

Linlin Li

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Education

Northwestern University	Evanston, IL
<i>Ph.D., Industrial Engineering and Management Sciences</i> (GPA: 3.95/4)	<i>expected 06/2012</i>
Concentrations: Decision and Risk Analysis, Optimization, Production and Logistics	
Thesis topic: Capacity and Quality Contract Design in Supply Chain	
Advisors: Seyed M.R. Iravani, Industrial Engineering and Management Sciences, Northwestern University Izak Duenyas, Ross School of Business, University of Michigan	
<i>M.Sci., Industrial Engineering and Management Sciences</i>	<i>06/2008</i>
Tsinghua University	Beijing, China
<i>M.Eng., Control Science and Engineering</i> (GPA: 3.82/4)	<i>06/2007</i>
Nankai University	Tianjin, China
<i>B.Eng., Automation</i> (GPA: 3.96/4)	<i>06/2004</i>

Research Interests

Applications: Operations Management, Supply Chain Management, Strategic Sourcing and Procurement

Methodologies: Optimization, Game Theory, Stochastic Modeling and Analysis, Dynamic Programming

Publications and Research Experience

Production Control and Transfer Pricing in a Two-Stage System with Intermediate and End Demand
with Izak Duenyas. *Work in progress.*

- Study transfer pricing schemes to coordinate two divisions of a firm with intermediate and end demand
- Examine the performance of simple transfer pricing schemes by comparing with the optimal schemes

Group Warranty Contracts to Coordinate Assembly Supply Chains with Non-testable Components
with Izak Duenyas and Seyed M.R. Iravani. *To be shortly submitted to Operations Research or M&SOM.*

- Modeled an assembly manufacturer's contract design problem to improve suppliers' component quality
- Identified the optimal test sequence for a contract combining group warranty with limited tests
- Examined effects of contractibility, information asymmetry, and single-sourcing on quality and profit

Capacity Option Transfer Rights: Do They Benefit Suppliers?

with Izak Duenyas and Seyed M.R. Iravani. Under revision for 3rd review at *Production and Operations Management*.

- Compared a supplier's different capacity reservation and transfer strategies with more than one buyer
- Provided managerial insights into strategic decisions in dealing with capacity option transfer rights

Single Item Lot-Sizing Problem with Minimum Order Quantity

with Chan Seng Pun and Diego Klabjan. Under review at *Discrete Optimization*.

- Studied the complexity of capacitated lot sizing problem with minimum order quantities
- Provided polynomial algorithms for special cases and FPTAS algorithm for general cases

Presentations

- Capacity Option Transfer Rights: When and How Do They Benefit Suppliers?
INFORMS Annual Meeting, Charlotte, NC, Nov 16, 2011
- Group Warranty Contracts to Coordinate Assembly Supply Chain with Non-testable Components
Invited Talk. Antai College of Economics & Management, Shanghai Jiao Tong University, Shanghai, China, Oct 19, 2011
- Capacity Option Transfer Rights: Do They Benefit Suppliers?
MSOM Annual Conference, Ann Arbor, MI, June 2011
INFORMS Annual Meeting, Austin, TX, Nov 2010
INFORMS Annual Meeting, San Diego, CA, Oct 2009
- Single Item Lot-Sizing Problem with Minimum Order Quantity
20th International Symposium on Mathematical Programming, Chicago, IL, Aug 2009
- A Spanning Tree-Based Particle Swarm Optimization Algorithm for Transportation Problems
International Conference on Informatics and Control Technologies, Shenzhen, China, Dec 2006

Teaching Experience

Primary Instructor

Northwestern University

- Production Planning and Scheduling (IEMS 382, undergraduate)

Forthcoming, Spring 2012

Guest Lecturer, Lab Instructor, Discussion Leader

Northwestern University

- Taught 8 lectures and 4 review sessions for Probability, Stochastic Models and Simulation *2008-2011*
- Instruct lab sessions 3 hours per week for Probability, Stochastic Models and Simulation *2008-2011*
- Designed lab materials and assignments for Stochastic Models and Simulation *Fall 2008*
- Lead group discussions for Paradigms & Strategies in Leadership course *Fall 2011*

Teaching Assistant

Northwestern University

- Stochastic Models and Simulation (IEMS 315, undergraduate)
Fall 2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010
- Probability (IEMS 202, undergraduate) *Fall 2008, Winter 2011*
- Methods, Standards and Work Design (IEMS 210, undergraduate) *Spring 2009*
- Decision Tools for Managers (IEMS 407, MBA&MEM) *Spring 2010*
- Operations (IEMS 490, MBA&MEM) *Winter 2010*
- Measurement and Valuation of Business Processes (IEMS 490, MBA&MEM) *Spring 2011*

Responsibilities: holding office hours and review sessions, preparing and grading assignments and exams, instructing lab sessions, grading lab assignments, writing case studies, and developing spreadsheet models.

Industry Experience

Intern at United Airlines

Chicago, IL

Enterprise Optimization research group

06/2010 - 09/2010

- Studied the core profitability forecasting model of the United Airlines' flight network
- Developed and implemented a sub-network based algorithm to improve the model

Leadership and Services

- Fellow, Center for Leadership, Northwestern University 2011-2012
- Board Member of INFORMS Student Chapter, Northwestern University 2008-2010
- IEMS Graduate Liaison Committee Member, Northwestern University 2009-2010
- Volunteer for the 11th IAAF World Junior Championship, Beijing, China 2006
- Class Vice President, Department of Automation, Tsinghua University, China 2005-2006
- Department Manager, Chuangyuan Computer Club, Nankai University 2002-2003

Honors and Awards

- Terminal Year Fellowship, Northwestern University 2011
- Fellowship in Leadership, Northwestern University 2011-2012
- Walter P. Murphy Fellowship, Northwestern University 2007-2008
- Comprehensive Outstanding Scholarship, Tsinghua University 2006
- Academic Excellence Scholarship, Nankai University 2001-2002-2003-2004

References

Seyed M.R. Iravani (Advisor)

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McCormick School of Engineering and Applied Science, Northwestern University
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Stephen M. Ross School of Business, University of Michigan
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Jeremy Staum (Director of Graduate Studies)

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