edu <i>Phone:</i> 917-703-5174 <i>Webpage:</i> http://www.columbia.edu/~dhs2131/
EDUCATION	Columbia University , NY, USA Ph.D. candidate in Operations Management, Decision, Risk, and Operations Division, Graduate School of Business <i>Advisors:</i> Prof. Jay Sethuraman (e-mail: jay@ieor.columbia.edu) Prof. Gabriel Weintraub (e-mail: gweintraub@columbia.edu)	Fall 2010 to present
	Univ. of Buenos Aires (UBA) , Buenos Aires, Argentina BS (Oct. 2006) and MS (Mar. 2009) degrees in Computer Science	March 2003-2009
RESEARCH INTERESTS	supply chain management, procurement mechanisms, resource allocation, market design, matching markets, auctions, game theory, combinatorial optimization.	
WORKING PAPERS	<i>Procurement Mechanisms for Differentiated Products</i> , with G. Weintraub. In collaboration with a large government procurement agency (ChileCompra). Targeted for Management Science. <i>The Size of the Core in Assignment Markets</i> , with Y. Kanoria and J. Sethuraman. Targeted for Operations Research.	
PAPERS UNDER REVIEW	<i>House Allocation with Indifferences: A Generalization and a Unified View</i> , D. Saban and J. Sethuraman, submitted to Operations Research. <i>The Competitive Facility Location Problem in a Duopoly</i> , Y. Gur, D. Saban and N. Stier-Moses, under third round of reviews in Operations Research.	
JOURNAL PAPERS	<i>The Complexity of Computing the Random Priority Allocation Matrix</i> , D. Saban and J. Sethuraman, accepted for publication in Mathematics of Operations Research. <i>A Note on Object Allocation under Lexicographic Preferences</i> , D. Saban and J. Sethuraman, Journal of Mathematical Economics, 50, 283-289, 2014. <i>A Polyhedral Study of the Maximum Edge Subgraph Problem</i> , F. Bonomo, J. Marengo, D. Saban and N. Stier-Moses, Discrete Applied Mathematics, 160:18, 2573–2590, 2012. <i>An Application of the Traveling Tournament Problem: The Argentine Volleyball League</i> , F. Bonomo, A. Cardemil, G. Durán, J. Marengo and D. Saban, Interfaces 42 (3), 245–259, 2012. <i>Analysis and Models of Bilateral Investment Treaties using a Social Networks Approach</i> , D. Saban, F. Bonomo and N. Stier-Moses, Physica A 389(17), 3661–3673, 2010.	
REFEREED CONFERENCE PROCEEDINGS	<i>The Size of the Core in Assignment Markets</i> , Y. Kanoria, D. Saban and J. Sethuraman, accepted in the ACM-SIAM Symposium on Discrete Algorithms (SODA), 2015.	

The Complexity of Computing the Random Priority Allocation Matrix, D. Saban and J. Sethuraman, conference on Web and Internet Economics (WINE), 2013.

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.

Combinatorial Properties and Further Facets of Maximum Edge Subgraph Polytopes, J. Marengo and D. Saban, Latin-American Algorithms, Graphs and Optimization Symposium (LAGOS), 2011. Electronic Notes in Discrete Mathematics 37, 303–308, 2011.

HONORS &
AWARDS

The Paul and Sandra Montrone Doctoral Fellowship, 2014.

Columbia University - Glasgow University Exchange Program Fellowship, 2014.

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

Doctoral Fellowship, Columbia Business School, 2010 - present.

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

Tesis de Licenciatura (MSc. Thesis): Finalist in the National Thesis Contest, organized as part of the Jornadas Argentinas de Informática 2009.

TEACHING
EXPERIENCE

Teaching Assistant, Columbia University Spring 2012 - Spring 2014

Operations Management, MBA and EMBA core courses. Instructors: Prof. Carri Chan, Prof. Gabriel Weintraub and Prof. Nelson Fraiman.

Technology & Operations Strategy, EMBA elective course. Instructors: Prof. Medini Singh and Prof. Nelson Fraiman.

Operations Strategy, MBA & MS&E elective courses. Instructor: Prof. Medini Singh.

Service Operations, MS&E core course. Instructor: Prof. Carri Chan.

Decision Models, MBA and EMBA core courses. Instructors: Prof. Carri Chan, Prof. Bob Phillips and Prof. Lucius Riccio.

Managerial Statistics, MBA core course. Instructor: Prof. Costis Maglaras.

Provided research and writing support for the teaching note accompanying the MBA teaching case, “*Emergency Department Congestion at SaintMarie University Hospital*”, Laurent Hublet, Omar Besbes, and Carri Chan, Columbia CaseWorks case # 110204.

Instructor, Univ. Nac. Gr. Sarmiento March 2008 to August 2010

Numerical Analysis, Spring 2009 & Fall 2010, undergraduates in Mathematics.

Algorithms and Data Structures I, Fall 2009, undergraduates in Computer Science.

Introduction to Algorithms, Fall & Spring 2008, undergraduates in Computer Science.

TALKS AND CONFERENCE PRESENTATIONS	<p>ORIE Workshop on Data-Driven Decision Making, Cornell University, USA, 2014.</p> <p>MSOM conference, Seattle, USA, 2014.</p> <p>Economics lunchtime seminar, Glasgow University, Glasgow, UK, 2014.</p> <p>WINE '13, Cambridge, USA, 2013.</p> <p>INFORMS Annual Meeting, Minneapolis, USA, 2013.</p> <p>EC '13, Philadelphia, USA, 2013.</p> <p>WINE '12, Liverpool, UK, 2012.</p> <p>ISMP '12, Berlin, Germany, 2012.</p> <p>ALIO-INFORMS Joint International Meeting, Buenos Aires, Argentina, June 2010.</p> <p>LAGOS '09, Gramado, Brazil, 2009.</p>
PROFESSIONAL SERVICE	<p>Reviewer for Mathematics of Operations Research, Games and Economic Behavior, Conference on Web and Internet Economics, Mathematical Social Sciences, Discrete Optimization.</p>
EXPERIENCE	<p>Researcher - University of Buenos Aires March 2008 to August 2010 Member of the Graphs and Optimization Research Group: Theory and Applications Research areas: combinatorial optimization, integer programming, graph theory.</p> <p>National Volleyball Clubs Association Seasons 2008-2009 and 2009-2010 Design and implementation of mathematical models and heuristics to organize the schedule of the volleyball league in seasons 2008-2009 and 2009-2010.</p> <p>Braier & Asociados Consultores December 2007 to June 2008 Design of linear programming models, heuristic and meta-heuristic implementations for a forestry planning optimization software.</p> <p>ArCERT March 2006 to November 2007 Worked as an IT security Consultant in the Argentina Computer Emergency Response Team.</p>
LEADERSHIP AND VOLUNTEERING	<p>Exactas por la Sociedad - Computer course March 2007 to August 2010 Instructor for a computer basics course for low income citizens, sponsored by the School of Sciences, University of Buenos Aires.</p> <p>The game of Go basics July 2009 to August 2010 Teaching the basics of game of go in a retirement club, as part of an initiative of the government of the city of Buenos Aires to prevent Alzheimer.</p> <p>The game of Go Represented Argentina in the first World Mind Sport Games (Beijing, October 2008) in women's individual and pair-go. Secretary of the directive board, Argentine Go Association, July 2004 to August 2010. Administrator of the Kiseido Go Server (KGS), January 2005 to December 2011.</p>
ADDITIONAL SKILLS	<p>Programming languages: C, C++, Python.</p> <p>Software: CPLEX, Mathematica, Matlab, R.</p> <p>Languages: English (fluent), Spanish (native).</p>

ACADEMIC
REFERENCES

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Professor Nicolas Stier-Moses
UTDT Business School
Buenos Aires, Argentina, and,
Facebook Data Science
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TEACHING
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