

# Gustavo J. Vulcano

Stern School of Business  
New York University  
44W 4th Street, KMC 8-76  
New York, NY 10012, U.S.A.

Phone: +1(212) 998-4018  
Fax: +1(212) 995-4227  
e-mail: gvulcano@stern.nyu.edu

---

## Education

- *Ph.D., Decision, Risk and Operations Division*, Graduate School of Business, Columbia University, New York, NY. Thesis: “Auctions and Simulation-Based Optimization in Revenue Management”, supervised by Prof. Garrett van Ryzin. (April 2003)
- *M.Phil., Decision, Risk and Operations Division*, Graduate School of Business, Columbia University, New York, NY. (October 2000)
- *Licenciado en Ciencias de la Computación (M.Sc. Computer Science)*, School of Sciences, University of Buenos Aires, Argentina (June 1997). Thesis: “Survivability of Communication Networks: a solution using Taboo Search”, supervised by Prof. Irene Loiseau.
- *Analista Universitario de Computación (B.Sc. Computer Science)*, School of Sciences, University of Buenos Aires, Argentina (October 1994).

## Academic Appointments

- New York University, Stern School of Business, New York, NY. *Assistant Professor* (since July 2002). Courses: Competitive Advantage from Operations, Seminar on Revenue Management and Pricing, Stochastic Processes.
- University Torcuato di Tella, School of Business, Buenos Aires, Argentina. *Visiting Professor* (2005). MBA and EMBA courses: Operations Management I. Undergrad course: Advanced Operations Management.
- Columbia University, Graduate School of Business, New York, NY. *Teaching Assistant* (Sept. 1998 – December 2000) . MBA courses: Decision Models, Managerial Statistics.
- University of Buenos Aires, School of Sciences, Buenos Aires, Argentina. *Teaching Assistant* (1992 – 1998) . Undergraduate courses: Algorithms and Data Structures, Linear Programming, Discrete Mathematics.

## Professional/Consulting Experience

- *Delta Technology, a division of Delta Airlines (Georgia, U.S.A.)*: Estimation of customer choice behavior for the New York – Florida commercial airline markets, and assessment of the revenue impact of accounting for choice behavior when optimizing the availability of the different fare-classes in the economic cabin (2005).

- *SpotsAuction.com (Kansas, U.S.A.)*: Consultant for the design of auction mechanisms for “last minute” broadcast industry (December 2004). Site is online since 2005.
- *Dash Optimization (New Jersey, U.S.A.)*: Analysis and programming to modify a scheduling system for the graph industry. (Summer internship, 1999).
- *World Bank Project for the AFIP (Argentina)*: Consultant for designing and programming of a system to authorize the printing of new debit notes through the Internet (March – August 1998).
- *CIRPC, Perez Companc Holding Group (Argentina)*: Consultant for the implementation of solutions using mathematical models and simulation to assist in chemical and biological issues related to assisted reproduction (1996-1998).

## Research Activity

### Published Papers

1. G. J. van Ryzin and G. Vulcano (2004), “Optimal Auctioning and Ordering in an Infinite Horizon Inventory-Pricing System”, *Operations Research*, 52: 346-367.
2. G. Vulcano, G.J. van Ryzin and C. Maglaras (2002), “Optimal Dynamic Auctions for Revenue Management”, *Management Science*, 48: 1388-1407. Extended abstract in *Manufacturing and Service Operations Management*, 4: 7-11.
3. G. Vulcano, D. Moses, M. de las Heras and A. Valcarcel (1998), “A lineal equation for the classification of progressive and hyperactive spermatozoa”, *Mathematical Biosciences*, 149: 77-93.

### Working Papers

1. G. Vulcano, G.J. van Ryzin, and W. Chaar (2006), “Choice-Based Revenue Management: An Empirical Study of Estimation and Optimization”, in preparation.
2. J.J. Miranda Bront, I. Méndez Díaz, and G. Vulcano (2006), “A column generation algorithm for the choice-based linear programming model for network revenue management”, in preparation.
3. Y. Chen, C. Maglaras and G. Vulcano (2004), “Design and analysis of electronic marketplaces”, in preparation.
4. Y. Chen and G. Vulcano (2005), “Information Disclosure under First- and Second-Price Auctions in a Supply Chain Setting”. Revised version: April 2006.
5. R. Caldentey and G. Vulcano (2004), “Online Auction and List Price Revenue Management”. Revised version: February 2006.
6. G. J. van Ryzin and G. Vulcano (2004), “Computing Virtual Nesting Controls for Network Revenue Management Under Customer Choice Behavior”. Revised version: April 2006.
7. G. J. van Ryzin and G. Vulcano (2003), “Simulation-Based Optimization of Virtual Nesting Controls for Network Revenue Management”, conditionally accepted for *Operations Research*.

## Fellowships and Funding

- Research Assistantship supported by the Deming Center at the Columbia Business School, for the 2001-02 academic year.
- Fellowship and tuition for Doctoral studies supported by the Graduate School of Business, Columbia University (September 1998- May 2002).
- Fellowship awarded by the Ministry of Education of Argentina to support Doctoral students in foreign countries (1998-2000)

## Honors and Awards

- AGIFORS Revenue Management & Cargo Study Groups 2006 Annual Meeting, Cancun, Mexico. Honorable mention for the best presentation award.
- AGIFORS Revenue Management Study Group 2005 Annual Meeting, Cape Town, South Africa. Best technical presentation award.
- Junior Faculty Interest Group at INFORMS: finalist in the 2004 Paper Competition for the paper “Online Auction and List Price Revenue Management”.
- George Nicholson Student Paper Competition 2001 (INFORMS): second prize, for the paper “Optimal Dynamic Auctions for Revenue Management”.
- Manufacturing and Service Operations Management division at INFORMS, Student Paper Competition 2001: second prize, for the paper “Optimal Dynamic Auctions for Revenue Management”.
- Dean’s List, Columbia Business School (1998-2000)
- Argentine national contest of master thesis in computer science, organized by the Argentine Society of Informatics and Operations Research (SADIO), first prize winner in the 1997 edition for the thesis “Survivability of Communication Networks: a solution using Taboo Search”.

## Professional Activities

- Member of the Editorial Board, INFORMS Journal of Manufacturing and Service Operations Management (2004-05).
- Referee: Management Science, Operations Research, Transportation Science, M&SOM.
- Member of INFORMS, the INFORMS MSOM Society, and the INFORMS Revenue Management Section.

## Personal

Born September 29<sup>th</sup>, 1969, in Buenos Aires, Argentina.