

NIZAR ZAAROUR, Ph.D.

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D'Amore-McKim School of Business, Northeastern University
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EDUCATION

2011	Ph.D., Industrial Engineering, Mechanical and Industrial Engineering Department, Northeastern University
2004	M.S., Operations Research, Mechanical and Industrial Engineering Department, Northeastern University
2002	M.S., Information Systems, Mechanical and Industrial Engineering Department, Northeastern University
1998	B.S., Civil Engineering, Northeastern University

RESEARCH INTERESTS

Operations Research and Management, Applied Statistics, Predictive Analytics, Logistics, and Supply Chain Management

ACADEMIC EMPLOYMENT

2011 – Present Assistant Teaching Professor, Northeastern University, Boston, MA
Supply Chain and Information Management Group, D'Amore-McKim School of Business

- Act as lead coordinator for the undergraduate business Statistics classes
- Act as lead faculty for the online MBA Statistics classes
- Develop and teach the Statistics classes for the full-time and part-time MBA students
- Develop and teach the Predictive Analytics class for MBA students
- Teach Procurement and Supply Chain Management classes for the MBA program
- Teach Supply Chain Management classes to the undergraduate business students
- Recruit and manage the teaching assistants for all the Statistics sections
- Develop projects and case studies that test the students' knowledge on software usage such as Excel, Minitab and SPSS

PRIOR TEACHING EXPERIENCE

2000 – 2011	Part-time Instructor in the Math Department, Northeastern University Taught Algebra, Pre-calculus, Statistical Thinking, Calculus 1, 2 & 3, Differential Equations & Linear Algebra, and Probability & Statistics to undergraduate engineering students.
2010 – 2011	Part time Instructor in the College of Engineering, Northeastern University Developed and taught the Engineering Probability and Statistics for the graduate and undergraduate Engineering students. Incorporated online technology, to enhance students' learning experience through Blackboard Academic Suite and WileyPlus.
2000 – 2004	Teaching Assistant - Information Services, Training Department, Northeastern University Developed and led training classes and workshops in applications, personal accountability, practical skills, and basic computing skills. Conducted training sessions for university faculty, staff, and students in "Office Productivity Software", primarily consisting of Microsoft Office applications and basic computer hardware and software in the PC environment. Developed new interest-specific classes and workshops.

PROFESSIONAL ACTIVITIES

- Global project course that involves a real world consulting project with one of the school's corporate partners. The objective is to apply the concepts from the first year curriculum in a real-world project with "live" clients operating in an international setting
- Predictive analytics consulting for a Boston firm that measures real-time business intelligence for line level employees
- Inventory management model design for cosmetics phased-out items for a national firm
- Optimization of product portfolio to deliver improved sales and operational efficiencies for a national firm

SELECTED HONORS AND DISTINCTIONS

2011	Northeastern University Outstanding Graduate Student Award
2006	College of Engineering Outstanding Teaching Award
2000	John D. O'Bryant Graduate Study Academic Excellence Award
1997	Engineering Society Scholarship
1995	Honor's Program Award

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REFERREED JOURNAL PUBLICATIONS

Zaarour, N., Melachrinoudis, E., and Solomon, M., "Maximizing Revenue of End of Life Items in Retail Stores", **European Journal of Operational Research**, Vol. 255, pp. 133-141, 2016

Zaarour, N., Melachrinoudis, E., Solomon, M., Min, H., "The Optimal Determination of the Collection Period for Returned Products in the Sustainable Supply Chain", **International Journal of Logistics Research and Applications**, Vol. 17, pp. 35-45, 2014

Zaarour, N., Melachrinoudis, E., Solomon, M., and Min, H., "A Reverse Logistics Network Model for Handling Returned Products", **International Journal of Engineering Business Management**, Vol. 6, pp. 1-10, 2014

Nobakhti, S., Katsamenis, O., Thurner, P., Zaarour, N., "Elastic Modulus Varies along the Bovine Femur," under revision, **Journal of the Mechanical Behavior of Biomedical Materials**

BOOKS AND BOOK CHAPTERS

Zaarour, N., Melachrinoudis, E., "Performance Optimization in Retail Business Using Real-time Predictive Analytics," Sheibani K., Hirsch, P. and Nordlanders TE (eds.), **Lecture Notes in Management Science**, ORLab Analytics, Vienna, Austria, Vol. 7, pp. 45-49, 2015

REFERREED PROCEEDINGS

Zaarour, N., Melachrinoudis, E., Solomon, M., Min, H., "Optimal Collection Period for Returned Products in the Reverse Supply Chain", **Proceedings of the International Federation of Automatic Control**, St Petersburg, Russia, June 2013

Melachrinoudis, E., Zaarour, N., and Solomon, M.M., "Optimal Pricing of Phase-out Items in Retail Stores," **Proceedings of the Industrial and Systems Engineering Research Conference 2013**, San Juan Puerto Rico, May 2013.

Zaarour, N., Melachrinoudis, E., "The Design of a Reverse Logistics Network to handle Product Returns under Capacity Restrictions and Service Requirements", **Proceedings of the First International Symposium on Supply Chain Management 2008**, Dubai, UAE, May 2008

SELECTED CONFERENCE PRESENTATIONS

Zaarour, N., Melachrinoudis, E., Solomon, M., "Revenue Driven Supply Chains under Uncertainty", **INFORMS**, Philadelphia, Pennsylvania, Oct 2015

Zaarour, N., Melachrinoudis, E., Kozanidis, G., "Optimizing the Collection Period of Product Returns in a Closed-loop Supply Chain: a Non-Linear Model", **International Federation of Operational Research Societies**, Barcelona, Spain, July 2014

Zaarour, N., Melachrinoudis, E., Solomon, M., "Developing Markdown Strategies to Phase-out Items in Retail Stores", **International Federation of Operational Research Societies**, Melbourne, Australia, July 2011

Zaarour, N., Melachrinoudis, E., "The Determination of the Optimal Collection Period of Product Returns to obtain Closed Form Solutions under Special Structures", **INFORMS**, San Diego, California, Oct 2009

SERVICE AND ACADEMIC ADVISING

- Session Chair: Mathematical Models of Service Systems, Industrial and Engineering Research Conference, Nevada 2011
- Session Chair: Supply Chain Design Section, INFORMS Annual Meeting, San Diego 2009
- Reviewer: International Federation of Automatic Control, Saint Petersburg 2013
- Reviewer: Industrial and Engineering Research Conference, Nevada 2011
- Academic Advisor for the Golden Key National Honor Society – Northeastern University Chapter