Haitao Li

Updated May 2018 Associate Professor of Logistics and Operations Management Research Fellow of Center for Transportation Studies (CTS) College of Business Administration University of Missouri – St. Louis 208 ESH, One University Blvd, Missouri, MO 63121 (314) 516 – 5890 (314) 516 – 7269 (Fax) E-mail: lihait@umsl.edu

Educational Background

2002-2005 UNIVERSITY OF MISSISSIPPI PhD of Production and Operations Management Minor fields in Economics Theory and Econometrics GPA: 3.94 PhD Program Courses GPA: 4.0

2000-2002 UNIVERSITY OF MISSISSIPPI M.A. Economics GPA: 4.0

1995-2000 BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS B.E. Foreign Trade in Industry Minor in Aeronautical Engineering GPA: 3.85

Academic Positions

2014-present UNIVERSITY OF MISSOURI – ST. LOUIS Associate Professor of Logistics and Operations Management Chair, Doctoral Studies Committee of College of Business Administration Research Fellow of Center for Transportation Studies (CTS)

2008-2014 UNIVERSITY OF MISSOURI – ST. LOUIS Assistant Professor of Logistics and Operations Management Research Fellow of Center for Transportation Studies (CTS)

2005-2008 TROY UNIVERSITY Assistant Professor of Operations Management

Research Interests

Resource Constrained Project Scheduling Supply Chain Optimization Metaheuristics Constraint Programming Stochastic Modeling and Optimization

Courses Taught

Undergraduate Level:

Introduction to Supply Chain Management Operations Management Business Statistics Introduction to Management Science

Graduate Level:

Prescriptive Analytics and Optimization Advanced Operations Management Supply Chain Modeling Decision Theory

Awarded Research Grants

- PI, "Optimizing Fleet Routing and Scheduling at Operation Food Search", supported by the Supply Chain & Analytics Department Summer Research Program, \$9,000, June 2017 to Aug 2017.
- PI, "Optimizing the Fleet Composition and Size under Uncertainty in Urban Transit Systems", sponsored by the U.S. DOT/Research & Innovative Technology Administration, \$25,000, Jan 2016 to Dec 2016.
- CO-PI, "A Resource Distribution Tool for Construction Projects", sponsored by the UM System FastTrack Program, \$49,704, Aug 2014 to Dec 2015.
- PI, "Unmanned Aerial Vehicle (UAV) Mission Planning: New Modeling and Solution Methodologies", sponsored by the UMSL Research Award, \$12,000, Aug 2014 to July 2015.
- CO-PI, "Decision Support Tool Model for Scheduling and Resource Allocation in Construction Projects through Application of Operations Research Methods", sponsored by the Interdisciplinary/Intercampus Research Grants of UM System, \$37,600, June 2013 to May 2014.
- PI, "Project and Resource Optimization", sponsored by HP Labs Innovative Research Program, \$67,000, August 2012 to July 2013.
- PI, "Models and Algorithms for Stochastic Resource Planning", sponsored by HP Labs Innovative Research Program, \$72,587, August 2011 to July 2012.
- PI, "Resource-Constrained Project Scheduling under Uncertainty: Models, Algorithms and Applications", sponsored by the Army Research Office (ARO) Young Investigator Award, \$146,931, September 2010 to August 2013.

- PI, "Optimizing the Project Portfolio Design and Staffing Decisions for Professional Service Enterprises", sponsored by HP Labs Innovative Research Program, \$32,200, August 2010 to July 2011.
- PI, "New Models and Algorithms for Stochastic Resource-Constrained Project Scheduling", sponsored by University Missouri Research Board, \$23,800, June 2010 to May 2011.
- PI, "Constraint Programming Based Algorithms for Stochastic Resource-Constrained Project Scheduling Problems", College of Business Administration Faculty Summer Research Grant, University of Missouri – St. Louis, \$10,000, from June 1 to August 31, 2009.
- "Applications of Optimization Methodologies to Optimized Skills Bank and MAX-FIT", U.S. Army Research Office (ARO) Scientific Services Program, Contract No. W911NF-07-D-0001, \$32,000, from May 1 to July 31, 2008.
- "Integrated Modeling and Solution Approach for Optimal Supply Chain Design", Faculty Summer Research Grant, Troy University, \$4,500, from May 15 to July 31, 2007.

Consulting Experience

- Research Consultant, HP Enterprises (HPE), 2014 present
- Research Consultant, Naval Personnel Research Studies and Technology (NPRST), Millington, TN. From April 2008 to August 2008.
- Statistical Analysis on the Maximum Price Survey for WIC Vendors in Alabama, February 2007.
- Visiting Scholar, Hewlett-Packard Laboratories (HPL), Palo Alto, CA. From June 2005 to December 2005.
- Statistical Analyst, Naval Personnel Research Studies and Technology (NPRST), Millington, TN. From December 2004 to July 2005.

Journal Publications

- Li, H., C. Santos, A. Fuciec, T. Gonzalez, S. Jain, C. Marquez, C. Mejia, A. Zhang (2018), Optimizing the Labor Strategy for IT Service Enterprises, to appear in *IEEE Engineering Management*.
- Li, H., L. Xiong, Y. Liu, H. Li (2017), An Effective Genetic Algorithm for the Resource Leveling Problem with Generalized Precedence Relations, to appear in *International Journal of Production Research*.
- Yang, L., H. Li, D. Sweeney, J. Campbell (2017), Integrated multi-period dynamic inventory classification and control, *International Journal of*

Production Economics, Vol. 189, p86-96.

- Li, H. (2017), Stochastic Single-Machine Scheduling with Learning Effect, *IEEE Transactions on Engineering Management*, Vol. 64, No. 1, p94-102.
- Womer, K., H. Li, J. Camm, C. Osterman, R. Radhakrishnan (2017), Learning and Bayesian Updating in Long Cycle Made-to-order (MTO) Production, <u>*Omega*</u>, Vol. 69, p29-42.
- Mai, L. and H. Li (2016), Optimizing the Capital Rationing Decisions with Uncertain Returns, *The Engineering Economist*, Vol. 61, No. 2, p128-143.
- Jiang, D., H. Li, T. Yang, D. Li (2016), Genetic Algorithm for Inventory Positioning Problem with General Acyclic Supply Chain Networks, *European Journal of Industrial Engineering*, Vol. 10, No. 3, p367-384.
- Li, H. and B. Alidaee (2016), Tabu Search for Solving the Black-and-White Traveling Salesman Problem, to appear in the *Journal of the Operational <u>Research Society</u>, Vol. 67, No. 8, p1061-1079.*
- Amini, M. and H. Li (2015), The Impact of Dual Market on Supply Chain Configuration for New Products, to appear in *International Journal of Production Research*, Vol. 53, No. 18, p5669-5684.
- Li, H. and K. Womer (2015), Solving Stochastic Resource-Constrained Project Scheduling Problems by Closed-loop Approximate Dynamic Programming, *European Journal of Operational Research*, Vol. 246, No. 1, p20-33.
- Millstein, M., L. Yang and H. Li (2014) Optimizing ABC Inventory Grouping Decisions, *International Journal of Production Economics*, Vol. 148, p71-80.
- Alidaee, B. and H. Li (2014), Parallel Machine Selection and Job Scheduling to Minimize Sum of Machine Holding Cost, Total Machine Time Costs and Total Tardiness Costs, *IEEE Transactions on Automation Science and* <u>Engineering</u>, Vol. 11, No. 1, p294-301.
- Santos, C., T. Gonzalez, H. Li, K.-Y. Chen, D. Beyer, S. Biligi, Q. Feng, R. Kumar, S. Jain, R. Ramanujan, A. Zhang (2013), HP Enterprise Services Uses Optimization for Resource Planning, *Interfaces*, Vol. 43, No. 2, p152-169.
- Li, H. and K. Womer (2012), Optimizing the Supply Chain Configuration for Make-to-Order Manufacturing, *European Journal of Operational Research*, Vol. 221, No. 1, p118-128.
- Li, H. and D. Jiang (2012), New Model and Heuristics for Safety Stock Placement in General Acyclic Supply Chain Networks, <u>*Computers and Operations Research*</u>, Vol. 39, No. 7, p1333-1344.
- Li, H. and M. Amini (2012), A Hybrid Optimization Approach to Configure a

Supply Chain for New Product Diffusion: A Case Study of Multiple-Sourcing Strategy, *International Journal of Production Research*, Vol. 50, No. 11, p3152–3171.

- Amini, M. and H. Li (2011), Supply Chain Configuration for Dynamic Diffusion of New Products: An Integrated Optimization Approach, *Omega*, Vol. 39, No. 3, p313-322.
- Rego, C., H. Li and F. Glover (2011), A Filter-and-Fan Approach to the 2D Lattice Model of the Protein Folding Problem, to appear in <u>Annals of</u> <u>Operations Research</u>, Vol. 188, No. 1, p389-414.
- Li, H. and K. Womer (2009), A Decomposition Approach for Shipboard Manpower Scheduling, *Military Operations Research*, Vol. 14, No. 3, p1-23.
- Li, H. and K. Womer (2009), Scheduling Projects with Multi-Skilled Personnel by a Hybrid MILP/CP Benders Decomposition Algorithm, *Journal of Scheduling*, Vol. 12, No. 3, p281-298.
- Li, H. and K. Womer (2008), Modeling the Supply Chain Configuration Problem under Resource Constraints, *International Journal of Project* <u>Management</u>, Vol. 26, No. 6, p646-654.
- Blodgett, J. and H. Li (2007), A Simulation Model for Consumer Complaint Process, *Journal of Consumer Satisfaction, Dissatisfaction & Complaint* <u>Behavior</u>, Vol. 20, p1-15.
- Li, H. and K. Womer (2007), A Model and Procedure for Competitive Bidding under Resource Constraints, *International Journal of Operational Research*, Vol. 2, No. 4, p452-480.
- Li, H. and K. Womer (2006), Project Scheduling with Multi-Purpose Resources: A Combined MILP/CP Decomposition Approach, *International Journal of Operations and Quantitative Management*, Vol. 12, No. 4, p305-325.

Book Chapters

- Li, H. (2015), Benders Decomposition Approach for Project Scheduling with Multi-Purpose Resources, in *Handbook on Project Management and Scheduling*, C. Schwindt and J. Zimmermann, ed., Springer, p587-602.
- Li, H. (2015), Make or Buy and Supplier Selection Problems in Make-to-Order Supply Chains, in *Handbook of Project Management and Scheduling*, C. Schwindt and J. Zimmermann, ed., Springer, p1227-1248.

Other Publications

• Santos, C., H. Li, T. Gonzalez, H. Davis, S. Perez, F. Oronzco, O. Fernandez

and C. Bartolini (2013), Project Portfolio Optimization (PPO), <u>HPL Technical</u> <u>Report</u>, Feb, 2013.

- Li, H. and K. Womer (2011), Stochastic Resource-Constrained Project Scheduling and Its Military Applications, *MORS Phalanx*, March.
- Riley, C., Cesar Rego and H. Li (2010), A Simple Dual-RAMP Algorithm for Resource Constrained Project Scheduling, 48th <u>ACM Southeast Regional</u> <u>Conference</u>, Oxford, MS, Article No.: 67, doi>10.1145/1900008.1900097.
- Jiang, D. and H. Li (2010), The Design and Uncapacitated Single Allocation Hub-and-Spoke Networks Using a Hybrid Algorithm, *Proceedings of ICCTP* 2010, doi: doi:10.1061/41127(382)442.
- Li, H. (2009), Constraint Programming Based Approximate Dynamic Programming for Deterministic and Stochastic Resource-Constrained Project Scheduling. <u>Technical Report, College of Business Administration</u>, University of Missouri – St. Louis.
- Santos, C. A., H. Li, M. T. Gonzalez and A. Fuciec (2009), Workforce Capacity and Capability Planning at Hewlett-Packard, <u>*Hewlett-Packard Lab*</u> <u>*Technical Report HPL-2009-239*</u>, Palo Alto, CA.
- Li, H. and K. Womer (2006), Project Scheduling in Decision-Theoretic Competitive Bidding, *Evolutionary Computation, CEC 2006, IEEE Congress* on Computation, July 2006, p3042-3049.
- Li, H., J. Dula, K. Lewis, and K. Womer (2004), Using Constraint Programming to Solve a Project Scheduling Problem with Skilled Labor, in <u>14th International Conference on Automated Planning & Scheduling</u>, Canada, June 2004.
- Dula, J., K. Lewis, K. Womer, and H. Li (2004), A Constraint Programming Approach to Solve A Resource Constrained Project Scheduling Problem, in <u>Proceedings of International Academy of Business and Public Administration</u> <u>Disciplines Conference</u>, New Orleans, Jan 2004.

Submitted and Working Papers

• Li, H., L. Mai, W. Zhang, X. Tian (2017), A Bilevel Programming Approach to Optimize Credit Term Decisions in Supply Chains, working paper, UMSL, under review in *Journal of Purchasing and Supply Management*.

Patents and Inventions

• Li, H., C. Halmen and L. Yang (2016). *Physical Resource Optimization System and Associated Method of Use*, Provisional Patent Application submitted, Docket Number: 65000-159476

- Santos, P., H. Li and I. Lopez (2014). *Method Generating Optimal Project Portfolios*, Invention Disclosure. (Submitted)
- Li, H. (2013). System and Method of Stochastic Resource-Constrained Project Scheduling, U.S. Patent Application 61/795,574, filed October 2013. Patent Pending.
- Li, H. (2012). *Hybrid Architecture in Approximate Dynamic Programming for Project Scheduling*, Provisional Patent Application submitted, Attorney Docket Number: 13UMS002prov.
- Li, H. (2012). *Stochastic Resource-Constrained Project Scheduling*, Provisional Patent Application submitted, Attorney Docket Number: 11UMS001prov.
- Santos, C. A., H. Li, T. Gonzalez, H. Davis, S. Perez, F. Orozco, O. Fernandez and C. Bartolini (2012). *Project Portfolio Optimization (PPO)*, Invention Disclosure. (Submitted)
- Santos, C. and Tere Gonzalez, Xin Zhang, Shelen Jain, Andrei Fuciec, Haitao Li, Claudia Marquez-Nava, Christopher Mejia (2011). *Optimizing Workforce Capacity and Capability*, Patent Application submitted, Attorney Docket Number: 201001914.

Invited Talks

- Trends and Opportunities of Supply Chain Optimization in China, joint UMSL-CASS (Chinese Academy of Social Sciences) Conference, UMSL, May 2018.
- Sharing on Technology Transfer and Commercialization of Research, UMSL Junior Faculty Panel, UMSL Technology Transfer Office, UMSL, April 2018.
- Prescriptive Analytics and Its Applications in Agribusiness Supply Chains, Data Science Training Series, Monsanto, St. Louis, MO, April 2018.
- Labor Strategy Optimization for the Professional Service Industry, Webinar Presentation, Gurobi, April 2018.
- Approximate Dynamic Programming and Its Applications, Northwestern Polytechnic University, Xi'an, Shanxi, China, June 2017.
- Data-Driven Optimization and Prescriptive Analytics: Recent Trends, Opportunities and Applications in Supply Chains, Northwestern Polytechnic University, Xi'an, Shanxi, China, June 2017.
- A Bilevel Programming Approach to Optimize Credit Term Decisions in Supply Chains, Shanxi University of Finance and Economics, Taiyuan,

Shanxi, China, June 2017.

- Synthesis of Analytics for Information and Data-Driven Decision Making, American University of Sharjah, UAE, Dec 2016.
- *Talent Optimization for the Knowledge Economy, with C. Santos,* invited session at INFORMS Annual Meeting, Nashville, TN, Nov. 2016.
- The Supply Chain Inventory Positioning and Supply Chain Configuration Problems: Current State and Research Directions, Beijing University of Aeronautics and Astronautics, Beijing, China, July 2016.
- Optimization and Prescriptive Analytics: Recent Trends, Opportunities and Applications, Logistical Engineering University, Chongqing, July 2016.
- Stochastic Single-Machine Scheduling with Learning Effect, IIE Annual Conference, Los Angeles, CA, May 2016.
- Optimizing the Labor Strategy of a Professional Service Firm, INFORMS Business Analytics Conference, Orlando, FL, April 2016. (Among 30 speakers selected to present in this conference).
- Approximate Dynamic Programming Approach for Solving the Stochastic Resource-Constrained Project Scheduling Problems, International Congress of Industrial and Applied Mathematics (ICIAM), Beijing, China, August 2015.
- Optimization and Prescriptive Analytics: Recent Trends, Opportunities and Applications, Beijing University of Aeronautics and Astronautics, Beijing, China, June 2015.
- *The State-of-the-art Research and Practice in Logistics and Supply Chain in the 21st Century*, Chinese Academy of Social Science (CASS), Beijing, China, June 2015.
- Optimization and Prescriptive Analytics: Recent Trends, Opportunities and Their Applications in Logistics and Supply Chain, Monsanto, St. Louis, Jan 21, 2015.
- *Tabu Search for Solving the Black-and-White Travelling Salesman Problem*, with Bahram Alidaee, INFORMS Annual Meeting, San Francisco, Nov, 2014.
- *Optimizing a Reciprocal Workforce*, with Kay-Yut Chen, Claudia Marquez-Nava, Alex Zhang and Pano Santos, INFORMS Annual Meeting, Minneapolis, October, 2013.
- Lookahead or Lookback: A Hybrid Architecture in Approximate Dynamic *Programming*, invited talk at the 18th Army Conference on Applied Statistics, Monterey, CA, Oct. 2012.

- *Made-to-Order Production Scheduling using Bayesian Updating*, with K. Womer, J. Camm, C. Osterman, R. Radhakrishnan, invited talk at the 18th Army Conference on Applied Statistics, Monterey, CA, Oct. 2012.
- Stochastic Resource Planning, invited talk at HPL, Palo Alto, CA, Oct. 2012.
- *HP Enterprise Services Uses Optimization for Resource Planning*, with Pano et al., INFORMS Annual Meeting, Charlotte, NC, Nov. 2011.
- *Project Portfolio Design and Staffing at HP*, invited talk at HPL, Palo Alto, CA, Oct. 2011.
- Stochastic Resource-Constrained Project Scheduling and Its Military Applications, 17th Army Conference on Applied Statistics, Annapolis, MD, Oct. 2011.
- Resource-Constrained Project Scheduling under Uncertainty: Models, Algorithms and Applications, Military Operations Research Society Session, INFORMS Annual Meeting, Austin, TX, Nov. 2010.
- Constraint Programming Based Hybrid Algorithms for Project Scheduling and Resource Allocation, The First Decision Sciences Workshop of Army Research Office, at United States Military Academy, West Point, NY, June 16 – 17, 2009.
- A New Approach to Supply Chain Configuration Optimization: Models, Algorithms and Research Opportunities, presented at Seminar of Department of Industrial and System Engineering, Auburn University, Feb 15, 2008.

Conference Presentations

- *Optimizing a Reciprocal Workforce*, with K.-Y. Chen, A. Zhang, C. Marquez, C. Santos, POMS Annual Conference, Atlanta, GA, May 2014.
- *Multi-Period Stochastic Resource Planning: A Simulation-Optimization Algorithm using Scatter Search*, with Stan Solomon, INFORMS Annual Meeting, Minneapolis, October, 2013.
- Parallel Machine Selection and Job Scheduling in the Context of Supply Chain Logistics, Bahram Alidaee and Haitao Li, The Economics, Finance, MIS & International Business Research Conference, London, England, July 11 – 13, 2013.
- Supply Chain Configuration for Diffusion of New Products, with Mehdi Amini, INFORMS Annual Meeting, Charlotte, NC, Nov. 2011.
- Multiple-Sourcing Strategies for Supply Chain Configuration of New Products: An Integrated Optimization Approach, with Mehdi Amini, Society of Marketing Advancement (SMA 2011), Memphis, TN, Nov. 2011.

- Optimizing the Supply Chain Configuration for Make-to-Order Manufacturing, with Keith Womer, INFORMS Annual Meeting, Austin, TX, Nov. 2010.
- New Models and Heuristics for Safety Stock Placement in General Acyclic Supply Chain Networks, with Dali Jiang, INFORMS Annual Meeting, Austin, TX, Nov. 2010.
- *Modeling Multiple Sourcing Decisions in a Supply Chain*, with Keith Womer, INFORMS Annual Meeting, Seattle, WA, Nov. 2007.
- A Survey of Portfolio Optimization Problem, with William Cheng, Liuqing Mai, Troy University Sorrell College of Business Annual Research Symposium, Feb. 2007, Destin, Florida.
- Modeling the Supply Chain Configuration Problem under Resource Constraints, with Keith Womer, INFORMS Annual Meeting, Pittsburgh, Nov. 2006.
- A Tabu Search Approach to Product Line Design, with Wenge Zhu, INFORMS Annual Meeting, Pittsburgh, Nov. 2006.
- *Determining Crew Composition for A New Technology*, with Keith Womer, INFORMS Annual Meeting, San Francisco, Nov. 2005.
- *RAMP for Resource Constrained Project Scheduling*, with Cesar Rego and Fred Glover, INFORMS Annual Meeting, San Francisco, Nov. 2005.
- New Advances on Solving the Protein Folding Problem in 3D HP Lattice Model, with Cesar Rego and Fred Glover, INFORMS Annual Meeting, San Francisco, Nov. 2005.
- Tree Search Neighborhoods for the Protein Folding Problem in the HP Lattice Model, with Cesar Rego and Fred Glover, Mississippi Academy of Sciences, Oxford, Mississippi, Jan. 2005.
- A Filter and Fan Approach for Protein Folding, with Cesar Rego and Fred Glover, INFORMS Annual Meeting, Denver, Oct. 2004.
- A Hybrid MILP/CP Approach for Project Scheduling with Skilled Labor, with Keith Womer, INFORMS Annual Meeting, Denver, Oct. 2004.
- *Ejection Chain Methods for Protein Folding* with Cesar Rego and Fred Glover, INFORMS Annual Meeting, Denver, Oct. 2004.
- Using ILOG OPL Studio to Develop Optimization Applications, at Hearin Center Seminar, University of Mississippi, Feb 2004.

- Using Constraint Programming to Solve a Resource Constrained Project Scheduling Problem, at International Academy of Business and Public Administration Disciplines Conference, New Orleans, Jan 2004.
- An Improved Tabu Search Algorithm for 2-D Protein Folding Problem, with Cesar Rego, INFORMS Annual Meeting, Atlanta, Oct. 2003.
- Application of Constraint Programming: The Data Error Detection and DDX Manpower Planning problem, with Keith Womer, at Military Personnel Science Workshop, University of Mississippi, June 2003.
- Solution of Satisfiability Problems by Unconstrained Quadratic Programming with Gary Kochenberger, Fred Glover, Bahram Alidaee, Keith Womer, at Military Personnel. Science Workshop, University of Mississippi, June 2003.
- Constraint Programming Approach to Solve Production Line Scheduling Problem, at Hearin Center Seminar, University of Mississippi, Feb 2003.

Academic and Professional Services

Editorial Board

International Journal of Business Research and Management (IJBRM), 2012 – present

International Journal of Project Management, 2016 - present

Committee

Chair, Doctoral Studies Committee, College of Business Administration, Feb, 2015 to present.

Chair, Ph.D. Committee, Logistics and Operations Management, March 2014 to Feb 2015.

Faculty Policy Committee, College of Business Administration, University of Missouri – St. Louis, 2013 to present.

Graduate Council, University of Missouri – St. Louis, 2013 to 2016.

Patent Committee, UM System, 2013 to present.

Ph.D. Committee, Department of Logistics and Operations Management 2010 to present.

Instruction Committee, College of Business Administration, University of Missouri – St. Louis, 2008 to 2010.

Graduate Academic Council, Troy University, 2006 to 2008.

Ph.D. Thesis Supervision

Liu (Dorothy) Yang: Integrating Inventory Classification and Control Decisions to Optimize Performance Measures in Multi-Period Setting, Graduation: Spring 2016, Placement: Purdue Polytechnic Institute

Stan Solomon: *Multi-Period Stochastic Resource Planning: Models, Algorithms and Applications*, Graduation: Fall 2015; Placement: Sam Houston State University

Aldis Jakubovskis: Capacity Planning and Resource Acquisition Decisions Using Robust Optimization, Graduation: Spring 2015

Ph.D. Committee Members

Marcos Cesar Vargas Magana: Matchings in Bipartite Graphs and Assignment Problems, Center for Research and Advanced Studies of the National Polytechnic Institute, Mexico, Graduation: Fall 2016

Ivan Lopez: Hybridizing Evolutionary Algorithms with Polyhedral Combinatorics Technique for Solving Multi-Objective Optimization Problems Stated as a Set Partitioning or Set Covering Problem. Tecnológico de Monterrey, Mexico, Graduation: Spring 2015.

Fang Xie: Resource-constrained project scheduling subject to various resource uncertainties. Beijing University of Aeronautics and Astronautics, Beijng, China, Graduation: Spring 2016

Journal Referee

International Journal of Project Management (39) *Operations Research* (1) European Journal of Operational Research (4) *Production and Operations Management* (2) Journal of the Operational Research Society (10) Journal of Heuristics (5) Annals of Operations Research (4) Military Operations Research (1) **OMEGA** (10) *Computers and OR* (9) International Journal of Production Research (15) International Journal of Production Economics (14) *IIE Transactions* (2) Journal of Scheduling (4) IEEE Transactions on Evolutionary Computation (2) *Journal of Testing and Evaluation* (1) **Optimization Letters** (1)

Applied Math Modeling (4) Journal of System Science and Systems Engineering (1) North American Journal of Economics and Finance (1) PLOS ONE (7) Transportation Research: Part E (2) Expert System with Applications (2) Transportation Research Letters (3) IEEE Engineering Management (1) INFOR (3) Engineering Economist (1) Engineering Optimization (1)

Grant Review

Department of Homeland Security (DHS), Center of Excellence of Cross-Border and Threat Screening and Supply Chain Defense (CBTS), Feb 2018.

DHS, Center for Homeland Security, Quantitative Analysis Program, 2015: 5

U.S. Army Research Office (ARO): 2

Fonds québécois de la recherche sur la nature et les technologies (FQRNT), Québec, Canada

Book Review

Managerial Decision Modeling with Spreadsheets, Second Edition, by Nagraj Balakrishnan, Barry Render and Ralph Stair, Prentice Hall, 2010.

Managing Operations across the Supply Chain, by Swink, Melnyk, Cooper, Hartley, McGraw Hill, 2011.

Conferences and Workshops

Program Committee for the IEEE International Conference on Automation and Logistics (ICAL), 2010~2012, 2015.

Honors and Professional Affiliations

- The 2015 Douglas Durand Award for Research Excellence, College of Business Administration.
- UMSL 2015 Inventor of the Year.
- Fellow in Office of International Studies and Program (ISP), 2012 ~ 2013.
- Logistics and Operations Management (LOM) Faculty Summer Fellowship, Summer 2012.

- National Academy of Inventors (NAI), Honorary Member, since April, 2012.
- Young Investigator Award of Army Research Office (ARO), 2010 to 2013.
- **First Place** in Chemical Sciences I category, Sigma Xi Poster Competition 2004, University of Mississippi, Apr 2004. "New advances on solving protein folding problem in a 2D HP lattice model: new neighborhood structures for dynamic and adaptive search".
- **First Place** in Math and Computer Sciences category, Sigma Xi Poster Competition 2003, University of Mississippi, Apr 2003. Research on Constraint Programming approach to solve scheduling problems.
- 2004 Summer Dissertation Fellowship \$1, 500, University of Mississippi
- 2004 Fall Dissertation Fellowship \$5, 000, University of Mississippi
- Sigma Xi
- Phi Kappa Phi Honor Society
- INFORMS, DSI, ACM and APICS member

Skills and Research Tools

Optimization Software:

- ILOG OPL Studio for optimization modeling and application development
- CPLEX, Gurobi, Xpress-Mosel, and AMPL for linear, integer and mixedinteger linear programming
- GAMS for nonlinear programming
- ILOG Solver and Scheduler for constraint programming

Mathematics: Matlab

Statistical Software: SAS, SPSS, Limdep, R, WinBugs

Simulation Software: Crystal Ball, @Risk, Arena, AnyLogic

<u>General Purpose Programming</u>: C, C++, Visual Basic, Visual Basic for Applications (VBA), Java, Python