

Lijian Chen, Ph.D.

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MIS, Operations Management, and Decision Sciences,
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Education

Ph.D., The Ohio State University, 2006.

Major: Industrial Engineering and Operations Research

Supporting Areas of Emphasis: Stochastic Programming

Dissertation Title: Stochastic Programming for Airline Revenue Management

MS, Tianjin University, 1999.

Major: Industrial Engineering and Operations Research

BS, Tianjin University, 1997.

Major: Industrial Engineering and Operations Research

Professional Positions Held

Academic

Assistant Professor, University of Dayton. (August 16, 2014 - Present).

Visiting Professor, West Virginia University. (August 1, 2013 - July 31, 2014).

Assistant Professor, University of Louisville. (August 1, 2006 - July 31, 2013).

Visiting Scholar, Sandia National Laboratory. (January 1, 2011 - July 1, 2011).

Graduate Research Assistant, The Ohio State University. (September 1, 2001 - August 27, 2006).

Pre-Doctoral Fellow, Northwestern University. (September 1, 2003 - August 26, 2006).

Professional

Revenue Manager, Extra Space Storage LLC. (June 6, 2005 - December 1, 2005).

Revenue Analyst/Manager, General Electric Commercial Finance. (February 14, 2005 - July 6, 2005).

RESEARCH

Published Intellectual Contributions

Articles Under Review, Revision

- L. Chen, S. Li, and D. Wang, The Price Controller Approach for the Self-Storage Industry, under review at *Manufacturing & Service Operations Management*.
- J. Chen, L. Chen, and D. Sun, Air Traffic Flow Management under Uncertainty Using Chance-Constrained Optimization, under review at *Transportation Research Part B*.
- L. Chen, A Polynomial Approximation-Based Approach for Chance-Constrained Optimization, under review at *Optimization Methods & Software*.
- L. Chen, W. Chiang, R. Russell, J. Chen, and D. Sun, Probabilistic Multiple Traveling Salesman Problem, under review at *INFORMS Journal on Computing*.

Articles Under Preparation

- L. Chen, M. Li, and S. He, Revenue Management of High-Speed Train Service, under preparation, target *Operations Research*.

Selected Refereed Journal Articles

- L. Chen, S. Li, L. Wang, (2014). Capacity Planning with Financial and Operational Hedging in Low-Cost Countries. *Production and Operations Management*, 23(1059-1478), 1495–1510.
- P. Wei, L. Chen, D. Sun, (2014) “Algebraic connectivity maximization of an air transportation network: The flight routes’ addition/deletion problem”, *Transportation Research Part E: Logistics and Transportation Review* 61, 13-27.
- L. Sun, SS. Heragu, L. Chen, ML. Spearman, (2012) “Comparing dynamic risk-based scheduling methods with MRP via simulation”, *International Journal of Production Research* 50 (4), 921-937.
- L. Chen, D. Sun, G. Li, (2012) “Ancillary service capacity optimization for both electric power suppliers and independent system operator”, *Energy Systems* 3 (2), 109-132.
- L. Chen, T. Homem-de-Mello, (2010) “Mathematical programming models for revenue management under customer choice”, *European Journal of Operational Research* 203 (2), 294-305.

- L. Chen, T. Homem-de-Mello, (2010) “Re-solving stochastic programming models for airline revenue management”, *Annals of Operations Research* 177 (1), 91-114.
- L. Chen, SM. Alexander, (2010) “Capacity-driven pricing mechanism in special service industries”, *Journal of Revenue & Pricing Management* 9 (3), 260-275.

Other Refereed Journal Articles

- L. Chen, (2015). Preprocessing of Sample Average Approximation for Stochastic Programming. *Stochastic Programming E-Print Series*, 2015(1).
- L. Chen, (2015). A Simulation Based Approach to Solve A Specific Type of Chance Constrained Optimization. *Stochastic Programming E-Print Series*, 2015(1).
- L. Chen, D. Sun, W. Chiang, and S. He, (2015) “Purposeful underestimation of demands for the airline seat allocation with incomplete information”, *International Journal of Revenue Management*, 8 (1), 34-55.
- DK. Sharma, Q. Cui, L. Chen, JK. Lindly, (2010) “Balancing private and public interests in public-private partnership contracts through optimization of equity capital structure”, *Transportation Research Record: Journal of the Transportation Research Board* 2051(3), 60-66.
- L. Chen, S. Sondhi, (2009) “Revenue management at extra space storage LLC”, *International Journal of Revenue Management* 3 (2), 179-196, 2009.

TEACHING

Teaching Experience and Developments

University of Dayton, 2014-present

OPS 301, Survey of Operations Management, 3 credit, 6 courses.
 MBA 791, Modeling and Analysis for Business Decisions, 1.5 credit, 1 course.
 Teaching Fellow, Teaching and Learning Center at University of Dayton.

West Virginia University, 2013-2014

Using everyday examples in engineering classroom to improve learning and student retention, National Academy of Engineering, 2014.
 West Virginia Great Teachers Seminar, 2013.

University of South Carolina, 2013

Faculty Development in International Business, 2013.
Sustainable Enterprise and Development, 2013.

University of Louisville, 2006-2013

IE 701, Convex Optimization, 3 credit, 5 courses.
IE 701, Stochastic Optimization, 3 credit, 1 course.
IE 370, Engineering Economy, 3 credit, 7 courses.
IE 361, Statistical Quality Control, 3 credit, 1 course.
IE 360, Probability and Statistics, 3 credit, 11 courses.
Idea to Action Fellow, Delphi Teaching Center at University of Louisville

University of Memphis, 2005-2006

SCMS 2710, Business Statistics, 3 credit, with Dr. Michael Racer.

SERVICE

Service – Scholarship, Reviewer

Manufacturing and Service Operations Management.

Operations Research

Computer and Industrial Engineering.

Operations Research Letters.

European Journal of Operational Research.

Production and Operations Management.

European Journal of Operational Research.

Transportation Science.

Wiley Encyclopedia of Operations Research and Management Sciences.

European Journal of Operational Research.

International Journal of Revenue Management.

Sponsored Research

Principle investigator with D. Sun of Purdue University, Collaborative Research:
Service Level Air Traffic Flow Management Under Adverse Weather
Conditions, \$80,293, pending, 2017-2019.

Co-investigator, Stochastic Optimization Technique for the Supply Chain of Cancer Treatments, Fonds de recherche du Québec - Nature et technologies (FQRNT), #166951, Co-PI with McGill University, \$102,000, funded, 2013-2015.

Real-Time decision support system for healthcare and public health sector protection, Department of Homeland Security, Co-PI with Dr. Heragu, \$3.3 million, September 2010 – December 2012.

Visiting support, \$20,400, Sandia National Laboratory, January 2011 – May 2011.

Stochastic logistics system planning, \$50,000, PI, Factory physics, September 2007 – August 2008.

Awards

Teaching Fellow, Learning and Teaching Center at University of Dayton, 2015-2016.

Research Fellow, Learning and Teaching Center at University of Dayton, 2015-2016.

INFORMS Revenue Management Practice Award, Finalist, 2010.

Franz Edelman Award for Achievement in Operations Research and the Management Sciences, Semi-finalist, 2009.

Alpha Pi Mu, 2009.

Memberships

Production and Operations Management Society (POMS), Member, 2013-present

Manufacturing and Service Operations Management Society (MSOM), Member, 2015-present