

Scott Jennings Mason
Clemson University
273 Freeman Hall
Clemson, South Carolina 29634
1-864-656-5645 mason@clemson.edu

Education

Doctor of Philosophy, Industrial Engineering, Arizona State University, 2000

Master of Science, Engineering, Operations Research, The University of Texas at Austin, 1995

Bachelor of Science, Mechanical Engineering with Honors, The University of Texas at Austin, 1993

Primary Research and Teaching Interests

Modeling and analysis of large-scale supply chain, manufacturing, and energy systems

Applied operations research with emphasis in mathematical and heuristic optimization

Academic Experience

Clemson University

Fluor Endowed Chair in Supply Chain Optimization and Logistics, August 2010 to Present

Chair, SmartState Center of Economic Excellence in Supply Chain Optimization and Logistics, August 2010 to Present

Professor of Industrial Engineering (with tenure), July 2010 to Present

Interim Chair of Industrial Engineering, August 2013 to July 2014

University of Arkansas

Associate Professor of Industrial Engineering (with tenure), July 2005 to June 2010

Associate Department Head, August 2004 to June 2010

Assistant Professor of Industrial Engineering, August 2000 to June 2005

Industry and Consulting Experience

Principal Research Scientist, Amazon, Seattle, WA, 2017-2018 (sabbatical leave)

President, MultipleOptima, Inc., Clemson, SC, 2000-Present

Senior Industrial Engineering, Abbie Gregg, Inc., Tempe, AZ, 1997-2000

Modeling Engineering, Wright Williams and Kelly, Phoenix, AZ, 1998-1999

Operational Modeling Engineering, Advanced Micro Devices, Austin, TX, 1995-1997

Operational Modeling Consultant, Sematech, Austin, TX, 1993-1995

Awards and Recognition

Elected as Fellow of the Institute of Industrial Engineers, 2015

Best Technical Paper, Quality Control and Reliability Engineering Track, Industrial Engineering Research Conference, Houston, Texas, 2004.

Department of Industrial Engineering, University of Arkansas

AAIE Outstanding Faculty Member, 2003-2004, 2007-2008

Outstanding Researcher, 2001-2002, 2002-2003, 2003-2004

Outstanding Service to Students, 2004-2005

Outstanding Teacher, 2005-2006, 2006-2007, 2008-2009, 2009-2010

Student Chapter of IIE's Outstanding Teacher (voted by students), 2009-2010

College of Engineering, University of Arkansas

Outstanding Advisor, 2004-2005

University of Arkansas

Inaugural recipient of the Collis R. Geren Award for Excellence in Graduate Education, 2010

Finalist, Dr. John and Mrs. Lois Imhoff Award for Outstanding Teaching and Student Mentoring, 2009

Faculty Gold Medal, Office of Nationally Competitive Awards, 2009

Outstanding Mentor, Office of Nationally Competitive Awards, 2007, 2008, 2009, 2010

Citation of Appreciation, Faculty Senate, 2003-2004

Books

1. Mönch, L., Fowler, J.W., Mason, S.J., Production Planning and Control for Semiconductor Wafer Fabrication Facilities: Modeling, Analysis, and Systems, Springer Operations Research-Computer Science Interfaces Series, New York, ISBN-10: 1461444713, ISBN-13: 978-1461444718, 2013.

Journal Articles

1. Madathil, S.C.*, Yamangil, E., Nagarajan, H., Barnes, A., Bent, R., Backhaus, S., Mason, S.J., Mashayekh, S., 2017, Resilient Off-grid Microgrids: Capacity Planning and N-1 Security, IEEE Transactions on Smart Grid, to appear.
2. Farthing, A.D.*, Dale, M., Mason, S.J., 2016, Utility-Scale Solar PV in South Carolina: Analysis of Suitable Lands and Geographical Potential, Journal of Biophysical Economics and Resource Quality, to appear.
3. Ransikarbum, K.*, Mason, S.J., 2016, Goal programming-based post-disaster decision making for integrated relief distribution and early-stage network restoration, International Journal of Production Economics, 182, 324-341.
4. Lowe, J.J.*, Mason, S.J., 2016, Integrated Semiconductor Supply Chain Production Planning, IEEE Transactions on Semiconductor Manufacturing, 29 (2), 116-126.

5. Li, S.* , Huang, Y., Mason, S.J., 2016, A multi-period optimization model for the deployment of public electric vehicle charging stations on a network, *Transportation Research Part C: Emerging Technologies*, 65, 128-143.
6. Ransikarbum, K.* , Mason, S.J., 2016, Multiple-Objective Analysis of Integrated Relief Supply and Network Restoration in Humanitarian Logistics Operations, *International Journal of Production Research*, 54 (1), 49-68.
7. Ivanov, D., Mason, S.J., Hartl, R., 2016, Supply chain dynamics, control and disruption management, *International Journal of Production Research*, 54 (1), 1-7
8. Masoud, S.A.* , Mason, S.J., 2016, Integrated Cost Optimization in a Two-Stage, Automotive Supply Chain, *Computers & Operations Research*, 67, 1-11.
9. Masoud, S.A.* , Mason, S.J., 2016, A Bi-criteria Hybrid Metaheuristic for Analyzing an Integrated Automotive Supply Chain, *Journal of the Operational Research Society*, 67 (3), 516-526.
10. Cheng, J.* , Fowler, J.W., Kempf, K., Mason, S.J., 2015, Multi-mode Resource-Constrained Project Scheduling Problems with Non-Preemptive Activity Splitting, *Computers & Operations Research*, 53, 275-287.
11. Madadi, O.A.* , Kurz, M.B., Taaffe, K.M., Sharp, J.A., Mason, S.J., 2014, Supply Network Design: Risk-Averse or Risk-Neutral?, *Computers & Industrial Engineering*, 78, 55-65.
12. Cakici, E.* , Mason, S.J., Geismar, H.N., Fowler, J.W., 2014, Scheduling parallel machines with single vehicle delivery, *Journal of Heuristics*, 20, 511-537.
13. Gedik, R.* , Medal, H., Rainwater, C.E., Pohl, E.A., Mason, S.J., 2014, Vulnerability Assessment and Re-Routing of Freight Trains under Disruptions: A Coal Supply Chain Network Application, *Transportation Research Part E: Logistics and Transportation Review*, 71, 45-57.
14. Madadi, O.A.* , Kurz, M.B., Mason, S.J., Taaffe, K.M., 2014, Supply Network Design under Risk of Supply Disruptions and Tainted Materials Delivery, *Transportation Research Part E: Logistics and Transportation Review*, 67, 105-123.
15. Nguyen, H.-N.* , Rainwater, C.E., Mason, S.J., Pohl, E.A., 2014, Quantity discount with freight consolidation, *Transportation Research Part E: Logistics and Transportation Review*, 66, 66-82.
16. Milburn, A.B., Mason, S.J., 2013, How Much Time Do Home Health Nurses Spend on Non-Clinical Supply Chain Duties?, *Home Health Care Management & Practice*, 25 (4), 160-168.
17. Cakici, E.* , Mason, S.J., Fowler, J.W., Geismar, H.N., 2013, Batch Scheduling on Parallel Machines with Dynamic Job Arrivals and Incompatible Job Families, *International Journal of Production Research*, 51 (8), 2462-2477.
18. Pazour, J.A.* , Root, S.E., Meller, R.D., Thomas, L.M.* , Mason, S.J., 2013, Selecting and Allocating Repackaging Technology for Unit-Dose Medications in Hospital Pharmacies, *International Journal of Innovation and Technology Management*, 10 (3).
19. Kamali, B.* , Mason, S.J., Pohl, E.A., 2013, An Analysis of Special Needs Student Busing, *Journal of Public Transportation*, 16 (1), 21-45.
20. Milburn, A.B., Mason, S.J., Spicer, J.* , 2012, Characterizing the Home Health Care Supply Chain, *Home Health Care Management & Practice*, 24, 266-274.
21. Cakici, E.* , Mason, S.J., Kurz, M.E., 2012, Multi-Objective Analysis of an Integrated Supply Chain Scheduling Problem, *International Journal of Production Research*, 50 (10), 2624-2638.

22. Mönch, L., Fowler, J.W., Dauzere-Peres, S., Mason, S.J., Rose, O., 2011, A Survey of Problems, Solution Techniques, and Future Challenges in Scheduling Semiconductor Manufacturing Operations, *Journal of Scheduling*, 14, 583-599.
23. Medal, H.*, Sharp, S.J.*, Pohl, E., Rainwater, C., Mason, S.J., 2011, Models for Reducing the Risk of Critical Networked Infrastructure, *International Journal of Risk Assessment and Management*, 15 (2/3), 99-127.
24. Mönch, L., Zimmermann, J.*, Mason, S.J., Fowler, J.W., 2011, Multiple Orders per Job Formation and Release Strategies in Large Scale Wafer Fabs: A Simulation Study, *Journal of Simulation*, 5, 25-43.
25. Jampani, J.*, Pohl, E.A., Mason, S.J., Mönch, L., 2010, Integrated Heuristics for Scheduling Multiple Order Jobs in a Complex Job Shop, *International Journal of Metaheuristics*, 1 (2), 156-180.
26. Mason, S.J., Chen, J.-S., 2010, Scheduling Multiple Orders per Job in a Single Machine to Minimize Total Completion Time, *European Journal of Operational Research*, 207, 70-77.
27. Meller, R.D., Pazour, J.A.*, Thomas, L.M.*, Mason, S.J., Root, S.E., Churchill, W.W., 2010, Third-Party Repackaging in Hospital Pharmacy Unit-Dose Acquisition, *American Journal of Health-System Pharmacy*, 67, 1108-1114.
28. Unlu, Y.*, Mason, S.J., 2010, Evaluation of Mixed Integer Programming Formulations for Non-Preemptive Parallel Machine Scheduling Problems, *Computers and Industrial Engineering*, 58, 785-800.
29. Magableh, G.M.*, Mason, S.J., 2010, Minimizing earliness and tardiness on parallel machines with sequence-dependent setups, *International Journal of Operations Research*, 8 (1), 42-61.
30. Mason, S.J., Meller, R.D., Thomas, L.M.*, Pazour, J.A.*, Root, S.E., 2010, Survey of Hospital Pharmacy Directors: Assessment of the Current State of Unit-Dose Acquisition, *Journal of Pharmacy Technology*, 26 (1), 3-8.
31. Jampani, J.*, Mason, S.J., 2010, A Column Generation Heuristic for Complex Job Shop Multiple Orders per Job Scheduling, *Computers and Industrial Engineering*, 58, 108-118.
32. Mason, S.J., Jin, S.*, Jampani, J.*, 2009, A moving block heuristic to minimize earliness and tardiness costs on parallel machines, *International Journal of Production Research*, 47 (19), 5377-5390.
33. Magableh, G.M.*, Mason, S.J., 2009, An integrated supply chain model with dynamic flow and replenishment requirements, *Journal of Simulation*, 3, 84-94.
34. Jia, J.*, Mason, S.J., 2009, Semiconductor manufacturing scheduling of jobs containing multiple orders on identical parallel machines, *International Journal of Production Research*, 47 (10), 2565-2585.
35. Pfund, M.E., Balasubramanian, H.*, Fowler, J.W., Mason, S.J., Rose, O., 2008, A multi-criteria approach for scheduling semiconductor wafer fabrication facilities, *Journal of Scheduling*, 11, 29-47.
36. Erramilli, V.*, Mason, S.J., 2008, Multiple orders per job batch scheduling with incompatible jobs, *Annals of Operations Research*, 159, 245-260.
37. Jampani, J.*, Mason, S.J., 2008, Column generation heuristics for multiple machine, multiple orders per job scheduling problems, *Annals of Operations Research*, 159, 261-273.

38. Kurz, M.B., Mason, S.J., 2008, Minimizing total weighted tardiness on a batch-processing machine with incompatible job families and job ready times, *International Journal of Production Research*, 46 (1), 131-151.
39. Cakici, E.*, Jia, J.*, Yu, P.*, Mason, S.J., Cassady, C.R., Pohl, L.M.*, Lachowsky, A.J.*, 2007, Cellar tank piping network analysis at E. and J. Gallo Winery, *Journal of Wine Research*, 17 (3), 145-160.
40. Cakici, E.*, Mason, S.J., 2007, Parallel machine scheduling subject to auxiliary resource constraints, *Production Planning and Control*, 18 (3), 217-225.
41. Mason, S.J., Kurz, M.E., Pohl, L.M.*, Fowler, J.W., Pfund, M.E., 2007, Random keys implementation of NSGA-II for semiconductor manufacturing scheduling, *International Journal of Information Technology and Intelligent Computing*, 2 (3).
42. Swaminathan, R.*, Pfund, M.E., Fowler, J.W., Mason, S.J., Keha, A., 2007, Impact of permutation enforcement when minimizing total weighted tardiness in dynamic flowshops with uncertain processing times, *Computers and Operations Research*, 34 (10), 3055-3068.
43. Erramilli, V.*, Mason, S.J., 2006, Multiple orders per job compatible batch scheduling, *IEEE Transactions on Electronics Packaging Manufacturing*, 29 (4), 285-296.
44. Gupta, J.N.D., Ruiz, R., Fowler, J.W., Mason, S.J., 2006, Operational planning and control of semiconductor wafer production, *Production Planning and Control*, 17 (7), 639-647.
45. Yeung, T.G.*, Mason, S.J., 2006, Using real options analysis to value reoptimization options in the Shifting Bottleneck heuristic, *Naval Research Logistics*, 53 (4), 285-297.
46. Yeung, T.G.*, Mason, S.J., Chimka, J.R., Greiner, M.A., 2006, Recommendations for automatic identification technology in the Air Force supply chain, *Air Force Journal of Logistics*, 30 (3), 80-83.
47. Mason, S.J., Jin, S.*, Jampani, J.*, 2005, A moving block heuristic for minimizing earliness and tardiness on a single machine with unrestrictive common due dates, *Journal of Manufacturing Systems*, 24 (4), 328-338.
48. McGee, J.B.*, Rossetti, M.D., Mason, S.J., 2005, Quantifying the effect of transportation practices in military supply chains, *Journal of Defense Modeling and Simulation*, 2 (2), 87-100.
49. Qu, P.*, Mason, S.J., 2005, Metaheuristic scheduling of 300mm jobs containing multiple orders, *IEEE Transactions on Semiconductor Manufacturing*, 18 (4), 633-643.
50. Mason, S.J., Fowler, J.W., Carlyle, W.M., Montgomery, D.C., 2005, Heuristics for minimizing total weighted tardiness in complex job shops, *International Journal of Production Research*, 43 (10), 1943-1963.
51. Tovia, F.*, Mason, S.J., Ramasami, B.*, 2004, A scheduling heuristic for maximizing wirebonder throughput, *IEEE Transactions on Electronics Packaging Manufacturing*, 27 (2), 145-150.
52. Mason, S.J., Jin, S.*, Wessels, C.*, 2004, Rescheduling strategies for minimizing total weighted tardiness in complex job shops, *International Journal of Production Research*, 42 (3), 613-628.
53. Mason, S.J., Oey, K.*, 2003, Scheduling complex job shops using disjunctive graphs: a cycle elimination procedure, *International Journal of Production Research*, 41 (5), 981-994.
54. Mason, S.J., Ribera, P.M.*, Farris, J.A.*, Kirk, R.G., 2003, Integrating the warehousing and transportation functions of the supply chain, *Transportation Research Part E: Logistics and Transportation Review*, 39 (2), 141-159.

55. Fowler, J.W., Hogg, G.L., Mason, S.J., 2002, Workload control in the semiconductor industry, *Production Planning and Control*, 13 (7), 568-578.
56. Mason, S.J., Cole, M.H., Ulrey, B.T.*, Yan, L., 2002, Improving electronics manufacturing supply chain agility through outsourcing, *International Journal of Physical Distribution and Logistics Management*, 32 (7), 610-620.
57. Mason, S.J., Fowler, J.W., Carlyle, W.M., 2002, A modified shifting bottleneck heuristic for minimizing total weighted tardiness in complex job shops, *Journal of Scheduling*, 5 (3), 247-262.

* Student co-author

Proceedings Publishing

1. Mason, S.J., Hill, R.R., Mönch, L., Rose, O., Jefferson, T., Fowler, J.W. (eds.), 2008, *Proceedings of the 2008 Winter Simulation Conference*, Miami, Florida.
2. Fowler, J.W., Mason, S.J. (eds.), 2008, *Proceedings of the 2008 Industrial Engineering Research Conference*, Vancouver, British Columbia.

Book Chapters

1. Pfund, M.E., Mason, S.J., Fowler, J.W., 2006, Semiconductor manufacturing scheduling and dispatching, Chapter 9 in *Handbook of Production Scheduling*, Herrmann, J.W. (ed.), Springer, New York, 213-241.
2. Collins, T.R., Mason, S.J., Nachtmann, H.L., 2006, Cost evaluation and analysis, Chapter 17 in *Advanced Electronic Packaging*, 2nd Edition, Ulrich, R.K., Brown, W.D. (eds.), John Wiley and Sons, New York, 691-724.
3. Malstrom, E.M., Mason, S.J., 2001, Scheduling and inventory control of manufacturing systems, *Maynard's Industrial Engineering Handbook*, 5th Edition, McGraw-Hill, New York, 9.27-9.47.

Refereed Conference Papers

1. Lowe, J.J.*, Khademi, A., Mason, S.J., 2016, Robust Semiconductor Production Planning Under Yield Uncertainty, *Proceedings of the 2016 Winter Simulation Conference*, Washington, D.C., 2697-2708.
2. Madadi, A.*, Kurz, M.E., Mason, S.J., Taaffe, K.M., 2012, A Metaheuristic Approach to Supply Chain Network Design Using CVaR, *Industrial Engineering Research Conference*, Orlando, Florida.
3. Cakici, E.*, Kurz, M.E., Mason, S.J., 2010, Integrated Production and Distribution Scheduling with Multiple Objectives, *Industrial Engineering Research Conference*, Cancun, Mexico.
4. Bogle, B.M.*, Mason, S.J., 2009, Optimizing Demand Fulfillment from Test Bins, *Proceedings of the 2009 Winter Simulation Conference*, M. D. Rossetti, R. R. Hill, B. Johansson, A. Dunkin and R. G. Ingalls, eds., 1730-1736.
5. Mönch, L., Zimmerman, J.*, Fowler, J.W., Mason, S.J., 2009, A Simulation-Based and an Analytic Modeling Approach to Calculate an Appropriate Number of FOUPs in Wafer Fabs, *Proceedings of the 2009 INFORMS Simulation Society Research Workshop*, L. H. Lee, M. E. Kuhl, J. W. Fowler and S. Robinson, eds., Coventry, England, 57-61.

6. Mönch, L., Fowler, J.W., Dauzere-Peres, S., Mason, S.J., Rose, O., 2009, Scheduling Semiconductor Manufacturing Operations: Problems, Solution Techniques, and Future Challenges, 4th Multidisciplinary International Conference on Scheduling: Theory and Applications, Dublin, Ireland, 192-201.
7. McCallion, E.A.*, Taylor, N.D.*, Mason, S.J., Pohl, E.A., 2009, Analysis of Transportation Network Design Strategies for Forced Transfer Busing, Industrial Engineering Research Conference, Miami, Florida, 1321-1326.
8. Montgomery, W.*, Mason, S.J., 2009, Mission Assignment and Leave Block Scheduling: Maintaining Readiness and Sustainment of Military Troops During War-Time, Industrial Engineering Research Conference, Miami, Florida, 2073-2078.
9. Zimmerman, J.*, Mönch, L., Mason, S.J., Fowler, J.W., 2008, Determining an Appropriate Number of FOUPs in Semiconductor Wafer Fabrication Facilities, Proceedings of the 2008 Winter Simulation Conference, 2164-2170.
10. Ingalls, R.G., Hunsaker, B., Mason, S.J., Needy, K.L., Norman, B.A., Cornejo, M.*, Methapatara, C.*, Sittivijan, P.*, Claypool, E.*, Gokhan, N.M.*, 2008, Integrating design for supply chain research into a graduate supply chain modeling course-a collaborative approach, 2008 American Society for Engineering Education Annual Conference Proceedings. Pittsburgh, Pennsylvania.
11. Ferguson, J.A.*, Mason, S.J., 2008, Analysis of a Circuit Routing Strategy for Forced Transfer Busing, Industrial Engineering Research Conference, Vancouver, British Columbia, 1556-1561.
12. Medal, H.*, Gade, D.*, Mason, S.J., Meller, R.D., Pohl, E.A., 2008, Pickup and Delivery of Poultry in Rural Networks, Industrial Engineering Research Conference, Vancouver, British Columbia, 1897-1902.
13. Needy, K.L., Ingalls, R.G., Mason, S.J., Hunsaker, B., Norman, B.A., Gokhan, N.M.*, Cornejo, M.*, 2008, Design for Supply Chain - A Collaborative Research Project Between Institutions and Between Centers, Industrial Engineering Research Conference, Vancouver, British Columbia, 396-401.
14. Saka, B.*, Mason, S.J., 2008, Tractor and Trailer Routing in a Less Than Truckload Network, Industrial Engineering Research Conference, Vancouver, British Columbia, 703-708.
15. Saka, B.*, Mettenburg, D., Mason, S.J., 2008, Effective Freight Touring in Truckload Transportation, Industrial Engineering Research Conference, Vancouver, British Columbia, 709-714.
16. Unlu, Y.*, Mason, S.J., 2008, Comparison of Formulations for Non-Preemptive Parallel Machine Scheduling Problems, Industrial Engineering Research Conference, Vancouver, British Columbia, 1550-1555.
17. Jampani, J.*, Mason, S.J., 2007, Complex Job Shop Multiple Orders per Job Scheduling, 3rd Multidisciplinary International Conference on Scheduling: Theory and Applications, Paris, France, 225-233.
18. Li, W.*, Mason, S.J., 2007, Comparison of Simulation-Based Schedule Generation Methodologies for Semiconductor Manufacturing, Industrial Engineering Research Conference, Nashville, Tennessee.
19. Unlu, Y.*, Mason, S.J., 2007, Optimizing Tank Selection And Operations Scheduling At A Large Winery, Industrial Engineering Research Conference, Nashville, Tennessee.
20. Mason, S.J., Kurz, M.E., Pfund, M.E., Fowler, J.W., Pohl, L.M.*, 2007, Multi-Objective Semiconductor Manufacturing Scheduling: A Random Keys Implementation of NSGA-II, Proceedings of the 2007 IEEE Symposium on Computational Intelligence in Scheduling (CI-Sched 2007), 159-164.

21. Magableh, G.*, Rossetti, M.D., Mason, S.J., 2005, Modeling and analysis of a generic cross-docking facility, Proceedings of the 2005 Winter Simulation Conference, 1613-1620.
22. Erramilli, V.*, Mason, S.J., 2005, Multiple orders per job batch scheduling on a single machine with incompatible jobs, 2nd Multidisciplinary International Conference on Scheduling: Theory and Applications, New York, New York.
23. Jampani, J.*, Mason, S.J., Erramilli, V.*, 2005, Multiple orders per job scheduling on a single machine using column generation, 2nd Multidisciplinary International Conference on Scheduling: Theory and Applications, New York, New York.
24. Pfund, M.E., Balasubramanian, H.*, Fowler, J.W., Mason, S.J., 2005, A bi-criteria approach to scheduling wafer fabrication facilities, 2nd Multidisciplinary International Conference on Scheduling: Theory and Applications, New York, New York.
25. Kutanoglu, E., Tanrisever, F.*, Mason, S.J., 2004, Forming and scheduling jobs from multiple orders with different attributes: a computational study of special cases, Industrial Engineering Research Conference, Houston, Texas.
26. Magableh, G.*, Mason, S.J., 2004, Transportation logistics applications of wireless data systems, Industrial Engineering Research Conference, Houston, Texas.
27. Qu, P.*, Mason, S.J., 2004, Solving the multiple orders per job scheduling problem with Tabu search, Industrial Engineering Research Conference, Houston, Texas.
28. Qu, P.*, Mason, S.J., Kutanoglu, E., Fowler, J.W., 2004, A heuristic for minimizing total weighted completion time on a single machine for the multiple orders per job scheduling problem, Industrial Engineering Research Conference, Houston, Texas.
29. Rainwater, C.*, Honeycutt, J.*, Cassady, C.R., Mason, S.J., 2004, Solving selective maintenance problems for fleets of systems, Industrial Engineering Research Conference, Houston, Texas.
30. Sophabmixay, K.J.*, Mason, S.J., Rossetti, M.D., 2004, Strategic optimization of a transportation distribution network, Industrial Engineering Research Conference, Houston, Texas.
31. Swaminathan, R.*, Fowler, J.W., Pfund, M.E., Mason, S.J., 2004, Minimizing total weighted tardiness in a dynamic flowshop with variable processing times, Industrial Engineering Research Conference, Houston, Texas.
32. Kutanoglu, E., Ling, R.*, Mason, S.J., 2003, Scaling-based algorithms for resource-constrained project scheduling problems, Industrial Engineering Research Conference, Portland, Oregon.
33. Magableh, G.*, Mason, S.J., 2003, Future applications of wireless data systems in transportation logistics, Industrial Engineering Research Conference, Portland, Oregon.
34. Magableh, G.*, Mason, S.J., 2003, Increased supply chain efficiencies through integration, Industrial Engineering Research Conference, Portland, Oregon.
35. Magableh, G.*, Mason, S.J., 2003, Minimizing weighted earliness/tardiness on parallel machines with sequence-dependent setups, Industrial Engineering Research Conference, Portland, Oregon.
36. Mason, S.J., Carlyle, W.M., Fowler, J.W., 2003, Improving MIP solver performance for scheduling complex job shops, Industrial Engineering Research Conference, Portland, Oregon.
37. Qu, P.*, Steinmiller, B.*, Mason, S.J., 2003, Incorporating automated material handling systems into a disjunctive graph for subsequent scheduling by a shifting bottleneck-based approach, Industrial Engineering Research Conference, Portland, Oregon.

38. Ramasami, B.* , Tovia, F.* , Mason, S.J., Potoradi, J., Boon, O.S., 2003, Mathematical programming approach for wire bonder scheduling, Industrial Engineering Research Conference, Portland, Oregon.
39. Fowler, J.W., Brown, S., Carlyle, W.M., Gel, E., Mason, S.J., Mönch, L., Rose, O., Runger, G., Sturm, R., 2002, A modified shifting bottleneck heuristic for scheduling wafer fabrication facilities, International Conference on Flexible Automation and Intelligent Manufacturing, Dresden, Germany, 1231-1236.
40. Jin, S.* , Mason, S.J., 2002, Rescheduling strategies for complex job shops, International Conference on Modeling and Analysis of Semiconductor Manufacturing, Mackulak, G.T., Fowler, J.W., Schoemig, A. (eds.), 90-94.
41. Mason, S.J., Skinner, G.* , Qu, P.* , Jin, S.* , Wessels, C.* , Pfund, M., Fowler, J.W., Carlyle, W.M., Kim, B., 2002, Scheduling and rescheduling methodologies for wafer fabs, International Conference on Flexible Automation and Intelligent Manufacturing, Dresden, Germany, 1464-1471.
42. Potoradi, J., Boon, O.S., Mason, S.J., Fowler, J.W., Pfund, M.E., 2002, Using simulation based scheduling to maximize demand fulfillment in a semiconductor assembly facility, Proceedings of the 2002 Winter Simulation Conference, San Diego, CA, 1857-1861.
43. Qu, P.* , Mason, S.J., Kutanoglu, E., 2002, Scheduling jobs containing multiple orders, International Conference on Modeling and Analysis of Semiconductor Manufacturing, Mackulak, G.T., Fowler, J.W., Schoemig, A. (eds.), 264-269.
44. Ramasami, B.* , Mason, S.J., Cole, M.H., Yan, L., Hargroder, M., 2002, Issues in Inventory Modeling in a Virtual Supply Chain, Industrial Engineering Research Conference, Orlando, Florida
45. Rose, O., Fowler, J., Carlyle, M., Runger, G., Mason, S., 2002, Ein neuer Ansatz fuer die Ressourceneinsatzplanung und Fabriksteuerung von Halbleiterfertigungsanlagen, Proceeding of the 10th ASIM-Fachtagung Simulation in Produktion und Logistik.
46. Skinner, G.E.* , Mason, S.J., 2002, A genetic algorithm for scheduling parallel batch processing machines, International Conference on Modeling and Analysis of Semiconductor Manufacturing, Mackulak, G.T., Fowler, J.W., Schoemig, A. (eds.), 270-275.
47. Hau, T.* , Mason, S.J., Yan, L., Cole, M.H., 2001, Contract manufacturing's impact on the electronics manufacturing supply chain, Industrial Engineering Research Conference, Dallas, Texas.
48. Mason, S.J., Fowler, J.W., 2001, Maximizing delivery performance in semiconductor wafer fabs-potential implementation issues, Industrial Engineering Research Conference, Dallas, Texas.
49. Mason, S.J., Yan, L., The manufacture/outsourcing decision in electronics manufacturing, 2001, Semiconductor Manufacturing Operational Modeling and Simulation Symposium, Cochran, J.K., Bonal, J. (eds.), 117-122.
50. Nachtmann, H., Mason, S.J., Angulo, A.F.* , Fant, E.W., 2001, Validation of target inventory methodologies in the real world, Industrial Engineering Research Conference, Dallas, Texas.
51. Oey, K.* , Mason, S.J., 2001, Scheduling batch processing machines in complex job shops, Proceedings of the 2001 Winter Simulation Conference, Peters, B.A., Smith, J.S., Medeiros, D.J., Rohrer, M.W. (eds.), 1200-1207.
52. Qu, P.* , Skinner, G.E.* , Mason, S.J., 2001, Sizing a pilot production line using simulation, Proceedings of the 2001 Winter Simulation Conference, Peters, B.A., Smith, J.S., Medeiros, D.J., Rohrer, M.W. (eds.), 1188-1193.

53. Mason, S.J., Fowler, J.W., 2000, Maximizing delivery performance in semiconductor wafer fabs, Proceedings of the 2000 Winter Simulation Conference, Joines, J.A., Barton, R.R., Kang, K., Fishwick, P.A. (eds.), 1458-1463.
54. Mason, S.J., Jensen, P.A., Fowler, J.W., 1996, A comparison study of the logic of four wafer fabrication simulators, Proceedings of the 1996 Winter Simulation Conference, Charnes, J.M., Morrice, D.J., Brunner, D.T., Swain, J.J.(eds.), 1031-1038.

* Student co-author

Other Papers and Presentations

1. Margolis, J.T.*, Sullivan, K., Mason, S.J., Magagnotti, M.*, 2017, A multi-objective optimization model for designing resilient supply chain networks, 21st Conference of the International Federation of Operational Research Societies, Quebec City, Canada.
2. Rashidi, E., Mason, S.J., 2017, A Multi-Stage Stochastic Programming Model for Risk Management in Semiconductor Supply Chain Networks, 2017 International Annual Conference of the American Society for Engineering Management, Huntsville, Alabama.
3. Masoud, S.A., Mason, S.J., Ferrell, W.G., Hunter, R., 2017, A Predictive Tool for Capital Projects, 2017 INFORMS Business Analytics Conference, Las Vegas, Nevada.
4. Chalil Madathil, S., Nagarajan, H., Yamangil, E., Barnes, A., Bent, R., Backhaus, S., Mason, S.J., Mashayekh, S., Stadler, 2016, Resilient Off-grid Microgrids: Capacity Planning and N-1 Security, 2016 INFORMS Annual Conference, Nashville, Tennessee.
5. Chalil Madathil, S., Nagarajan, H., Yamangil, E., Bent, R., Barnes, A., Backhaus, S., Mashayekh, S., Stadler, M., Mason, S.J., 2016, Resilient Off-grid Microgrids: Capacity Planning and N-1 Security, 2016 DTRA Basic Research Technical Review, Springfield, Virginia.
6. Wang, S., Gangammanavar, H., Eksioglu, S., Mason, S.J., 2016, A Rolling-Horizon Stochastic Optimization with Application in Power Systems, Industrial and Systems Engineering Research Conference, Anaheim, California.
7. Wang, S., Gangammanavar, H., Eksioglu, S., Mason, S.J., 2016, A Stochastic Optimization Framework for Distributed Decision-Making in Power Systems, Industrial and Systems Engineering Research Conference, Anaheim, California.
8. Mason, S.J., 2016, Preparing for Research: Successful Strategies, Industrial and Systems Engineering Research Conference New Faculty Colloquium, Anaheim, California.
9. Mason, S.J., 2016, Supply Chain Optimization and Logistics for Capital Projects, National Contract Managers Association Education Summit, Greenville, South Carolina.
10. Mason, S.J., 2016, Industrial Engineering and the Automotive Industry: From Research to Results, 2016 South Carolina Auto Week, Greenville, South Carolina.
11. Mason, S.J., 2016, Network Planning, Dagstuhl Seminar on Modeling and Analysis of Semiconductor Supply Chains, Wadern, Germany.
12. Khademi, A., Magagnotti, M.*, Mason, S.J., 2015, Supply Chain Design Through Acquisition: A Robust Multi-objective Approach, INFORMS Annual Conference, Philadelphia, Pennsylvania.
13. Masoud, S.*, Mason, S.J., 2015, Minimizing Automotive Supply Chain Costs Under Mixed Transportation Modes, INFORMS Annual Conference, Philadelphia, Pennsylvania.

14. Wang, S.* , Huang, Y., Mason, S.J., 2015, A Metaheuristic for the Electric Vehicle Routing Problem with Recharging Stations and Time Windows, INFORMS Annual Conference, Philadelphia, Pennsylvania.
15. Wang, S.* , Mason, S.J., Smith, J.C., 2015, Integrated Batching and Lot Streaming With Variable Sublots And Sequence-dependent Setups, INFORMS Annual Conference, Philadelphia, Pennsylvania.
16. Lowe, J.J.* , Mason, S.J., 2015, Effects of Varied Minimum Inventory Requirements on Semiconductor Master Planning, Industrial and Systems Engineering Research Conference, Nashville, Tennessee.
17. Ransikarbum, K.* , Mason, S.J., 2015, Multicriteria Analysis of Post-Disaster Integrated Relief Supply and Network Restoration Decisions, Industrial and Systems Engineering Research Conference, Nashville, Tennessee.
18. Wang, S.* , Mason, S.J., 2015, Scheduling Orders for Multiple Products With Sequence-Dependent Setups, Industrial and Systems Engineering Research Conference, Nashville, Tennessee.
19. Li, B.* , Milburn, A.B., Mason, S.J., 2015, Parallel Machine Scheduling with Unrelated Machine and Splitting Jobs, Industrial and Systems Engineering Research Conference, Nashville, Tennessee.
20. Mason, S.J., 2015, Preparing for Research: Successful Strategies, Industrial and Systems Engineering Research Conference New Faculty Colloquium, Nashville, Tennessee.
21. Lowe, J.J.* , Mason, S.J., Eksioglu, S., 2014, Solving Semiconductor Wafer Production Planning Using Benders Decomposition, INFORMS Annual Conference, San Francisco, California.
22. Ransikarbum, K.* , Mason, S.J., 2014, Model for Integrated Relief Supply and Network Restoration– A Hazus based Application, INFORMS Annual Conference, San Francisco, California.
23. Huang, Y., Moghaddam, N.M.* , Mason, S.J., 2014, Concurrent Electric Vehicle Fleet Sizing and Charging Station Network Design, INFORMS Annual Conference, San Francisco, California.
24. Magagnotti, M.* , Mason, S.J., Sullivan, K., 2014, On Supply Chain Network Re-Design after a Corporate Merger, 20th Conference of the International Federation of Operational Research Societies, Barcelona, Spain.
25. Mason, S.J., 2014, Preparing for Research: Successful Strategies, Industrial and Systems Engineering Research Conference New Faculty membersium, Montreal, Canada.
26. Lowe, J.J.* , Mason, S.J., 2014, On Delayed Product Differentiation in Semiconductor Wafer Production Planning, Industrial and Systems Engineering Research Conference, Montreal, Canada.
27. Magagnotti, M.* , Mason, S.J., 2014, Supply Chain Network Design for the Acquisition Environment - A multi-criteria approach, Industrial and Systems Engineering Research Conference, Montreal, Canada.
28. Mason, S.J., Taaffe, K., Allen, R.* , Ransikarbum, K.* , 2014, Meeting Customer Needs in Fabric Roll Production, Industrial and Systems Engineering Research Conference, Montreal, Canada.
29. Masoud, S.* , Mason, S.J., 2014, Multiobjective Optimization in an Integrated Automotive Supply Chain, Industrial and Systems Engineering Research Conference, Montreal, Canada.
30. Ransikarbum, K.* , Mason, S.J., 2014, Multiple-Criteria Model for Integrated Response and Recovery Analysis in Humanitarian Logistics, Industrial and Systems Engineering Research Conference, Montreal, Canada.

31. Mason, S.J., Ferrell, W.G., 2014, Identifying Opportunities and Risks in a Nuclear Supply Chain's Material Flow, Nuclear Supply Chain Procurement and Vendor Management Summit, Greenville, South Carolina.
32. Mason, S.J., Ferrell, W.G., 2014, The Global Nuclear Supply Chain: Necessity, Opportunity, and Risk, Nuclear Supply Chain Procurement and Vendor Management Summit, Greenville, South Carolina.
33. Neyens, D.M., Mason, S.J., Magagnotti, M.*, Wang, S.*, Fan, Z.*, Fields, C.A.*, 2014, Scoring the Economic Development Impact of Transportation Infrastructure Projects, TDL Summit, Columbia, South Carolina.
34. Taaffe, K., Mason, S.J., Allen, R.*, Ransikarbum*, K., Willett, B., 2014, Managing Customer Needs at Glen Raven Custom Fabrics, OR Society's 7th Simulation Workshop, Worcestershire, England.
35. Lowe, J.J.* , Mason, S.J., 2013, Effective Resource Utilization in a Fixed Budget Allocation Inventory System, INFORMS Annual Conference, Minneapolis, Minnesota.
36. Madathil, S.C.* , Mason, S.J., 2013, Models for Improved Photolithography Scheduling with Cluster Tools, INFORMS Annual Conference, Minneapolis, Minnesota.
37. Magagnotti, M.* , Mason, S.J., 2013, Acquisition Viability When Combining Supply Chain Networks, INFORMS Annual Conference, Minneapolis, Minnesota.
38. Masoud, S.* , Mason, S.J., 2013, Models for Automotive Supply Chain Planning, INFORMS Annual Conference, Minneapolis, Minnesota.
39. Ransikarbum, K.* , Mason, S.J., 2013, An Integrated Response and Recovery Model for Disaster Relief Operations Support, INFORMS Annual Conference, Minneapolis, Minnesota.
40. Mason, S.J., Magagnotti, M.* , Ransikarbum, K.* , 2013, Modeling and Analysis of Supply Chain Viability, EURO XXVI, Rome, Italy.
41. Milburn, A.B, Mason, S.J., 2013, Uncovering hidden costs in home health supply chains. INFORMS Healthcare 2013, Chicago, Illinois.
42. Mason, S.J., 2013, Preparing for Research: Successful Strategies, Industrial and Systems Engineering Research Conference New Faculty membersium, San Juan, Puerto Rico.
43. Mason, S.J., 2013, Panelist, Industry Research Funding, Industrial Engineering Research Conference Doctoral studentium, San Juan, Puerto Rico.
44. Mason, S.J., Masoud, S.* , Ferrell, W.G., Hunter, R., 2013, Predictive Performance Indicators for Capital Projects, Fiatch 2013 Technology Conference & Showcase, San Antonio, Texas.
45. Mason, S.J., 2013, Clemson Supply Chain Program Overview, South Carolina Supply Chain Summit, Charleston, South Carolina.
46. Mason, S.J., Ferrell, W.G., Skinner, K.* , Watson, A.* , Bobo, S.* , 2013, Update on Carolinas Nuclear Industry Economic Impact Study, Carolinas Nuclear Cluster Meeting, Charlotte, North Carolina.
47. Mason, S.J., 2013, Call to Action, New Carolina's 2nd TDL Summit, Columbia, South Carolina.
48. Magagnotti, M.* , Mason, S.J., Mattioda, D., 2013, Dynamic Scheduling and Personnel Visualization Tool for the USAF, 42nd Annual Meeting, Western Decision Sciences Institute, Long Beach, California.

49. Mason, S.J., 2012, The Science of Santa: The Tech Behind Holiday Shipping & Logistics, Engenuity SC Science Cafe, Columbia, South Carolina
50. Mason, S.J., 2012, Supply Chain & Logistics Optimization Research in Practice, MTHSC OR Seminar Series, Clemson University
51. Mason, S.J., 2012, Improving Your Business AND the Bottom Line: Why IE is NOT Imaginary Engineering, Southern Textiles Association, Spartanburg, South Carolina
52. Magagnotti, M.*, Mason, S.J., 2012, Modeling and Analyzing Supply Chain Viability, INFORMS Annual Conference, Phoenix, Arizona.
53. Gedik, R.*, Pohl, E.A., Rainwater, C.E., Mason, S.J., Medal, H.*, 2012, Designing Resilient and Sustainable Supply Chain Networks, Industrial Engineering Research Conference, Orlando, Florida.
54. Magagnotti, M.*, Mason, S.J., Rainwater, C.E., Heier-Stamm, J., Pohl, E.A., 2012, On Supply Chain Viability, Industrial Engineering Research Conference, Orlando, Florida.
55. Milburn, A.B., Mason, S.J., Spicer, J.*, 2012, Quantifying Nurse Involvement in the Home Health Supply Chain, Industrial Engineering Research Conference, Orlando, Florida.
56. Mason, S.J., 2012, Preparing for Research: Successful Strategies, Industrial Engineering Research Conference New Faculty Colloquium, Orlando, Florida.
57. Mason, S.J., Ferrell, W.G., 2012, Updating “The Economic Impact of the Nuclear Cluster in the Carolinas” Study, Carolinas Nuclear Cluster Meeting, Charlotte, North Carolina.
58. Mason, S.J., 2012, Efficiently Utilizing South Carolina’s TDL Infrastructure, New Carolina’s 1st TDL Summit, Columbia, South Carolina.
59. Milburn, A.B., Mason, S.J., Spicer, J.*, 2012, Characterizing the Home Health Supply Chain, Society for Health Systems Conference, Las Vegas, Nevada.
60. Mason, S.J., 2011, Optimization, Logistics, and Logistics Optimization in Practice, National Contract Management Association, Greenville, South Carolina.
61. Mason, S.J., Ferrell, W.G., 2011, The Nuclear Supply Chain: Are There Possibilities to Re-Shore?, Energized: A Guide to the Nuclear Industries in North & South Carolina, December, 19.
62. Milburn, A.B., Spicer, J.*, Mason, S.J., 2011, Characterizing the Home Health Supply Chain, INFORMS Annual Meeting, Charlotte, North Carolina.
63. Mason, S.J., Fowler, J.W., Mönch, L., Rainwater, C.E., 2011, Algorithmic Parallelization in Multi-Criteria Semiconductor Scheduling, INFORMS Annual Meeting, Charlotte, North Carolina.
64. Fowler, J.W., Balasubramanian, H., Mason, S.J., Pfund, M.E., 2011, Multi-Criteria Scheduling of Semiconductor Wafer Fabrication Facilities, INFORMS Annual Meeting, Charlotte, North Carolina.
65. Sir, M., Kurz, M.E., Mason, S.J., Pariazar, M.*, Pohl, E.A., Root, S.E., Taaffe, K.M., 2011, Designing a Robust Pharmaceutical Supply Chain Network Against Disruptions, INFORMS Annual Meeting, Charlotte, North Carolina.
66. Gedik, R.*, Rainwater, C.E., Medal, H.*, Pohl, E.A., Mason, S.J., 2011, Assessing Vulnerabilities in the Coal Supply Chain, INFORMS Annual Meeting, Charlotte, North Carolina.
67. Mason, S.J., Ferrell, W.G., Catron, D.*, Toro Diaz, H.*, Nemati, B.*, Skinner, K.*, 2011, Mapping the Nuclear Supply Chain, Carolinas Nuclear Cluster Member Meeting, Columbia, SC.

68. Rainwater, C.E., Mason, S.J., Fowler, J.W., Mönch, L., 2011, Algorithmic Parallelization in Multi-Criteria Semiconductor Scheduling, 5th Multidisciplinary International Conference on Scheduling: Theory and Applications, Phoenix, Arizona.
69. Boylan, G.*, Mason, S.J., 2011, Assessing Supply Chain Viability through Multi-Objective Optimization, 79th MORS Symposium, Monterey, California.
70. St. John D.E.*, Spicer, J.*, Bennett, A.R., Rainwater, C.E., Pohl, E.A., Mason, S.J., 2011, Mitigating Dynamic Risk in Multi-Modal Perishable Commodity Supply Chains, Industrial Engineering Research Conference, Reno, Nevada.
71. Kamali, B.*, Mason, S.J., Pohl, E.A., 2011, An Analysis of Special Needs Student Busing, Industrial Engineering Research Conference, Reno, Nevada.
72. Marhefka, S.*, Pohl, E.A., Mason, S.J., 2011, Team Selection Strategies for Youth Sports Programs, Industrial Engineering Research Conference, Reno, Nevada.
73. Bennett, A.R., Mason, S.J., 2011, Characterizing the Home Health Care Supply Chain, Industrial Engineering Research Conference, Reno, Nevada.
74. Mason, S.J., 2011, Supply Chain and Logistics Research in Practice, Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio.
75. Pohl, E.A., Root, S.E., Mason, S.J., Kurz, M.E., Taaffe, K., Sir, M., 2011, Ensuring Continuity of Care—A Quantification of Risk in the Healthcare Supply Chain, 2011 CELDi Spring Meeting, Denver, Colorado.
76. Ferrell, W.G., Mason, S.J., 2011, Construction Dynamics, Procurement Executives Group, Phoenix, Arizona.
77. Bennett, A.R., Mason, S.J., Kamali, B.*, Hilborn, J.*, Phan, E.*, 2011, Characterizing the Home Health Supply Chain, Proceedings of the 2011 Society for Health Systems Conference and Expo, Orlando, Florida.
78. Mason, S.J., Ferrell, W.G., Magagnotti, M.S.*, McCallion, E.A.*, Von Fange, J.*, Whetsel, S.*, 2010, Capital Projects Supply Chain: An Introduction, INFORMS Annual Meeting, Austin, Texas.
79. Kamali, B.*, Mason, S.J., Pohl, E.A., 2010, Efficient School Bus Routing for Special Needs Students, INFORMS Annual Meeting, Austin, Texas.
80. Nguyen, H.-N.*, Mason, S.J., Rainwater, C.E., Pohl, E.A., 2010, Line-haul Outsourcing as a Solution for the Empty Balancing Problem in Trucking Transportation, INFORMS Annual Meeting, Austin, Texas.
81. Nguyen, H.-N.*, Rainwater, C.E., Pohl, E.A., Mason, S.J., 2010, Methodologies for Solving Dynamic Fortification Problems, INFORMS Annual Meeting, Austin, Texas.
82. Taaffe, K.M., Kurz, M.E., Madadi, A.*, Mason, S.J., Pohl, E.A., Root, S.E., Sir, M., 2010, Selecting Facilities while Managing Pharmaceutical Manufacturing Risks, INFORMS Annual Meeting, Austin, Texas.
83. Marhefka, S., Pohl, E.A., Mason, S.J., 2010, Simulating Team Selection Strategies for Youth Sports Programs, INFORMS Annual Meeting, Austin, Texas.
84. Long, T.C.*, Mason, S.J., Fowler, J.W., 2010, Impact of Traceability Requirements in Single Machine Multiple Orders per Job Scheduling, Industrial Engineering Research Conference, Cancun, Mexico.

85. Madadi, A.*, Kurz, M.E., Taaffe, K., Mason, S.J., Pohl, E.A., Root, S.E., Sir, M., 2010, Managing Disruptions in Healthcare Supply Chain Networks, Industrial Engineering Research Conference, Cancun, Mexico.
86. Medal, H.*, Sharp, S.J.*, Nguyen, H.-N.*, Pohl, E.A., Mason, S.J., 2010, Multi-Modal Supply Chain Network Analysis Under Disruptions, Industrial Engineering Research Conference, Cancun, Mexico.
87. Nguyen, H.-N.*, Salgado, M.*, Pohl, E.A., Mason, S.J., 2010, Risk and Vulnerability Analysis Techniques for Supply Chain Network Infrastructure, Industrial Engineering Research Conference, Cancun, Mexico.
88. Taylor, N.D.*, Mason, S.J., 2010, Industrial Engineering Analysis to Improve Phlebotomy Lab Operations, Industrial Engineering Research Conference, Cancun, Mexico.
89. Kurz, M.E., Hudda, A.*, Mason, S.J., 2010, A Genetic Algorithm for Forced Transfer Bus Routing, Industrial Engineering Research Conference, Cancun, Mexico.
90. Mason, S.J., 2010, An Analysis of Forced Transfer Busing for Elementary School Students, IIE Solutions Conference, Cancun, Mexico.
91. Mason, S.J., 2010, Keeping it Fresh: Tapping into Local University Resources, Southern Bakers' Association Annual Meeting, Fayetteville, Arkansas.
92. Mason, S.J., 2010, Panel on the State of the Art/Practice in DELS: Successes and Failures, Dagstuhl Workshop on Discrete Event Logistics Systems, Wadern, Germany.
93. Mason, S.J., 2010, Supply Chain and Logistics Research in Practice, University of Hagen, Hagen, Germany.
94. Mönch, L., Fowler, J.W., Dauzere-Peres, S., Mason, S.J., Rose, O., 2009, Scheduling Semiconductor Manufacturing Operations: Problems, Solution Techniques, and Future Challenges, Working Paper Series ENSM-SE CMP WP 2009/16.
95. Cakici, E.*, Mason, S.J., Fowler, J.W., Geismar, H.N., 2009, Batch Loading on Parallel Machines with Incompatible Job Families and Release Times, INFORMS Annual Meeting, San Diego, California.
96. Bogle, B.M.*, Mason, S.J., 2009, Binning and Allocation Strategies for Satisfying Semiconductor Customer Demand, INFORMS Annual Meeting, San Diego, California.
97. Kamali*, B., Mason, S.J., Pohl, E.A., 2009, Network Design Analysis for Special Needs Student Services, INFORMS Annual Meeting, San Diego, California.
98. Iyoob, I.*, Mason, S.J., Pohl, E.A., 2009, Impact of Lane Volume Variability in Forecasting Lane Volumes for Truckload (TL) Service Procurement, INFORMS Annual Meeting, San Diego, California.
99. Townsley, R.*, Mason, S.J., 2009, Scheduling Gifted and Talented Education Classes, INFORMS Annual Meeting, San Diego, California.
100. Mason, S.J., 2009, An Analysis of Forced Transfer Busing for Elementary School Students, Clemson University, Clemson, South Carolina.
101. Mason, S.J., 2009, Introduction to Scheduling, Universidad de Centro Americana, San Salvador, El Salvador.

102. Mason, S.J., 2009, Optimizing Logistics for Improved Performance, Rotary International, Rogers, Arkansas.
103. Mason, S.J., 2009, Optimizing Logistics for Improved Performance, Rotary International, Fayetteville, Arkansas.
104. Mason, S.J., 2009, Modeling and Analysis of Semiconductor Manufacturing: From Research to Reality, College of Engineering, Texas State University, San Marcos, Texas.
105. Thomas, L.M.*, Meller, R.D., Pazour, J.A.*, Mason, S.J., Root, S.E., Tutorial for a Tool to Support the Best Selection of Technology for Unit-Dose Packaging, Report Series 08-03, Center for Innovation in Healthcare Logistics, University of Arkansas
106. Mason, S.J., Nachtmann, H.L., Pohl, E.A., 2008, Integrated Distribution Planning and Forecasting for Medical Logistics, INFORMS Annual Meeting, Washington, D.C.
107. Cakici, E.*, Mason, S.J., Geismar, N., Fowler, J.W., 2008, Integrated Manufacturing and Distribution Scheduling, INFORMS Annual Meeting, Washington, D.C.
108. Montgomery, W.*, Mason, S.J., Pohl, E.A., 2008, Military Troop Leave Scheduling During Wartime, INFORMS Annual Meeting, Washington, D.C.
109. Meller, R.D., Mason, S.J., Pazour, J.A.*, Root, S.E., Unlu, Y.*, 2008, Unit Dose Packaging Systems Analysis, INFORMS Annual Meeting, Washington, D.C.
110. Mason, S.J., Pohl, E.A., 2008, Military and Medical Logistics at the University of Arkansas, Defense Medical Logistics Academic Forum, Gaithersburg, Maryland.
111. Mason, S.J., Strnad, M., 2008, Cost Impacts of Simulation Modeling for Roll to Roll Processing, 7th Annual Flexible Electronics and Displays Conference, Phoenix, Arizona.
112. Ferguson, J.A.*, Mason, S.J., 2007, Circuit Routing Strategy for Forced Transfer Busing, INFORMS Annual Meeting, Seattle, Washington.
113. Kurz, M.E., Fowler, J.W., Mason, S.J., Pfund, M.E., Pohl, L.M.*, 2007, Multi-objective Semiconductor Manufacturing Scheduling, INFORMS Annual Meeting, Seattle, Washington.
114. Mason, S.J., 2007, Integrated Distribution Planning and Forecasting for Medical Logistics, U.S. Army Medical Research and Materiel Command's Telemedicine and Advanced Technology Research Center (TATRC), Fort Detrick, Maryland.
115. Mason, S.J., 2006, AFOSR-PS13: Integrated Distribution Planning and Forecasting for Medical Logistics, Logistics Management Institute, Virginia.
116. Kemp, R.A., Mason, S.J., 2005, Indirect MRO Benchmarking Survey 2005 Results, Ozark Indirect MRO Conference and Workshop, Fayetteville, Arkansas.
117. Kemp, R.A., Mason, S.J., 2005, Indirect MRO Benchmarking Survey 2005 Results, Indirect MRO Conference and Workshops, Seattle, Washington.
118. Mason, S.J., 2005, Integrated semiconductor manufacturing scheduling and simulation, Dagstuhl Seminar on Simulation and Scheduling, Wadern, Germany.
119. Mason, S.J., Hawthorne, P.D., 2004, RFID + MRO = ?, 7th MRO Indirect Materials Conference and Workshops, Las Vegas, Nevada.
120. Mason, S.J., 2004, Multiple orders per job scheduling problems, Graduate Seminar, Arizona State University.

121. Fowler, J.W., Mason, S.J., McGinnis, L.F., Rose, O., 2003, Operational Modeling and Simulation of Semiconductor Manufacturing: A Panel Discussion, INFORMS Annual Meeting, Atlanta, Georgia.
122. Mason, S.J., 2003, The multiple orders per job scheduling problem, Graduate Seminar, Clemson University.
123. Fowler, J.W., Mason, S.J., 2003, Industrial Engineering in Semiconductor Manufacturing Panel Discussion, Industrial Engineering Research Conference, Portland, Oregon.
124. Mason, S.J., 2003, Scheduling Semiconductor Wafer Fabrication Facilities, Business Briefing: Global Semiconductor Manufacturing Technology, World Markets Research Centre, London, England.
125. Mason, S.J., 2003, Industrial Engineering Research Conference Doctoral Colloquium, Teaching Panel Discussion, Industrial Engineering Research Conference, Portland, Oregon.
126. Mason, S.J., Jin, S.*, Zakaria, O.*, 2003, Repair Algorithms for Complex Job Shop Rescheduling, INFORMS Annual Meeting, Atlanta, Georgia.
127. Mason, S.J., Wessels, C.*, Zakaria, O.*, 2003, Toolgroup Blackboxing Approaches for Complex Job Shop Scheduling, INFORMS Annual Meeting, Atlanta, Georgia.
128. Mason, S.J., 2002, Graduate and undergraduate research and funding opportunities, in the University of Arkansas's Tech Summit, Arkansas.
129. Mason, S.J., 2002, Semiconductor manufacturing: an overview and current research, in Anahuac University's Tercer Congreso Internacional de Ingenieria Anahuac, Mexico City, Mexico.
130. Mason, S.J., Wessels, C.*, 2002, State of the Art Static and Dynamic Modeling Survey, Seagate Technologies, Minneapolis, Minnesota.
131. Fowler, J.W., Carlyle, W.M., Runger, G., Gel, E., Mason, S.J., Rose, O., 2001, A new approach for scheduling semiconductor wafer fabs, Semiconductor Fabtech, 15th Edition, 39-41.
132. Fowler, J.W., Mason, S.J., 2001, The need for planning and scheduling in wafer fab, in GINTIC Institute of Manufacturing Technology's Maximizing Output in Wafer Fab through Advanced Simulation and Planning/Scheduling Seminar, Singapore.
133. Fowler, J.W., Mason, S.J., 2001, The relationship between cycle time and capacity, Chartered Semiconductor Seminar, Singapore.
134. Krishnaswamy, S., Mason, S.J., 2001, Framework for Planning, Scheduling and Dispatch in Semiconductor Manufacturing, INFORMS International Annual Meeting, Maui, Hawaii.
135. Mason, S.J., Fowler, J.W., 2001, Planning and scheduling in wafer fab, in GINTIC Institute of Manufacturing Technology's Maximizing Output in Wafer Fab through Advanced Simulation and Planning/Scheduling Seminar, Singapore.
136. Mason, S.J., Fowler, J.W., Carlyle, W.M., 2001, Scheduling of Semiconductor Wafer Fabrication Facilities, INFORMS International Annual Meeting, Maui, Hawaii.
137. Fowler, J.W., Hogg, G.L., Mason, S.J., 1999, Workload Control in the Semiconductor Industry, INFORMS Annual Meeting, Philadelphia, Pennsylvania.
138. Mason, S.J., Galaz, E., 1998, Evaluation of a Compound Dispatch Rule in a Semiconductor Fab, INFORMS Annual Meeting, Seattle, Washington.
139. Mason, S.J., Krishnaswamy, S., Potti, K., 1997, Modeling and Simulation at AMD, INFORMS Annual Meeting, Dallas, Texas.

* Student co-author

Sponsored Research Grants (\$6.0M total)

Clemson University

1. Savannah River National Laboratory, Tritium Supply Chain Modeling and Analysis, Mason (50%), Ferrell (50%), 5/15/17-9/30/19, \$341,744
2. BMW, Using Supply Chain Data Analytics to Improve Effectiveness of BMW's MRP System, Mason (100%), 5/15/17-12/31/17, \$58,439
3. South Carolina Department of Commerce, South Carolina Rapid Innovation Laboratory, Mears (50%), Mason (10%), Summers (10%), Mocko (10%), McClendon (10%), McGregor (10%), 2/8/17-8/17/17, \$200,000
4. South Carolina Research Authority, Transportation Database Decision Support Tool, Mason (100%), 8/15/16/5/15/17, \$53,836
5. Air Force Office of Scientific Research, Grid computing laboratory for integrative behavioral and optimization research, Smith (25%), Eksioglu (25%), Mason (25%), Riggs (25%), 7/1/16-6/30/18, \$157,654
6. Risk Engineering and System Analytics Center, Assessing Supply Chain Risk with a Contingent Business Interruption Insurance Coverage Lens, Mason (100%), 3/15/16-3/15/17, \$106,348
7. Center for Excellence in Logistics and Distribution, CELDi: Simulation Modeling and Analysis at Glen Raven Custom Fabrics, Mason (100%), 9/15/15-9/30/16, \$99,695
8. South Carolina Research Authority, Tire Loading and Unloading Process Improvement, Mason (50%), Neyens (50%), 8/15/15-5/15/16, \$47,990
9. Michelin, Analysis of Multi-Product Load Combinations in Trailers, Mason (50%), Neyens (50%), 7/15/15-9/30/15, \$17,433
10. Savannah River National Laboratory, Tritium Supply Chain Modeling and Analysis, Mason (50%), Ferrell (50%), 3/18/15-3/17/18, \$308,970
11. Center for Excellence in Logistics and Distribution, CELDi: Simulation Modeling and Analysis at Glen Raven Custom Fabrics, Mason (50%), Taaffe (50%), 5/15/14-5/15/15, \$108,641
12. Savannah River National Laboratory, SRNS SCM Asset Management Operational Improvements, Mason (100%), 4/23/14-7/23/15, \$158,100
13. Center for Excellence in Logistics and Distribution, CDP: Identifying Fraudulent Behaviors in Logistics Systems, Mason (50%), Khademi (50%), 5/15/14-5/15/15, \$35,000
14. Center for Excellence in Logistics and Distribution, CELDi: Scoring the Economic Development Impact of Transportation Infrastructure Projects, Mason (50%), Neyens (50%), 1/1/14-12/31/14, \$65,794
15. BMW, Analytics-Based Exploration of the Manufacturing Value Chain, Mason (100%), 1/1/14-12/31/14, \$25,000
16. Savannah River National Laboratory, SCM Simulator IPS Upgrade, Mason (100%), 10/21/13-11/22/13, \$10,617
17. Center for Excellence in Logistics and Distribution, CELDi: Increasing DC Productivity at Trivantage, Mason (50%), Taaffe (50%), 8/15/13-8/15/14, \$113,770

18. Center for Excellence in Logistics and Distribution, CELDi: Modeling and Analysis of Warping, Weaving, and Warehouse Operations at Glen Raven, Mason (50%), Taafe (50%), 5/15/13-5/15/14, \$99,594
19. National Science Foundation, Collaborative Research: Center for Excellence in Logistics and Distribution, Phase II, Ferrell (90%), Mason (10%), 1/1/13-12/31/17, \$199,996
20. Fiatech, Predictive Performance Indicators Phase II, Mason (50%), Ferrell (50%), 1/1/13-8/15/13, \$40,000
21. Savannah River National Laboratory, SCM Inventory/Warehouse Analysis, Mason (100%), 10/10/12-8/15/13, \$112,501
22. Air Force Institute of Technology, F-22 Dynamic Scheduling Tool Implementation, Mason (100%), 1/1/13-12/31/13, \$105,230
23. CDM Smith, South Carolina Statewide Transportation Plan Support, Mason (100%), 7/1/12-12/31/13, \$42,000
24. Fiatech, Predictive Performance Indicators, Mason (50%), Ferrell (50%), 5/15/12-12/31/12, \$40,000
25. Center for Excellence in Logistics and Distribution, Economic Impact Study Update, Mason (50%), Ferrell (50%), 5/15/12-5/15/13, \$55,000
26. Center for Excellence in Logistics and Distribution, Modeling Support for Glen Raven Fabric Operations, Mason (50%), Taafe (50%), 5/15/12-5/15/13, \$74,988
27. Center for Excellence in Logistics and Distribution, Process Flow Analysis for Tri Vantage, Mason (50%), Taafe (50%), 5/15/12-5/15/13, \$74,776
28. ESEN, Creation and Delivery of Undergraduate Logistics Network Design Course for ESEN, Mason (100%), 2/15/12-8/31/12, \$5,950
29. National Science Foundation, F-22 Dynamic Scheduling Assessment and Tool Development, Mason (95%), Kurz (5%), 12/1/11-12/31/12, \$74,683
30. Glen Raven, Process Flow Analysis for Twisted Yarn Manufacturing, Mason (67%), Taafe (33%), 9/1/11-1/31/12, \$24,816
31. New Carolina, A Strategic Mapping of the Nuclear Supply Chain, Mason (50%), Ferrell (50%), 8/1/11-12/31/11, \$35,000
32. The Boeing Company, Supply Chain Risk Study, Mason (100%), 1/1/11-5/15/11, \$10,000

University of Arkansas

1. Department of Homeland Security, National Transportation Security Center of Excellence, Mitigating Dynamic Risk in Multi-Modal Perishable Commodity Supply Chains, Pohl (25%), Bennett (25%), Rainwater (25%), Mason (25%), 7/1/10-12/31/11, \$170,000
2. Center for Innovation in Healthcare Logistics, Characterizing the Home Health Medical Equipment Supply Chain, Bennett (50%), Mason (50%), 5/16/2010-5/15/2012, \$116,868
3. National Science Foundation, Ensuring Continuity of Care: A Quantification of Risk in the Healthcare Supply Chain, Mason (17%), Pohl (16%), Root (16%), Sir-Missouri (24%), Taafe-Clemson (27%), 8/15/09-12/31/10, \$150,000
4. Mack Blackwell Transportation Center, Network Design Analysis for Special Needs Student Services, Mason (50%), Pohl (50%), 7/1/09-6/30/10, \$100,000

5. Center for Excellence in Logistics and Distribution, Service Level Optimization, Root (50%), Mason (50%), 5/16/09-5/15/10, \$50,000
6. University of Arkansas, Honors College Undergraduate Research Grant-Elizabeth McCallion, Mason, 01/01/09-11/01/09, \$3,900
7. University of Arkansas, Honors College Undergraduate Research Grant-Rachel Townsley, Mason, 01/01/09-11/01/09, \$3,900
8. Department of Homeland Security, National Transportation Security Center of Excellence, Designing Resilient and Sustainable Supply Chains Networks, Pohl (47%), Mason (47%), Rainwater (6%), 1/1/2009-6/30/2011, \$225,000
9. Arkansas Department of Higher Education, SURF: Optimizing Piped Water Routing and Decentralized Water Unit Locations in Rural Areas, Mason, 1/1/2009-10/31/2009, \$4,320
10. National Science Foundation, Collaborative Research: CELDi Renewal, Meller (70%), Mason (10%), Pohl (10%), Root (10%), 6/1/08-7/31/13, \$75,000
11. Mack Blackwell Transportation Center, Improving Forced Transfer and Special Needs Busing in Rural Public Schools, Mason (50%), Pohl (50%), 7/1/08-6/30/09, \$79,760
12. Center for Engineering Logistics and Distribution, Assessment of Vendor Contract Impacts on Retail Logistics, Mason (34%), Meller (33%), Root (33%), 5/14/08-5/17/09, \$50,000
13. Center for Innovation in Healthcare Logistics, Unit and Dose Packaging Systems Analysis, Meller (34%), Mason (33%), Root (33%), 01/01/08-12/31/08, \$104,003
14. Arkansas Department of Higher Education, SURF: Examination of the Impact of Binning on Customer Demand Satisfaction and Profit Maximization in the Semiconductor Industry, Mason, 01/01/08-10/31/08, \$4,320
15. National Science Foundation, Collaborative Research: A TIE Research Program on E-Design for Design for Supply Chain, Mason, 08/01/07-07/31/09, \$50,364
16. Center for Engineering Logistics and Distribution, Improving Retail Logistics through an Examination of Merchandise Flow and Space Planning, Mason (50%), Meller (50%), 05/14/07-05/13/08, \$50,000
17. Center for Engineering Logistics and Distribution, CELDi Affiliate Membership, ABF Freight, Meller (50%), Mason (50%), 01/01/07-12/31/07, \$5,000
18. Center for Engineering Logistics and Distribution, CELDi Membership, Sam's Club, Meller (50%), Mason (50%), 01/01/07-12/31/07, \$5,000
19. Arkansas Department of Higher Education, SURF: Focused Research in Public School Transportation, Mason, 01/01/07-10/31/07, \$4,320
20. National Science Foundation, Research Experience for Teachers, Mason, 07/03/06-12/31/06, \$10,000
21. Mack Blackwell Transportation Center, Routing Models for Rural Transportation Networks with Time-Varying Constraints, Mason (34%), Meller (33%), Pohl (33%), 08/14/06-6/30/08, \$98,218
22. Air Force Office of Scientific Research, Scheduling and Coordination of Disaster Relief and Deployment Operations, Mason (50%), Buyurgan (50%), 07/01/06-12/31/08, \$97,154
23. Air Force Office of Scientific Research, Integrated Distribution Planning and Forecasting for Medical Logistics, Mason (50%), Nachtmann (50%), 07/01/06-12/31/08, \$140,151

24. University of Arkansas, Honors College Undergraduate Research Grant-Wenfeng Li, Mason, 01/01/06-11/01/06, \$3,800
25. Air Force Office of Scientific Research, Adaptive Military Logistics Network Design and Optimization, Mason (25%), Chimka (25%), Cassady (25%), Pohl (25%), 01/01/05-08/31/06, \$267,775
26. Center for Engineering Logistics and Distribution, Production and Distribution Systems Optimization, Mason (50%), Cassady (50%), 01/01/04-12/31/06, \$150,000
27. Center for Engineering Logistics and Distribution, Inventory Tracking-Best Practices and Research Needs, Mason, 01/01/04-12/31/04, \$8,458
28. Center for Engineering Logistics and Distribution, Modeling and Analysis of Center Point Distribution Network, Mason (50%), Rossetti (50%), 08/18/03-12/31/04, \$50,000
29. Center for Engineering Logistics and Distribution, Assessment of Radio Frequency Identification at Pine Bluff Arsenal, Chimka (34%), Fant (33%), Mason (33%), 10/01/03-09/30/04, \$50,000
30. Air Force Research Laboratory, Multi-State Selective Maintenance Decisions, Cassady (34%), Mason (33%), Pohl (33%), 08/01/03-01/31/05, \$120,756
31. Center for Engineering Logistics and Distribution, Integration of Supply Chain Warehousing and Transportation Functions, Mason, 01/01/03-12/31/03, \$25,000
32. Air Force Research Laboratory, Commercial Practices as Applied to Total Asset Visibility (TAV), Mason (50%), Chimka (50%), Other Faculty: Greiner, 08/19/02-12/31/03, \$106,359
33. Air Force Research Laboratory, Quantifying the Effect of Commercial Transportation Practices in Military Supply Chains, Rossetti (50%), Mason (50%), 08/19/02-06/30/04, \$94,533
34. Air Force Research Laboratory, Fleet-Level Selective Maintenance and Aircraft Scheduling, Cassady (34%), Mason (33%), Chimka (33%), 08/19/02-06/30/04, \$94,910
35. Mack Blackwell Transportation Center, Integrated Analysis of Transportation and Inventory in Intermodal Distribution Networks, Mason (50%), Kutanoglu (50%), 08/19/02-08/16/03, \$89,305
36. Seagate Technologies, LLC, Static and Dynamic Capacity Modeling Benchmarking, Mason, 06/01/02-09/30/02, \$4,664
37. The Logistics Institute, Integration of Supply Chain Warehousing and Transportation Functions, Mason, 01/01/02-12/31/02, \$25,000
38. Semiconductor Research Corporation, Research Opportunities for Undergraduates: Scheduling Semiconductor Wafer Fabs, Mason, 09/01/01-05/31/03, \$18,000
39. The Logistics Institute, Inventory Modeling of Complex Production Distribution Environments, Mason (50%), Cole (50%), 08/13/01-08/31/02, \$50,000
40. The Logistics Institute, Economic Assessment of Production Downtime, Mason (50%), Nachtmann (50%), 08/13/01-08/31/02, \$50,000
41. Mack Blackwell Transportation Center, Impact of Wireless Data Systems on the Transportation Systems of the Future, Mason (50%), Kutanoglu (50%), 08/01/01-06/30/02, \$32,846
42. The Logistics Institute, Integrating the Warehousing and Trucking Functions of the Supply Chain-A Pull Model, Mason, 01/01/01-12/31/01, \$25,000
43. Semiconductor Research Corporation, Scheduling of Semiconductor Wafer Fabrication Facilities, Mason, 01/01/01-12/31/03, \$220,011

44. The Logistics Institute, Contract Manufacturing's Impact on the Electronic Manufacturing Supply Chain, Cole (50%), Mason (50%), 08/16/00-08/15/01, \$50,000
45. The Logistics Institute, Production Planning Model Validation, Nachtmann (34%), Mason (33%), Fant (33%), 08/16/00-08/15/01, \$50,000

Courses Taught

Clemson University

Title	Semesters
IE 3860 Production Planning and Control	S11, S13
IE 4400 Decision Support Systems in IE	F15
IE 4670 Systems Design II	S14, F16, S17
IE 4860 Scheduling	S15
IE 6860 Scheduling	S15
IE 8030 Engineering Optimization and Applications	F 10-14
IE 8580 Case Studies in Capital Project Supply Chains	Su 11-12, S 13-18
IE 8590 Capstone Design Project	F 11-12, Su 13-18
IE 8860 Operations Research in Production Control	F10, S12, F15

University of Arkansas

Title	Semesters
INEG 3413 Engineering Economic Analysis	S01, F08
INEG 4103 Decision Support in Industrial Engineering	S10
INEG 4513 Electronics Manufacturing Processes	F00, F01
INEG 4904 Industrial Engineering Design	F02-S06, S07, S08, S09, S10
INEG 5613 Optimization Theory I	F03, F04, F06
INEG 5653 Modeling and Analysis of Semiconductor Mfg	F01, S04, S08
INEG 5843 Sequencing and Scheduling I	F02, F06
INEG 6843 Sequencing and Scheduling II	S03, F05

National and International Service

Referee for *Annals of Operations Research*, *Computers and Industrial Engineering*, *Computers and Operations Research*, *Computers in Industry*, *European Journal of Industrial Engineering*, *European Journal of Operational Research*, *IEEE Transactions on Components, Packaging, and Materials Technology*, *IEEE Transactions on Robotics and Automation*, *IEEE Transactions on Semiconductor Manufacturing*, *IIE Transactions on Scheduling and Logistics*, *International Journal of Production Research*, *International Journal of Simulation and Process Modeling*, *Journal of Business Logistics*, *Journal of Scheduling*, *Mathematical and Computer Modeling*, *Naval Research Logistics*, *Omega*, *Operations Research Letters*, *Production Planning and Control*, *Robotics and Computer Integrated Manufacturing*, *Simulation: Transactions of the Society for Modeling and Simulation International*, *Transportation Research Part E: Logistics and Transportation Review*, *International Journal of Planning and Scheduling*

Associate Editor, *IEEE Transactions on Components, Packaging, and Manufacturing Technology*, Manufacturing Section, 2011-2014

Associate Editor, *IEEE Transactions on Electronics Packaging Manufacturing*, 2007-2010

Guest Editor, *European Journal of Industrial Engineering*, Special Issue on 2008 Modeling and Analysis of Semiconductor Manufacturing (MASM) Conference, 2010

Member, Editorial Board, Wright Williams and Kelly's *Applied Cost Modeling*, 2001-2014

Member, International Technology Roadmap for Semiconductors, 2007-2009

Member, Academic Committee, Construction Industry Institute, 2011-2014

Member, CoEE Council of Chairs National Conference Planning Committee, 2011

Institute of Industrial and Systems Engineers

Senior Vice President, Continuing Education, 2015-2018

Technical Vice President, Technical Networking, 2007-2009

President, Operations Research Division, 2005-2006

Industrial and Systems Engineering Research Conference

Session Chair, 2002-2010

Operations Research Track Chair, 2005

Co-Coordinator, New Faculty Colloquium, 2005

Program Co-Chair, 2008

Tutorials Track Co-Chair, 2009

Invited Session Organizer, 2010

Judge, Outstanding Teacher in Operations Research, 2007, 2010

Presenter, Combined Faculty and Doctoral Colloquium, 2014-2016

Presenter, New Faculty Colloquium, 2012, 2013

Presenter, Doctoral Colloquium, 2013

Institute for Operations Research and Management Sciences (INFORMS) Annual Conference

Session Chair, 1999, 2007, 2009, 2010

Panelist, Future Academician Colloquium, 2008

Judge, 2010 Seth Bonder Scholarship for Applied Operations Research in Military Applications

Co-Chair, Invited Sessions, 2011-2013

Co-Chair, Contributed Sessions, 2016

Winter Simulation Conference

Proceedings Co-Editor and Publications Chair, 2008

Session Chair, 2000, 2001

Modeling and Analysis of Semiconductor Manufacturing (MASM) Conference

Program Committee, 2012, 2016

Program Co-Chair, Modeling and Analysis of Semiconductor Manufacturing, 2009

Construction Industry Institute

Academic Committee, 2011-2014

Academic Poster Session Sub-Committee, 2011-2012

Reviewer for Construction Research Conference CII Track, 2012

University Service

Clemson University

Member, Clemson Medallion Selection Committee, 2015

Chair, Provost's 2020Forward Task Force on Recruiting and Retaining Top Faculty, 2015

Member, Subcommittee on Stewardship, Clemson University Foundation, 2012-Present

Member, President's Stewardship Task Force, 2012-Present

Member, South Carolina Center of Economic Excellence Council of Chairs, 2010-2013

Chair, South Carolina Center of Economic Excellence Council of Chairs, 2014-2015

Member, Endowed Chairs and Titled Professors, 2010-Present

University of Arkansas

Member, Program Review Committee, 2006-2009

Member, Faculty Governance Task Force, 2005

Member, Committee on Continuing Education, 2004-2007

Chair, Nominating and Elections Coordinating Committee, 2002-2004

Member, Making the Most of College Task Force, 2003-2005

Summer Intern Mentor, George Washington Carver Project, 2002-2004

Member, Nominating and Elections Coordinating Committee, 2001-2002

College Service

Clemson University

Chair, Hash Endowed Chair in Sustainability Search Committee, 2017-2018

Chair, Associate Dean for Undergraduate Studies Search Committee, 2017

Member, Electrical and Computer Engineering Faculty Search Committee, 2017

Member, Associate Dean for Research and Graduate Studies Search Committee, 2016

Chair, BMW Endowed Chair in Manufacturing Search Committee, 2016-2017

Member, Athletic Council Committee, 2016-2019

Member, Thomas Green Clemson and Young Alumnus Award Committee, 2015-2016

Member, Bob Benmosche Endowed Professorship Search Committee, 2016

Chair, Hash Endowed Chair in Sustainable Development Search Committee, 2014-2015

Member, Sistine Endowed Chair Search Committee, 2014-2015

Member, BMW Endowed Chair in Manufacturing Search Committee, 2015-2016

Member, CES Dean's Advisory Council, 2013-Present

Member, CES Dean's Strategic Planning Committee, 2013-2014

Member, CES Dean's Search Committee, 2012-2013

Member, Alumni Distinguished Professor Selection Committee, 2012

University of Arkansas

Director of Distance Education, College of Engineering, 2009-2010

Chair of Distance Education Task Force, College of Engineering, 2009-2010

Chief Judge, Computing Technology and Applications Track, FEP Honors Research Symposium, 2009

Member, Space Planning Committee, College of Engineering, 2005

Member, Research Council, College of Engineering, 2004-2007

Member, Scholarship Committee, College of Engineering, 2002-2004

Member, Distance Education Committee, College of Engineering, 2003-2005

Member, Academic Programs Committee, College of Engineering, 2006-2009

Departmental Service

Clemson University

Chair, Graduate Studies Committee, 2016-2017

Member, Masters of Engineering Program Committee, 2010-Present

Member, Tenure, Promotion, and Reappointment Committee, Department of Industrial Engineering, 2010-Present

Chair, Post-Tenure Review Committee, 2014-2016

Member, Tenure, Promotion, and Reappointment Committee, Department of Automotive Engineering, 2015-2016

Member, Post-Tenure Review Committee, 2012-2014

Member, Scholarship, Honors, and Awards Committee, 2010-2016

Member, Computing and Resources Committee, 2012-2013

Member, IE Advisory Committee, 2010-Present

Member, Faculty Search Committee, 2011, 2013

Junior Faculty Mentor, 2012-Present

University of Arkansas

Member, Personnel Committee, Department of Industrial Engineering, 2010

Chair, Graduate Studies, Department of Industrial Engineering, 2000-2009

Member, Graduate Studies, Department of Industrial Engineering, 2009-2010

Member, Global Studies, Department of Industrial Engineering, 2007-2010

Member, Operations Management Graduate Committee, 2006-2009

Member, Faculty Search Committee, Department of Industrial Engineering, 2003-2004, 2006-2007

Member, Scholarship, Awards, and Banquet Committee, Department of Industrial Engineering, 2002-2010

Member, Equipment Committee, Department of Industrial Engineering, 2003-2005

Member, Promotion and Tenure Committee, Department of Industrial Engineering, 2005-2010

Post-Doctoral Students Supervised

Clemson University

1. Eghbal Rashidi, Ph.D., Supply Chain Risk through a Contingent Business Interruption Lens, 2016-2017.
2. Harsha Gangammanavar, Ph.D., Modeling and Analysis of the Electrical Grid (with Sandra Eksioğlu), 2015-2016.

Doctoral Students Supervised

Clemson University

1. Sreenath Chalil Madathil, Ph.D., Modeling and Analysis of Remote, Off-grid Microgrids, 2017.
2. Jonathan J. Lowe, Ph.D., Modeling and Analysis of Semiconductor Master Production Planning, 2015.
3. Kasin Ransikarbum, Ph.D., Disaster Management Cycle-Based Integrated Humanitarian Supply Network Management, 2015.
4. Mariah Magagnotti, Ph.D., Modeling Supply Chain Acquisitions, 2014
5. Sherif Masoud, Ph.D., Integrated Models and Algorithms for Automotive Supply Chain Optimization, 2014

University of Arkansas

1. Eray Cakici, Ph.D., Collaborative Decision Making in Supply Chain Scheduling, 2009
2. Jun Jia, Ph.D., Network Design Strategies for Forced Transfer Busing, 2008
3. Mazen Al-Otaibi, Ph.D., Scheduling Disaster Relief Operations, 2008
4. Inamulla Iyob, Ph.D., Evaluation of Multi-Unit Truckload Service Procurement Combinatorial Auctions with Two-Tier Capacity Constraints, 2008
5. Jagadish Jampani, Ph.D., Heuristics for Multiple Orders per Job Scheduling Problems, 2007
6. Ghazi Magableh, Ph.D., A Dynamic Replenishment System (DRS) for Integrating Supply Chain Warehousing and Transportation Functions, 2004
7. Peng Qu, Ph.D., Multiple Orders per Job Scheduling Problems, 2004

Master's Students Supervised

Clemson University

1. Shasha Wang, M.S.I.E., Integrated Batching and Lot Streaming with Variable Sublots and Sequence-Dependent Setups in a Two-stage Hybrid Flow Shop, 2015.
2. Site Wang, M.S.I.E., A Metaheuristic for the Electric Vehicle Routing Problem with Recharging Stations and Time Windows, 2015.

3. Navid Matin Moghaddam, M.S.I.E., The Partially Rechargeable Electric Vehicle Routing Problem with Time Windows and Capacitated Charging Stations, 2015.
4. Sreenath Chalil Madathil, M.S.I.E., Improved Photolithography Scheduling in Semiconductor Manufacturing, 2013.
5. Chirag Ojha, M.S.I.E., An Optimization Model for Class Scheduling at a Dance Studio, 2013.
6. Behzad Nemati, M.S.I.E., A New Metaheuristic Algorithm Motivated by the Rooting Phenomena in Plants, 2012.

University of Arkansas

1. Behrooz Kamali, M.S.I.E., Special Needs Student Busing, 2010.
2. Willie Montgomery III, M.S.I.E., Military Troop Leave Scheduling During Wartime, 2009.
3. Jennifer A. Ferguson, M.S.I.E., Analysis of Circuit Routing for Forced Transfer Busing, 2008.
4. Stephenson Sharp, M.S.I.E., Multi-Objective Multiple Orders per Job Scheduling on Identical, Parallel Machines, 2008.
5. Yasin Unlu, M.S.I.E., Evaluation of Mixed Integer Programming Formulations for Non-Preemptive Parallel Machine Scheduling Problems, 2008.
6. Behlul Saka, M.S.I.E., Dynamic Assignment and Scheduling for Less than Truckload Trucking, 2007.
7. K. John Sophabmixay, M.S.I.E., Strategic Optimization of a Distribution Network with Intermediate Consolidation Centers, 2007.
8. Joo Hyoung Kim, M.S.I.E., Lighter Scheduling in Joint Logistics Over-The-Shore Operations, 2006.
9. Jun Jia, M.S.I.E., Scheduling Jobs Containing Multiple Orders on Identical Parallel Machines, 2006.
10. Eray Cakici, M.S.I.E., Parallel Machine Scheduling Subject to Auxiliary Resource Constraints, 2005.
11. Vishnu Erramilli, M.S.I.E., Multiple Orders per Job Batching and Scheduling Problems, 2005.
12. Chris Wessels, M.S.I.E., Black Boxing Toolgroups in the Shifting Bottleneck Heuristic, 2005.
13. Thomas Yeung, M.S.I.E., Using Real Options Analysis to Value Reoptimization Options in the Shifting Bottleneck Heuristic, 2004.
14. Song Jin, M.S.I.E., A Moving Block Heuristic to Minimize Earliness and Tardiness Costs on Single and Parallel Machines, 2003.
15. Peng Qu, M.S.I.E., Scheduling Jobs Containing Multiple Orders, 2002.
16. P. Mauricio Ribera, M.S.I.E., Global Inventory Visibility's Impact on Trailer Yard Operations, 2002.
17. Tze-Chen Hau, M.S.I.E., Contract Manufacturing in the Electronics Manufacturing Supply Chain, 2001.
18. Kasin Oey, M.S.I.E., Scheduling Batch Processing Machines in Complex Job Shops, 2001.

Undergraduate Honors Theses Directed

University of Arkansas

1. Rachel Townsley, B.S.I.E., Identifying Feasible Schedules for Elementary School Gifted and Talented Education Programs, 2010.
2. Natassia Taylor, B.S.I.E., Industrial Engineering Analysis to Improve Phlebotomy Lab Operations, 2010.
3. Troy C. Long, B.S.I.E., Impact of Traceability Requirements in Single Machine Multiple Orders per Job Scheduling, 2010.
4. Elizabeth M. McCallion, B.S.I.E., An Analysis of Special Needs Student Busing, 2010.
5. Brittany Bogle, B.S.I.E., Focused Research in Public School Transportation, 2009.
6. Wenfeng Li, B.S.I.E., Comparison of Simulation-Based Schedule Generation Methodologies for Semiconductor Manufacturing, 2007.

Master's and Doctoral Committee Service

Clemson University

1. Mary A. Hobbs, M.S.I.E., Evaluating the Impact of Emergency Department Facility Design on Healthcare Workers' Perception of Safety, 2016.
2. Katherina Jurewicz, M.S.I.E., Mapping Natural Gestural Inputs to Traditional Touchscreen Interface Designs, 2016.
3. Nadeepa Wickramage, Ph.D., Time Based Modeling of Storage Facility Operations, 2016.
4. Elizabeth Jamison, M.S.I.E., Evaluating the Implementation of a Workflow Management Setting in a Pharmaceutical Setting Through the Examination of Workarounds and System Vulnerabilities, 2016.
5. Robert Allen, Ph.D., Prediction of Room End Times for a Series of Surgical Cases: Operating Room Management and Decision Making on the Day of Surgery, 2015.
6. Hailey Vaigneur, M.S.I.E., Engineering Hospital Discharge Instructions: An Eye-Tracking Study, 2015.
7. Parastoo Amiri, M.S.I.E., Discrete Particle Swarm Optimization for Flexible Flow Line Scheduling, 2015.
8. Fatmah Almazkoor, Ph.D., Two-Stage Methodology for Managing and Controlling Material Flow Between Multiple Construction Projects, 2014.
9. Kanchala Sudtachat, Ph.D., Strategies to Improve the Efficiency of Emergency Medical Service (EMS) Systems Under More Realistic Conditions, 2014.
10. Susan Robinson, M.S.I.E., Monitoring Hospital Safety Climate Using Control Charts of Non-Harm Events Documented in Reporting Systems, 2014.
11. Alireza Madadi, Ph.D., Supply Chain Network Design: Risk-averse vs. Risk-neutral Decision Making, 2012.
12. Ornurai Sangsawang, Ph.D., Metaheuristics for Hub Location Models, 2011.
13. Thashika Rupasinghe, Ph.D., An Investigation of Metaheuristics Using Path-Relinking on the Quadratic Assignment Problem, 2010.

University of Arkansas

1. Huy Nhiem Nguyen, Ph.D., Truckload Shipment Planning and Procurement, 2014.
2. Hector A. Vergara, Ph.D., Optimization Models and Algorithms for Truckload Relay Network Design, 2012.
3. Hugh R. Medal, Ph.D., Locating and Protecting Facilities Subject to Random Disruptions and Attacks, 2012.
4. Stephanie Marhefka, B.S.I.E., Team Assignment Strategies in Youth Sports: An Initial Investigation, 2011.
5. Leily Farrokhvar, M.S.I.E., Decision Support for Inland Waterways Emergency Response, 2010.
6. Prabuddha Lohani, B.S.I.E., Integrating the Ability to "Top Off" Trailers with the Load Matching and Routing Problem for Small Package Carrier, 2010.
7. Jason Stout, M.S.I.E., A Comparative Analysis of a Genetic Algorithm to the Cova-Church Heuristic for the Purpose of Risk and Vulnerability Assessment in Emergency Planning, 2009.
8. Hugh Medal, M.S.I.E., Multiobjective Simulation Optimization: A Comparison of Methods, 2008.
9. Jia Zhou, Ph.D., Theoretical Errors and Economic Design for Individual Measurements, 2008.
10. Julie Braden, M.S.I.E., The Dial-a-Ride Problem with Flexible Destinations, 2008.
11. Mauricio Guzman, M.S.O.R., A Probabilistic Programming Approach in the Analysis of Social Networks, 2008.
12. Jennifer Pazour, M.S.I.E., A Model to Design a National High-Speed Network for Freight Distribution, 2008.
13. Kelly Sullivan, M.S.I.E., Ranking Sports Teams: A Deterministic Algorithm, 2008.
14. Dinakar Gade, M.S.I.E., Analysis of Unreliable Facilities in Supply Chain Network Design Problems, 2007.
15. Sinan Salman, Ph.D., The Container Loading Problem: A New Approach To The Modeling And Solution Of Three-Dimensional Packing Problems, 2007.
16. Selin Celikkol, M.S.I.E., Cost Driver Selection In Activity-Based Costing Systems, 2007.
17. Oksan Kaya, M.S.I.E., Measuring the Impacts of High Magnitude and Asymmetric Inventory and Demand Error on a Retail Outlet, 2007.
18. Josh McGee, M.S.I.E., Modeling Sortie Generation for Unit Level Logistics Planners, 2007.
19. Shikha Nangia, M.S.I.E., Object-Oriented Transportation Modeling for a Logistics Network Simulation, 2006.
20. Kellie Schneider, M.S.I.E., Comparison of Alternative Fleet-Level Selective Maintenance Models, 2006.
21. Justin Hunter, M.S.I.E., Measuring the Impact of Inaccurate Inventory Information on a Retail Outlet, 2006.
22. David Rieske, M.S.I.E., Measuring the Impact of Demand Inaccuracy on a Retail Outlet, 2006.
23. Thomas Yeung, Ph.D., Optimization Models for Capital Budgeting Under Uncertainty, 2005.
24. V. Kiran Chittoori, M.S.I.E., Inventory Record Inaccuracy: Bullwhip Effect, 2005.
25. Amit Shee, M.S.I.E., Economic Design of Continuous Sampling Plans, 2005.

26. Soncy Thomas, M.S.I.E., Object Oriented Spare Parts Supply Chain Simulation Framework, 2004.
27. Ilyas Iyoob, M.S.I.E., Establishing Maintenance Resource Levels Using Selective Maintenance, 2004.
28. Rajanand Rajagopalan, M.S.I.E., An Improved Selective Maintenance Solution Approach, 2004.
29. Bashyam Ramasami, M.S.I.E., Design of Merge-In-Transit Networks, 2003.
30. Ronald Seng-Toh Ling, M.S.I.E., A Scaling-Based Heuristic for Resource Constrained Project Scheduling Problems, 2002.
31. Andres Felipe Angulo Garrido, M.S.I.E., The Impact of Information Delay and Accuracy in a Vendor-Managed Inventory Supply Chain Under an (R,S) Inventory Policy, 2002.
32. Hintat Chan, M.S.I.E., Object-Oriented Supply Chain Simulation Framework, 2002.
33. Long-Foong Liow, M.S.I.E., Integrated Job Shop Scheduling and Inventory Management, 2001.

Other Universities

1. Antoine Perraudat, M.S., Lot-sizing and scheduling: be sustainable and competitive through energy incentive programs, Ecole Nationale Supérieure des Mines de Saint-Etienne, Jury Member, 2017.
2. Kunlei Lian, Ph.D., Service Consistency in Vehicle Routing, University of Arkansas, 2017.
3. Anvar Abaydulla, Ph.D., Grouping Techniques to Manage Large-Scale Multi-Item Multi-Echelon Inventory Systems, University of Arkansas, 2016.
4. Sebastian Knopp, Ph.D., Complex Job Shop Scheduling with Batching in Semiconductor Manufacturing, Ecole Nationale Supérieure des Mines de Saint-Etienne, Jury Member, 2016.
5. Junzilan Cheng, Ph.D., Mathematical-based approaches for the semiconductor capital equipment installation and qualification scheduling problem, Arizona State University, Committee Member, 2015.
6. Hugues Dubedout, Ph.D., Robust optimization of a supply chain for bulk distribution of liquid gas, Ecole des Mines des Nantes, Jury Member, 2013.
7. Erin Gross Claypool, Ph.D., Assessing and Mitigating Risk in a Design for Supply Chain Problem, University of Pittsburgh, Committee Member, 2011.

Current Student Committees

Clemson University

1. Mowen Lu, Ph.D., Co-Chair of the Committee with S. Eksioglu, expected December 2018.
2. Site Wang, Ph.D., Chair of Committee, expected August 2019.
3. Shasha Wang, Ph.D., Chair of Committee, expected August 2019.
4. Amir Ali Nasrollah, Ph.D., Committee Member, expected May 2017.
5. Josh Margolis, Ph.D., Chair of Committee, expected August 2019.
6. Jon Lonski, Ph.D., Chair of Committee, expected August 2020.
7. Timothy Holtzmann, Ph.D., Committee Member, expected May 2019.

Other Universities

1. Bin Li, Ph.D., University of Arkansas, Committee Member, expected December 2017.

Professional Affiliations

Fellow, Institute of Industrial Engineers (IIE)

Member, Institute for Operations Research and Management Science (INFORMS)

Consulting and Industrial Experience

1. Abbie Gregg, Inc. (Tempe, Arizona)
2. Advanced Micro Devices (Austin, Texas; Sunnyvale, California)
3. Alice Manufacturing (Easley, South Carolina)
4. Anadigics (Warren, New Jersey)
5. Anheuser Busch (St. Louis, Missouri)
6. ArcBest Technologies (Fort Smith, Arkansas)
7. Atmel Semiconductor (North Tyneside, United Kingdom; Colorado Springs, Colorado)
8. Avago Technologies (Fort Collins, Colorado)
9. Carsem (Ipoh, Malaysia)
10. Chartered Semiconductor (Singapore)
11. Cobb-Vantress, Inc. (Siloam Springs, Arkansas)
12. CogniTech Corporation (Salt Lake City, Utah)
13. Continental Tires North America (Charlotte, North Carolina; Rock Hill, South Carolina)
14. Cypress Semiconductor (Bloomington, Minnesota)
15. Dickinson Frozen Foods (Fruitland, Idaho)
16. Elmos Semiconductor AG (Dortmund, Germany)
17. Emcore Corporation (Alhambra, California)
18. FabTime, Inc. (San Luis Obispo, California)
19. FlipChip (Phoenix, Arizona)
20. Fluor Idaho, LLC (Idaho Falls, Idaho)
21. Headway Technologies (Milpitas, California)
22. Institute for Supply Management (Fayetteville, Arkansas)
23. Intel Corporation (Chandler, Arizona)
24. International Rectifier (Newport, Wales, United Kingdom)
25. M/A-COM Technology Solutions (Lowell, Massachusetts)
26. Micrel Semiconductor (San Jose, California)
27. Microchip Technology (Chandler, Arizona)
28. National Security Agency (Fort Meade, Maryland)

29. National Semiconductor (Santa Clara, California; Arlington, Texas; South Portland, Maine; Greenock, Scotland)
30. Peregrine Semiconductor (Sydney, New South Wales, Australia)
31. PerkinElmer Optoelectronics (Santa Clara, California)
32. Polar Semiconductor (Minneapolis, Minnesota)
33. Read-Rite (Milpitas, California)
34. Sematech (Austin, Texas)
35. Skyworks (Mexicali, Mexico)
36. Springdale Public Schools (Springdale, Arkansas)
37. Synaptics (Santa Clara, California)
38. Tower Semiconductor (Migdal Haemek, Israel)
39. Tyson Foods (Fayetteville, Arkansas; Springdale, Arkansas)
40. Wright Williams and Kelly (Pleasanton, California)
41. X-Fab (Lubbock, Texas)