

BURCU B. KESKIN

Associate Professor of Operations Management
Reese Phifer Fellow in Operations/Manufacturing Management

Department of Information Systems, Statistics, and Management Science
Culverhouse College of Commerce and Business Administration
University of Alabama
355 Alston Hall, Tuscaloosa, AL 35487-0226
Phone: (205) 348-8442; Fax: (205) 348-0560
Mobile: (979) 220-7180; E-mail: bkeskin@cba.ua.edu
Webpage: <http://bkeskin.people.ua.edu/>

EDUCATION

Ph.D., Industrial and Systems Engineering, Texas A&M University, 2007.

M.S. in Industrial Engineering, Boğaziçi University, Istanbul, Turkey, 2002.

B.S. in Industrial Engineering, Boğaziçi University, Istanbul, Turkey, 2001.

PROFESSIONAL EXPERIENCE

Associate Professor of Operations Management Fall 2013-Current
Department of Information Systems, Statistics, and Management Science,
University of Alabama.

Reese Phifer Fellow in Operations/Manufacturing Management August 2016-August 2021
Culverhouse College of Commerce,
University of Alabama.

Visiting Professor of Operations Management Fall 2014-Spring 2015
School of Management, Sabanci University, Istanbul, Turkey.

Assistant Professor of Operations Management Fall 2007-Summer 2013
Department of Information Systems, Statistics, and Management Science,
University of Alabama.

Graduate Research and Teaching Assistant Fall 2002-Summer 2007
Department of Industrial and Systems Engineering, Texas A&M University.

Graduate Research and Teaching Assistant Fall 2001-Summer 2002
Department of Industrial Engineering, Boğaziçi University.

RESEARCH and TEACHING INTERESTS

- Supply chain management:
 - Facility location and network design,
 - vehicle routing and transportation,
 - supplier selection, and
 - inventory management.
- Applied optimization, heuristics, and meta-heuristics design.

PUBLICATIONS

Peer-Reviewed Journal Publications*

1. Freeman, N., B. B. Keskin, and İ. Çapar, “Profitable Tour and Event Planning with Proximity and Timing Interactions,” Accepted to appear *European Journal of Operational Research*, September 2017.
2. Freeman, N., J. Mittenenthal, S. Melouk, and B. B. Keskin. “Sourcing Strategies for a Capacitated Firm Subject to Supply and Demand Uncertainty,” Accepted to appear *OMEGA: International Journal of Management Science*, June 2017.
3. Miralinaghi, M., B. B. Keskin, Y. Lou, and Y-T. Hsu, “Refueling Station Location Problem with Traffic Deviation Considering Route choice and Demand Uncertainty,” , *International Journal of Hydrogen Energy*, October 2016.
4. Firouz, M., B. B. Keskin, and S. Melouk, “An Integrated Vendor Selection and Inventory Problem with Multi-Sourcing and Lateral Transshipments,” *OMEGA: The International Journal of Management Science*, available online, 13 September 2016.
5. Çapar, İ., S. Melouk, and B. B. Keskin, “Emergency Response Models: Analysis, Solutions, and Insights,” accepted to appear in *Journal of Operational Research Society*, April 2016.
6. Fontem, B., S. Melouk, B. B. Keskin, and A. N. Bajwa, “A Decomposition-based Heuristic for Stochastic Emergency Routing Problems,” *Expert Systems with Applications*, Volume 59, 4759, October 2016.
7. Miralinaghi, M., B. B. Keskin, Y. Lou, and A. M. Roshandeh, “Capacitated Refueling Station Location Problem with Traffic Deviations Over Multiple Time Periods,” *Networks and Spatial Economics*, appeared online, March 2016.
8. Zhi, J., B. B. Keskin, and S. Melouk, “A Multi-Period Dynamic Location Planning Model for Emergency Response,” *IIE Transactions on Healthcare Systems Engineering*, Volume 5 (4), 211-224, 2015.
9. Çapar, İ., B. B. Keskin, and P. Rubin, “An Improved Formulation for the Patrol Routing Problem,” *Computers and Operations Research*, Volume 59, 1–10, 2015.
10. Keskin, B. B., İ. Çapar, C. Sox, and N. Freeman, “An Integrated Load Planning Algorithm for Outbound Logistics at Webb Wheel,” 2013 INFORMS Wagner Prize finalist, *Interfaces*, 44 (5), 480–497, 2014.
11. Çetinkaya, S., B. B. Keskin, and H. Üster, “Characterization of Facility Assignment Costs for a Location-Inventory Model under Truckload Distribution,” *Journal of Operational Research Society*, 65, 1371–1379, 2014.
12. Li S. R. and B. B. Keskin, “Bi-criteria dynamic location-routing problem for patrol coverage,” *Journal of Operational Research Society*, 65, 1711–1725, 2013.
13. Keskin B. B. and H. Üster, “Production Distribution System Design Problems with Inventory Considerations,” *Naval Research Logistics*, 59 (2), 172–195, March 2012.
14. Keskin B. B., R. Li, D. Steil, and S. Spiller, “Analysis of an Integrated Maximum Covering and Patrol Routing Problem,” *Transportation Research, Part-E*, 48 (1), 215–232, 2012.
15. Melouk, S. and B. B. Keskin, “Team Assignments and Scheduling for the NCAA Basketball Tournament,” *Journal of Operational Research Society*, 63, 620–630, 2012.
16. Melouk, S., B. B. Keskin, C. Armbrester, and M. Anderson, “A Simulation Optimization-Based Decision Support Tool for Mitigating Traffic Congestion,” *Journal of Operational Research Society*, 62, 1971–1982, 2011.
17. Keskin B. B., S. Melouk, and I. Meyer, “A Simulation-Optimization Approach for Integrated Sourcing and Inventory Decisions”, *Computers and Operations Research*, 37(9), 1648–1661, 2010.
18. Keskin B. B., H. Üster, and S. Çetinkaya, “An Integrated Location/Inventory Optimization Approach to a Generalized Vendor Selection Problem,” *Computers and Operations Research*, 37(12), 2182–2191, 2010.

*Underlined are students.

19. Melouk S., U. Raja, and B. B. Keskin, “Managing Resource Allocation and Task Prioritization Decisions in Large Scale Virtual Collaborative Development Projects”, *Information Resources Management Journal*, 23(2), 53–76, 2010.
20. Çetinkaya S., H. Üster, G. Easwaran, and B. B. Keskin, “An Integrated Outbound Logistics Model for Frito-Lay: Coordinating Aggregate Level Production and Distribution Decisions,” INFORMS Wagner Prize Finalist, *Interfaces*, 39(5), 460–475, 2009.
21. Üster H., B. B. Keskin, and S. Çetinkaya, “Integrated Warehouse Location and Inventory Decisions in Three-Tier Distribution Systems,” *IIE Transactions*, 40(8), 718–732, 2008.
22. Keskin B. B. and H. Üster, “Meta-heuristic Approaches with Memory and Evolution for Multi Product Production Distribution System Design Problem,” *European Journal of Operational Research*, 182(2), 663–682, 2007.
23. Keskin B. B. and H. Üster, “A Scatter Search-Based Heuristic to Locate Capacitated Transshipment Points,” *Computers and Operations Research*, 34(10), 3112–3125, 2007.

Manuscripts Under Review

1. Keskin, B. B. and E. Barbee, “GreatDeal and NewChicken Merger: Designing an Omni-channel Supply Chain,” submitted to *2017 CSCMP Case Competition*, July 2017.
2. Zhi, J. and B. B. Keskin, “Simulated Annealing and GRASP Approaches for A Multi-product Production/Distribution System Design Problem,” submitted to *Networks and Spatial Economics*, April 2017.
3. Fontem, B., B. B. Keskin, and S. H. Melouk, “A Joint Surveillance and Patrol Problem for Law Enforcement,” submitted to *International Transactions in Operational Research*, April 2017.
4. Keskin B. B. and C. P. Schmidt, “Optimal Life Cycle Inventory Management for A Periodic Review System,” submitted to *Production and Operations Management*. September 2017.
5. B. B. Keskin, Li, R., and P. McLawhorn, “A Home Health Care Routing Problem With Work Balance Constraints,” submitted to *European Journal of Operational Research*. September 2017.
6. Hur, M., B. B. Keskin, C. P. Schmidt, “End-Of-Life Purchase of Spare Parts for Weapon System,” submitted to *International Journal of Production Economics*, September 2017.

Refereed Book Chapters

1. Keskin B. B. and I. Çapar, “Analytical Models for Integrating Vendor Selection and Inventory Decisions,” Chapter 8 in *The Supply Chain in Manufacturing, Distribution, and Transportation: Modeling, Optimization, and Applications*, CRC Press, Taylor & Francis, 2011.
2. Keskin B. B., “The Utility of Deterministic EOQ Models in Supply Chain Network Design,” in *Handbook of EOQ Inventory Problems: Stochastic and Deterministic Models and Applications*, Springer’s OR/MS International Series Volume 197, April 2013.

Complete Manuscripts

1. Freeman, N., B. B. Keskin, J. Mittenthal, and S. Melouk. “Optimal Use of Concurrent Sourcing when Supply and Demand is Uncertain.” Intended Journal: *Manufacturing and Service Operations Management*. Target submission: August 2017.
2. Freeman, N. K., B. B. Keskin, S. H. Melouk, and J. Mittenthal, “Sourcing Strategies Under Supply and Demand Uncertainty: A Theoretical Treatment,” in preparation for submission to *Management Science*. Target submission: August 2017.
3. Zhi, J. and B. B. Keskin, “Integrated warehouse location and inventory decisions in a Multi-location Newsboy Problem: Models and Motivations,” to be submitted to *European Journal of Operational Research*. Target submission: September 2017.
4. Firouz, M., B. B. Keskin, and L. Li, “A Rental Problem with Unreliable Products,” to be submitted to *Production and Operations Management*. Target submission: October 2017.

Work In Progress

1. Çapar, İ. and B. B. Keskin, “Online and Open Vehicle Routing Problems,” to be submitted to *Operations Research*. Target submission: Fall 2017.
2. Çapar, İ. and B. B. Keskin, “Online Patrol Routing Problem,” to be submitted to *Computers and Operations Research*.
3. Keskin B. B. and J. Mittenthal, “A Capacitated Lot-Sizing Problem for a Two-stage Distribution System,” to be submitted to *International Journal of Production Economics*.
4. Guo, J. and B. B. Keskin, “Designing a Centralized Distribution System for Omni-channel Retailing,” to be submitted to *Manufacturing and Service Operations Management*.
5. Keskin B. B., J. P. Kharoufeh, and S. Melouk, “Analysis of a Disrupted One Supplier, Multi-Retailer Production-Inventory System,” to be submitted to *IIE Transactions*.
6. Yavuz, M. and B. B. Keskin, “Patrol Routing with Alternative Fuel Vehicles,” to be submitted to *Transportation Science*.
7. Keskin, B. B. and N. K. Freeman, “A Review of Disruptions in Sourcing,” to be submitted to *Production and Operations Management*.
8. Keskin B. B. and J. Mittenthal, “Analysis of An Operational Integrated Inventory Routing Problem,” to be submitted to *European Journal of Operational Research*, submission target: Fall 2012.

FUNDED RESEARCH PROPOSALS

Online Optimization Applications in Supply Chain Management

Date: August 2015-May 2016.

Sponsor: Grant Incubator Program, Culverhouse College of Business.

Involvement: single PI.

Funding: \$10,000; one out of eight awards at the college.

Open and Online Vehicle Routing Problems

Date: August 2014-December 2014.

Sponsor: TUBITAK (Turkish National Science Foundation); Program 2221.

Involvement: single PI.

Funding: \$30,000.

A Stochastic Inventory Model For 2-Demand Classes

Date: June 2014-August 2014.

Sponsor: Culverhouse College of Business, Summer Excellence in Research.

Involvement: single PI, advising M. Firouz.

Funding: \$22,500, one out of four awards at the college.

Advanced Patrol Routing Using Online Optimization

Date: June 2013-August 2013.

Sponsor: Culverhouse College of Business, Summer Excellence in Research.

Involvement: single PI, advising İ. Çapar.

Funding: \$22,500, one out of four awards at the college.

Freight Routing Efficiency Problem for Webb Wheel

Date: June 2012-March 2013

Sponsor: Webb Wheel, Cullman, AL.

Involvement: co-PI with Dr. Charles R. Sox (University of Alabama).

Funding: \$25,000. *Outcome:* The decision support tool is implemented by Webb for an annual logistics savings of 4.4%. The paper based on this project is one of the finalist of 2013 Daniel H. Wagner Excellence in Operations Research Prize and appears in *Interfaces* in Spring 2014.

Advanced Patrol Routing with On-Call Response for Resource Management to Increase Highway Public Safety

Date: January 2011-December 2011

Sponsor: University Transportation Center for Alabama (UTCA)

Involvement: single PI

Funding: \$35,000.

Optimal Traffic Resource Allocation and Management

Date: January 2009-December 2009

Sponsor: University Transportation Center for Alabama (UTCA)

Involvement: co-PI with Dr. Allen Parrish (University of Alabama-Computer Science)

Funding: \$99,191.

Evaluation and Logistical Support for the Alabama Ticketing Aggressive Cars and Trucks (TACT) Program

Date: October 2008-September 2009

Sponsor: Alabama Department of Public Safety

Involvement: co-PI with Dr. Allen Parrish (University of Alabama- Computer Science)

Funding: \$54,995.

Development of a Dynamic Traffic Assignment and Simulation Model for Incident and Emergency Management Applications in the Birmingham Region

Development and Testing of a Decision Support Tool for Optimization of EMS Response Time

Date: July 2008-June 2010

Sponsor: University Transportation Center for Alabama (UTCA)

Involvement: co-PI with Dr. Virginia Sisiopiku (University of Alabama-Birmingham) and Dr. Sharif Melouk (University of Alabama)

Funding: \$435,866 (UA's share: \$100,105).

Transit Modeling and Mitigating Traffic Congestion

Date: January 2008-December 2008

Sponsor: University Transportation Center for Alabama (UTCA)

Involvement: co-PI with Dr. Sharif Melouk (University of Alabama) and Dr. Paul Compton (University of Alabama-Huntsville)

Funding: \$148,306 (UA's share: \$70,770).

PRESENTATIONS

Conference Presentations (*Since 2011*)

1. M. Yavuz, B. B. Keskin, and H. Ergin, "Patrol Routing with Hybrid Electric Vehicles," 2017 INFORMS Conference, October 2017, Houston, TX.
2. Zhi, J. and B. B. Keskin, "Simulated Annealing and GRASP Approaches for A Multi-product Production/Distribution System Design Problem," 2017 INFORMS Conference, October 2017, Houston, TX.
3. Guo, J. and B. B. Keskin, "Designing a Centralized Distribution System for Omni-channel Retailing," 2017 INFORMS Conference, October 2017, Houston, TX.
4. Capar, I., N. Freeman, and B. B. Keskin, "Profitable Tour and Event Planning with Proximity and Timing Interactions," 2017 INFORMS Conference, October 2017, Houston, TX.
5. M. Yavuz, B. B. Keskin, and H. Ergin, "Patrol Routing with Hybrid Electric Vehicles," INFORMS Transportation Science and Logistics Society, First Triennial TSL Conference, July 2017, Chicago, IL.
6. Freeman, N., B. B. Keskin, J. Mittenthal, and S. H. Melouk, "The Optimal Use of In-House Production as a Mitigation Strategy for Supply and Demand Uncertainty," POMS, May 2017, Seattle, WA.

7. Guo, J., M. Zhang, and B. Keskin, "A Polyhedral Study on Lot-sizing Problem with Capacity Acquisition," POMS, May 017, Seattle, WA.
8. Miralinaghi, M., B. B. Keskin, Y. Lou, A. M. Roshandeh, "Capacitated Hydrogen Refueling Station Location Problem With Traffic Deviations Over Multiple Time Periods," INFORMS Annual Conference, November 2016, Nashville, TN.
9. Çapar, İ. and B. B. Keskin, "Online Patrol Routing Problem," Sponsored session, INFORMS Annual Conference, November 2016, Nashville, TN.
10. Yavuz, M., B. B. Keskin, C. Harvey, and P. Mitchell, "Greening Patrol Routing Via Extended-range Electric Vehicles," INFORMS Annual Conference, November 2016, Nashville, TN.
11. Firouz, M. and B. B. Keskin, "A Rental Problem With Unreliable Products," INFORMS Annual Conference, November 2016, Nashville, TN.
12. Zhi, J. and B. B. Keskin, "Selective Newsvendor Problem With Dependent Lead Time And Marketing Decisions," INFORMS Annual Conference, November 2016, Nashville, TN.
13. Hur, M., B. B. Keskin, and C. P. Schmidt, "End-of-life Inventory Control of Aircraft Spare Parts Under Performance Based Logistics Environment," INFORMS Annual Conference, November 2016, Nashville, TN.
14. Zhi, J. and B. B. Keskin, "Selective Newsvendor Problem With Dependent Lead Time And Marketing Decisions," DSI Annual Conference, November 2016, Austin, TX.
15. Hur, M., B. B. Keskin, and C. P. Schmidt, "End-of-life Inventory Control of Aircraft Spare Parts Under Performance Based Logistics Environment," DSI Annual Conference, November 2016, Austin, TX.
16. Firouz, M., B. B. Keskin, and L. Li, "Managing Rental Products with Breakdown," POMS Annual Conference, May 2016, Orlando, FL.
17. Çapar, İ. and B. B. Keskin, "Online and Open Vehicle Routing Problem with Split Delivery," Invited session, POMS Annual Conference, May 2016, Orlando, FL.
18. Freeman, N. K, B. B. Keskin, and A. Narayanan, "Downward Substitution as a Mitigation Strategy for Supply and Demand Risk," DSI Annual Conference, November 2015, Seattle, WA.
19. Keskin, B. B. and J. Zhi, "A Multi-period Dynamic Location Planning Model for Emergency Response," Invited session: Joint Session TSL/Public Sector, INFORMS Annual Conference, November 2015, Philadelphia, PA.
20. Zhi, J. and B. B. Keskin, "Selective Newsvendor Problem with Quantity-dependent Leadtime and Marketing Decisions," Invited session, INFORMS Annual Conference, November 2015, Philadelphia, PA.
21. Firouz, M. and B. B. Keskin, "Managing Rental Products with Breakdown," INFORMS Annual Conference, November 2015, Philadelphia, PA.
22. Çapar, İ. and B. B. Keskin, "Online and Open Vehicle Routing Problem with Split Delivery," Sponsored TSL session, INFORMS Annual Conference, November 2015, Philadelphia, PA.
23. Zhi, J. and B. B. Keskin, "Selective Newsvendor Problem with Quantity-dependent Leadtime and Marketing Decisions," POMS Conference, May 2015, Washington, D.C.
24. Çapar, İ. and B. B. Keskin, "Online and Open Vehicle Routing Problem with Split Delivery," POMS Conference, May 2015, Washington, D.C.
25. Keskin, B. B., M. Firouz, and S. Melouk, "An Integrated Supplier Selection and Inventory Problem with Lateral Transshipments," POMS Conference, May 2015, Washington, D.C.
26. Çapar, İ. and B. B. Keskin, "Online and Open Vehicle Routing Problem with Split Delivery," DSI Conference, November 2014, Tampa, FL.
27. Freeman, N., B. B. Keskin, J. Mittenthal, and S. Melouk, "Mitigation Strategies for a Manufacturer Subject to Supply and Demand Risk," DSI Conference, November 2014, Tampa, FL.

28. Zhi, J. and B. B. Keskin, "An Integrated Location and Inventory Problem with Multiple Newsvendors," DSI Conference, November 2014, Tampa, FL.
29. Zhi, J. and B. B. Keskin, "An Integrated Location and Inventory Problem with Multiple Newsvendors," TSL Sponsored Session, INFORMS Conference, November 2014, San Francisco , CA.
30. Keskin, B. B., M. Firouuz, and S. Melouk, "An Integrated Supplier Selection and Inventory Problem with Lateral Transshipments," INFORMS Conference, November 2014, San Francisco , CA.
31. Freeman, N., B. B. Keskin, J. Mittenthal, and S. Melouk, "Mitigation Strategies for a Manufacturer Subject to Supply and Demand Risk," MSOM Sponsored Session, INFORMS Conference, November 2014, San Francisco , CA.
32. Çapar, İ, B. B. Keskin, "Online and Open Vehicle Routing Problem with Split Delivery," TSL Sponsored Session, INFORMS Conference, November 2014, San Francisco , CA.
33. Çapar, İ, B. B. Keskin, and P. Rubin, "An Improved Formulation for the Maximum Coverage Patrol Routing Problem," Public Programs, Service and Needs Sponsored Session, INFORMS Conference, November 2014, San Francisco , CA.
34. Freeman, N. K., J. Mittenthal, B. B. Keskin, and S. Melouk, "Disruption Mitigation Strategies with Supply and Demand Uncertainty," Supply Chain Risk Management Track, POMS Conference, May 2014, Atlanta, GA.
35. Çapar, İ. and B. B. Keskin, "An Online Optimization Approach for Outbound Logistics with Common Carriers," SCM Sponsored Track, POMS Conference, May 2014, Atlanta, GA.
36. Zhi, J. and B. B. Keskin, "An Integrated Location and Inventory Problem with Multiple Newsvendors," SCM Sponsored Track, POMS Conference, May 2014, Atlanta, GA.
37. Fontem, B., B. B. Keskin, and S. Melouk, "A Joint Surveillance and Patrol Problem for Law Enforcement," Purchasing and Supply Management, POMS Conference, May 2014, Atlanta, GA.
38. Firouuz, M., B. B. Keskin, and S. Melouk, "An Integrated Vendor Selection and Inventory Problem with Multi-sourcing and Lateral Transshipments," Purchasing and Supply Management, POMS Conference, May 2014, Atlanta, GA.
39. Keskin, B. B., I. Çapar, C. Sox, and N. Freeman, "An Integrated Load Planning Algorithm for An Outbound Supply Chain," SCM Sponsored Track, DSI Conference, November 2013, Baltimore, MD.
40. Keskin, B. B., I. Çapar, C. Sox, and N. Freeman, "An Integrated Load Planning Algorithm for An Outbound Supply Chain," Wagner Prize Sponsored Session, INFORMS Conference, October 2013, Minneapolis, MN.
41. Fontem B., S. Melouk, and B. B. Keskin, "A Stochastic Team Orienteering Problem with Budget and Time Constraints," Optimization Society Sponsored Session, INFORMS Conference, October 2013, Minneapolis, MN.
42. Zhi J., B. B. Keskin, and S. Melouk, "Two Multi-period Dynamic Relocation Models for Emergency Response," Healthcare Applications Society Sponsored Session, , INFORMS Conference, October 2013, Minneapolis, MN.
43. Keskin, B. B., S. Çetinkaya, and H. Üster, "Characterization of Facility Assignment Costs for a Location-Inventory Model under Truckload Distribution," 26th European Conference on Operations Research, June 2013, Rome, Italy.
44. Fontem B., S. Melouk, and B. B. Keskin, "A Joint Surveillance and Patrol Problem for Law Enforcement," POMS Annual Conference, May 2013, Denver, CO.
45. Çapar I., B. B. Keskin, C. Sox, and N. Freeman, "An Integrated Load Planning Algorithm for An Outbound Supply Chain," POMS Annual Conference, May 2013, Denver, CO.
46. Keskin, B. B., S. Çetinkaya, and H. Üster, "Characterization of Facility Assignment Costs for a Location-Inventory Model under Truckload Distribution," 20th EURO Working Group on Locational Analysis Meeting, April 2013, Ankara, Turkey.

47. Melouk, S. and B. Keskin, "Team Assignments and Scheduling for the NCAA Basketball Tournament," UA Sports Symposium, March 2013, Tuscaloosa, AL.
48. Fontem B., S. Melouk, and B. B. Keskin, "A Joint Surveillance and Patrol Problem for Law Enforcement," Military Applications Society Sponsored Session, INFORMS Conference, November 2012, San Francisco, CA.
49. Keskin, B. B., I. Çapar, C. Sox, and N. Freeman, "An Integrated Load Planning Algorithm for An Outbound Supply Chain," INFORMS Business Analytics Conference, April 2013, San Antonio, TX.
50. Keskin B. B., R. Li, and C. P. Schmidt, "A Multi-period Home Care Scheduling Problem with Work Balance," Healthcare Applications Society Sponsored Session, INFORMS Conference, October 2012, Phoenix, AZ.
51. Fontem B., S. Melouk, and B. B. Keskin, "A Joint Surveillance and Patrol Problem for Law Enforcement," Military Applications Society Sponsored Session, INFORMS Conference, October 2012, Phoenix, AZ.
52. Lou Y., M. Miralinaghi, and B. B. Keskin, "Energy Station Location Problem in a Transportation Network with Autonomous Users," Transportation Science and Logistics Sponsored Session, INFORMS Conference, October 2012, Phoenix, AZ.
53. Çapar I., B. B. Keskin, and S. Melouk, "Integrated Dispatch and Relocation Model to Minimize Emergency Vehicle Response," Healthcare Applications Society Sponsored Session, INFORMS Conference, October 2012, Phoenix, AZ.
54. Zhi J., B. B. Keskin, and S. Melouk, "Network Design for Emergency Response," Healthcare Applications Society Sponsored Session, , INFORMS Conference, October 2012, Phoenix, AZ.
55. Li R., B. B. Keskin, and C. P. Schmidt, "A Home Health Care Routing Problem With Work Balance Constraints," Healthcare Sponsored Session, POMS Conference, April 2012, Chicago, IL.
56. Zhi J., B. B. Keskin, and S. H. Melouk, "A Multi-Period Dynamic Location Planning Model for Emergency Response," POMS Conference, April 2012, Chicago, IL.
57. Li R. and B. B. Keskin, "Bi-criteria Dynamic Location-Routing Problem for Patrol Coverage," TSL Sponsored Session, INFORMS Conference, November 2011, Charlotte, NC.
58. Çapar I., B. B. Keskin, and S. Melouk, "A Planning Tool for Emergency Response," SPPSN/HAS Sponsored Session, INFORMS Conference, November 2011, Charlotte, NC.
59. Bryant P., B. B. Keskin, and S. Melouk, "Multi-echelon Network Design with Direct Shipments and Lateral Transshipments," INFORMS Conference, November 2011, Charlotte, NC.
60. Keskin B. B. and J. Mittenthal, "A Capacitated One Warehouse Multi-Retailer Lot-Sizing Problem," TSL Sponsored Session, INFORMS Conference, November 2011, Charlotte, NC.
61. Li R. and B. B. Keskin, "Bi-criteria Dynamic Location-Routing Problem for Patrol Coverage," DSI Annual Conference, November 2011, Boston, MA.
62. Li R. and B. B. Keskin, "A Multi-objective Dynamic Location-Routing Problem for Patrol Coverage," POMS Conference, April 2011, Reno, NV.
63. Çapar I., B. B. Keskin and S. Melouk, "Emergency Response: Models, Formulations, and Insights," POMS Conference, April 2011, Reno, NV.

Poster Presentations

1. Çapar I., B. B. Keskin, and S. Melouk, "Integrated Dispatch and Relocation Model to Minimize Emergency Vehicle Response," Deep South Chapter, Analytics Research Workshop, Poster Session, April 2013, Tuscaloosa, AL.
2. Zhi J., B. B. Keskin, and S. Melouk, "Network Design for Emergency Response," Deep South Chapter, Analytics Research Workshop, Poster Session, April 2013, Tuscaloosa, AL.

3. Çapar I., B. B. Keskin, and S. Melouk, “Integrated Dispatch and Relocation Model to Minimize Emergency Vehicle Response,” Healthcare Applications Society Sponsored Poster Session, INFORMS Conference, October 2012, Phoenix, AZ.

Invited Seminars

- The University of Alabama, Mathematics Department, October 2016.
- University of Missouri - St. Louis, Logistics & Operations Management Department, March 2106.
- Boğaziçi University, Department of Industrial Engineering, December 2015.
- Maltepe University, Department of Industrial Engineering, December 2015.
- Koç University, Industrial Engineering and Operations Management Joint Seminar, October 2015.
- Özyeğin University, Department of Industrial Engineering, October 2015.
- Sabancı University, Industrial Engineering and Operations Management Joint Seminar, August 2015.
- Alabama Association of Regional Councils Annual Training Conference, October 2008.
- Mississippi State University, Department of Industrial Engineering, January 2008.
- University of Michigan, Department of Industrial Engineering, April 2007.
- University of Massachusetts-Boston, Operations Management, March 2007.
- University of Dayton, Operations Management, March 2007.
- Clemson University, Industrial Engineering Department, February 2007.
- University of Missouri-Rolla, Engineering Management Department, February 2007.
- Penn State Erie, Sam and Irene Black School of Business, January 2007.
- University of Alabama, Department of Information Systems, Statistics, and Management Science, January 2007.
- Texas A&M University, Department of Industrial and Systems Engineering, January 2007.
- Air Force Institute of Technology, Operational Sciences, May 2006.

TEACHING EXPERIENCE

Courses Taught[†]

- OM 417 Logistics Management, Fall 2008 and 2009, Spring 2016, Spring 2017, University of Alabama.
- OM 423 Inventory Management, Spring 2008-2009 and Fall 2007, University of Alabama.
- OM 497/597 International Supply Chain Analytics, Spring Interim 2015 (taught in Ireland/Turkey), Spring Interim 2016 (will be taught in Ireland/Germany), University of Alabama.
- OM 506 Business Spreadsheet Analytics, Spring 2013, 2015, University of Alabama.
- OM 516 Introduction to Operations, Fall 2013, 2015, University of Alabama.
- OM 517 Supply Chain Analysis and Management, Spring 2009-2012, Spring 2014, Spring 2016, Spring 2017, On-campus, online, and E-MBA sections, University of Alabama.
- OM 523 Inventory Management, Fall 2008-2012, 2016, 2017, On-campus and online sections, University of Alabama.
- OM 603 Integer Programming, Fall 2011, 2012, 2017, University of Alabama.
- OM 602 Nonlinear Programming, Fall 2010, 2016, University of Alabama.
- INEN 302 Engineering Economy, Spring 2006, Texas A&M University.

[†]Underlined are courses developed by me.

STUDENTS ADVISED

Ph.D. Students

- Rong (Shirley) Li: “*Routing Models in Public Safety and Health Care.*” Defended on August 21st, 2012. Employed by United Airlines as OR Analyst.
- İbrahim Çapar: “*Online Optimization: Theory and Applications.*” Graduation: August 2016. Employed by Bowling Green State University, Department of Decision Analytics.
- Jianing (Jenny) Zhi: “*Emergency Response Network Design.*” Graduation: August 2016. Employed by Penn State-Erie, Behrend College of Business.
- Mohammad Firouz: “*Supply Chain Design and Analysis Under Disruptions.*” Graduation: August 2016. Employed by General Motors as an OR Analyst.
- Jia Guo: “*Designing Omni-channel Distribution Systems.*” Graduation: August 2019.
- Emily Barbee: “*Joint inventory and location optimization for omni-channels.*” Graduation: TBD.

Ph.D. Committee Involvement

- Nathan Palmer: “*Workforce Supply and Facility Location.*” December 2009. Advisors: Dr. John Mittenthal and Dr. Charles Sox.
- Benjamin Neve: “*Three Articles on Inventory Management.*” August 2011. Advisor: Dr. Charles P. Schmidt.
- Dana Steil: “*A Computing Theoretic Approach to the Creation of Police Patrol Routes Targeting Hotspot Road Segments.*” May 2010. Advisor: Dr. Allen Parrish.
- Amanda K. McCracken: “*Contributions to Joint Monitoring of Location and Scale Parameters: Some Theory and Applications.*” May 2012. Advisor: Dr. Subha Chakraborti.
- Bing Liu: “*Coordination of Pricing, Sourcing and Product Design Decisions in a Supply Chain.*” August 2012. Advisor: Dr. Charles Sox.
- Naeem Bajwa: “*Integrated Operations and Marketing Models.*” August 2013. Advisor: Dr. Charles Sox.
- Belleh Fontem: “*Simulation-Optimization: Theory and Applications.*” May 2014. Advisor: Dr. Sharif Melouk.
- Nickolas Freeman: “*Real World Perspectives in Production Scheduling, Surgical Scheduling, and Supply Chain Planning.*” May 2014. Advisor: Dr. Sharif Melouk.
- Huseyin Tunc: “*Replenishment Cycle Inventory Control Policies Under Non-Stationary Stochastic Demand.*” May 2012, Mississippi State University. Advisor: Dr. Burak Eksioglu.
- Paul Rowe: “*Generalized Newsvendor Problems.*” December 2012, Mississippi State University. Advisor: Dr. Burak Eksioglu.
- Caston Sigauke: “*Some Robust Solutions For Strategic Supply Chain Planning Under Uncertainty In The Energy Sector.*” University of Limpopo, Sovenga, South Africa. Expected May 2012. Advisor: Dr. M. A. Lesaoana.

M.Sci. Committee Involvement

- Jianing (Jenny) Zhi, M. Miralinaghi, Kara Ferguson, Tuğçe Martagan (MSU–External committee member), Ivan Meyer, Rong (Shirley) Li, James Malm, Yao Zhou, Mills Carter, Kayla Stanley, Raphael D. Lockett, Andrea Luque, Blake Spitler.

Undergraduate Students

- Pierce McLawhorn, Emerging Scholars Program, “Online Optimization,” Fall 2015-current. Received 2nd place within Emerging Scholars in poster presentations at URCA.
- Cameron Harvey, Faculty Scholar Program, “Patrol Routing,” Fall 2015- current. Received 2nd place, with Patrick Mitchell, within the Culverhouse College of Commerce in poster presentations at URCA.

- Patrick Mitchell, Honors Program, “Patrol Routing,” Fall 2015-Current. Received 2nd place, with Patrick Mitchell, within the Culverhouse College of Commerce in poster presentations at URCA.
- Victoria Loughran, Operations major, Sophomore Honors Program, “Sports Analytics,” advised with Dr. Sharif Melouk, Spring 2013-Fall 2015.
- Logan O’Neil, Mathematics major with a statistics track concentration, Junior University Fellow, “Sports Analytics,” advised with Dr. Sharif Melouk, Spring 2013-Fall 2015.
- Ashley Holmes, senior in MIS, UTCA project on “Transit Modeling and Mitigating Traffic Congestion,” advised with Dr. Sharif Melouk, Summer 2008.
- Brooke McLeod, sophomore in Economics, Computer-Based Honors Program (CBH) project on “Integrated Lot Sizing for a Single-Supplier, Multiple-Retailer Supply Chain Under Asymmetric Information,” Fall 2008.
- Sarah Spiller, sophomore in Finance, CBH Project on “Integrated Lot Sizing for a Single-Supplier, Multiple-Retailer Supply Chain Under Asymmetric Information,” Fall 2008.
- Sarah Spiller, sophomore in Finance, CBH Project on “Optimal Traffic Resource Allocation and Management,” from Spring 2009 to Spring 2011.
- Chris Armbrester, junior in MIS, CBH and UTCA Project on “Transit Modeling and Mitigating Traffic Congestion,” advised with Dr. Sharif Melouk, from Fall 2008 to Spring 2010.
- Ivan Meyer, senior in OM, CBH Project on “Simulation-Optimization Approach for the Vendor Selection Problem for Effective Supply Chain Management ,” advised with Dr. Sharif Melouk, from Fall 2008 to Spring 2010.

HONORS AND AWARDS

Research

- 2013 Daniel H. Wagner Paper Competition Finalist for Excellence in Operations Research Practice[‡].
- 2008 Daniel H. Wagner Paper Competition Finalist for Excellence in Operations Research Practice.
- Distinguished Graduate Student Award, Texas A&M University, 2007.
- Transportation Clubs International Scholarship Award, September 2007.
- The James Costello Memorial Scholarship Award, International Transportation Management Association, May 2007.
- NSF Travel Grant for Student Poster Contest, NSF Design, Service, and Manufacturing Grantees and Research Conference, St. Louis, MO, 2006.
- Recipient, Vehbi Koc Scholarship, Boğaziçi University, Istanbul, Turkey, 1997-2001.

Teaching

- 2015 40 Under 40 MBA Professors, Poets and Quants.
- 2013 Culverhouse College of Commerce Board of Visitors Teaching Award.
- The Faculty Bravo Award Nomination[§], MBA Class of 2012, Spring 2012.
- Outstanding Content Expert, College of Continuing Studies, Fall 2010.
- Doctoral Colloquium Participant, INFORMS Conference, San Francisco, CA, 2005.
- Doctoral Colloquium Participant, IIE Research Conference, Atlanta, GA, 2005.
- Graduate Teaching Academy Teaching Certificate, Texas A&M University, 2005.

Service

[‡]This prize recognizes the quality and coherence of the analysis used in practice.

[§]The Faculty Bravo Award, recognizes a faculty member that stimulates strategic thinking, inventive approaches to problem solving, and encourages creative leadership styles.

- Informs Moving Spirit Award for involvement with Junior Faculty Interest Group, INFORMS, October 2013.
- Judith Liebman ‘Moving Spirit’ Award, INFORMS, November 2006.
- Certificate of Appreciation, Texas A&M University Student Chapter of INFORMS, 2006.
- Member, Phi Kappa Phi Honor Society, 2003-2005.

PROFESSIONAL AFFILIATIONS

- Institute for Operations Research and the Management Sciences (INFORMS).
 - INFORMS Manufacturing and Service Operations Management Society (MSOM).
 - INFORMS Transportation Science and Logistics Society (TSL).
 - INFORMS Women in OR/MS (WORMS).
 - INFORMS Location Analysis section.
- Institute of Industrial Engineers (IIE).
- Production and Operations Management Society (POMS).
- Decision Sciences Institute (DSI).
- APICS The Operations Management Association.
- Council of Supply Chain Management Professionals (CSCMP).

SERVICE ACTIVITIES

Internal Service Activities

University-level

- Member, Strategic Planning Council, University of Alabama, September 2015- May 2016.
- Member, Strategic Planning Council, Research Subcommittee, University of Alabama, January 2016- May 2016.
- Member, Strategic Enrollment Council, International Enrollment Subcommittee, March 2016- On-going.
- Chair, International Enrollment, Housing and Transportation Committee, March 2016- On-going.
- Chair, Transportation-Operations Research Working Group, sponsored by ATI, August 2017-On-going.
- Member, Graduate Council, University of Alabama, August 2011- August 2017.
- Chair, Teaching, Research, and Service Awards Committee, Graduate Council, University of Alabama, August 2015- July 2017.
- Member, Honorary Degree Committee, April 2017.

College-level

- Chair, Culverhouse Strategic Planning Committee, University of Alabama, August 2016- February 2017.
- Chair, Scholarship Committee, C&BA, University of Alabama, April 2015- May 2017.
- Member, International Programs, C&BA, Fall 2011-Current.
- Member, International Business Awareness Committee, C&BA, Fall 2010-Spring 2011.
- Member, Strategic Initiative, Missions Committee, C&BA, November 2012-May 2013.
- Member, STEM MBA Admissions Committee, C&BA, Spring 2013-Current.
- Member, AACSB Accreditation Meetings, C&BA, Spring 2013.
- Advisor, MBA SCOM Concentration, Spring 2010-Current.

Department-level

- Member, Research/Scholarship Committee, ISM Department, University of Alabama, September 2015-Current.
- Member, Teaching Evaluation Committee, ISM Department, University of Alabama, February 2015-May 2016.
- Member, Statistics Faculty Search, University of Alabama, July 2017-February 2018.
- Member, Department Head Search Committee, University of Alabama, December 2016-March 2017.
- Member, OM Faculty Search, University of Alabama, July 2014- February 2015.
- Chair, OM Faculty Search, University of Alabama, July 2012- February 2013.
- Co-chair, The University of Alabama Business Analytics Symposium 2012-2016.
- Member, Business Analytics Degree Programs, ISM Department, Fall 2014-Current.
- Member, Statistics Faculty Search, University of Alabama, Summer 2012- February 2013.
- Member, OM Ph.D. Admissions Committee, Fall 2008-Current.

Others

- Advisor, MBA SCOM Concentration, Spring 2010-Current.
- Advisor, INFORMS Student Chapter, University of Alabama, Fall 2007-Spring 2016.
- Advisor, MBA Women International Student Chapter, University of Alabama, Spring 2011-Current.
- Advisor, Turkish Student Association, University of Alabama, Fall 2007-Spring 2013.
- Founder and President, Texas A&M Student Chapter of INFORMS, 2004-2006.
- Instructor for LaTeX workshop, Texas A&M Student Chapter of INFORMS , 2006.
- Mentor for Undergraduate Summer Research Grant Program (USRG), 2006.
- Judge for USRG at Texas A&M University, 2006.
- Mentor for Research Education for Teachers (RET), 2006.
- Judge for Student Research Week at Texas A&M University, 2004.

External Service Activities

Executive Board Roles

- Secretary and Treasurer, INFORMS Optimization Society, October 2015- October 2017
- Secretary and Treasurer, INFORMS Optimization Society, elected for a second term, October 2017-October 2019.
- Treasurer and VP of Tuscaloosa Region, INFORMS Deep South Chapter, 2009-Current.
- Doctoral Colloquia Chair, INFORMS, 2015-2017.
- Combined Colloquia Chair, INFORMS, 2016-2018.
- Conference Organization Committee, INFORMS Annual Meeting, Phoenix, AZ, 2018.
- Member, Chapters/Fora Committee, INFORMS, 2008-2016.
- Member, INFORMS Education Committee, 2009-Current.
- Advisor, INFORMS Student Union, 2009-2015.
- Student Chapter Representative, INFORMS Subdivision Council, 2008-2011.
- President, INFORMS Junior Faculty Interest Group, 2010-2011.
- Secretary, INFORMS Junior Faculty Interest Group, 2009-2010.
- Member, Transportation Clubs International Scholarship Committee, 2009.

Conference Organization and Management

- Conference Organization Committee, INFORMS Annual Meeting, Phoenix, AZ, 2018.
- Organization Committee, Deep South Chapter, Analytics Research Workshop, Tuscaloosa, AL, April 2013.
- Conference Organization Committee, Supply Chain Management Track, DSI Annual Meeting, Baltimore, MD, November 2013.
- Conference Organization Committee, INFORMS Annual Meeting, Phoenix, AZ, 2012.
- Student Chapter Representative, INFORMS Subdivision Council, 2008-2011.
- President, INFORMS Junior Faculty Interest Group, 2010-2011.
- Secretary, INFORMS Junior Faculty Interest Group, 2009-2010.
- Member, Transportation Clubs International Scholarship Committee, 2009.
- Moderator, “Distance, Not Distant Education” , JFIG Sponsored Panel, INFORMS Annual Conference, Charlotte, NC, November 2011.
- Panelist, “Managing the Tenure Years”, DSI Doctoral Consortium, Boston, MA, November 2011.
- Cluster Chair, JFIG Panel Sessions, INFORMS Annual Conference, Austin, TX, October 2010.
- Session Chair, MSOM and TSL Sponsored Sessions, INFORMS Annual Conference, Austin, TX, October 2010.
- Conference Committee Member, INFORMS Southern Regional Conference, Huntsville, AL, April 2010.
- Cluster Chair, TSL-sponsored Sessions, INFORMS Southern Regional Conference, Huntsville, AL, April 2010.
- Session Chair, INFORMS Southern Regional Conference, Huntsville, AL, April 2010.
- Panelist, “Academic versus Industrial Career?,” INFORMS Southern Regional Conference, Huntsville, AL, April 2010.
- Conference Committee Member, INFORMS Western Regional Conference, Tempe, AZ, April 2009.
- Session Chair, INFORMS Western Regional Conference, Tempe, AZ, April 2009.
- Moderator, “How to Setup and Sustain a Chapter/Student Chapter,” INFORMS Western Regional Conference, Tempe, AZ, April 2009.
- Panelist, “Opportunities to Shape the Future,” sponsored by Women in OR/MS, INFORMS Annual Conference, Washington D.C., October 2008.
- Panelist, “How to Identify and Interview for a Job”, DSI Doctoral Consortium, Baltimore, MD, November 2008.
- Chair, Invited Session, POMS Conference, San Diego, CA, May 2008.
- Program Chair, INFORMS Southwest Regional Conference, College Station, TX, April 2008.
- Session Chair, Integrated SCM, INFORMS Southwest Regional Conference, College Station, TX, April 2008.
- Cluster Chair, Invited Sessions, INFORMS Southwest Regional Conference, College Station, TX, April 2008.
- Moderator, “How to Setup and Sustain a Chapter/Student Chapter,” INFORMS Southwest Regional Conference, College Station, TX, April 2008.
- Panelist, “The Job Search and The First Year Out,” Fourth Annual Logistics Doctoral Symposium, Tuscaloosa, AL, April 2008.

Judging, Reviewing, Refereeing

- Editorial board:
 - *OMEGA: An International Journal of Management Science*, Associate Editor;

- *INTERFACES, Associate Editor;*
- *Computers and Operations Research;*
- *Surveys in Operations Research and Management Science;*
- *International Journal of Operations Research and Information Systems;* and
- *International Journal of Integrated Supply Management.*
- Referee/Ad-hoc Referee for journals including (in alphabetical order):
 - *Applied Mathematical Modeling,*
 - *Computers and Industrial Engineering,*
 - *Computers and Operations Research,*
 - *Decision Sciences Journal,*
 - *Energy & Environment*
 - *European Journal of Operational Research,*
 - *4ORQ,*
 - *IEEE- Engineering Management,*
 - *IIE Transactions,*
 - *International Journal of Integrated Supply Management,*
 - *International Journal of Physical Distribution and Logistics Management,*
 - *International Journal of Production Research,*
 - *International Journal of Production Economics,*
 - *International Journal of Sustainable Transportation,*
 - *Journal of Heuristics,*
 - *Journal of the Operational Research Society,*
 - *Naval Research Logistics,*
 - *Omega–The International Journal of Management Science*
 - *Operations Research,* and
 - *Production and Operations Management*
 - *Transportation Research Part E: Logistics and Transportation Review*
- Judge, 2017 INFORMS Nicholson Paper Competition.
- Judge, 2017 INFORMS Junior Faculty Interest Group Paper Competition.
- Judge, INFORMS Interactive Sessions: Poster Competition. 2015, 2017.
- Reviewer for National Science Foundation 2011, 2013, 2017.

REFERENCES

Dr. Joseph Geunes

Professor and John and Mary Lib White Systems Integration Chair
University of Arkansas
Department of Industrial Engineering
E-mail: jgeunes@uark.edu
Phone: (479) 575-6042

Dr. Mark Daskin

Clyde W. Johnson Collegiate Professor and Chair
Industrial & Operations Engineering
E-mail: msdaskin@umich.edu
Phone: (734) 764-9410

Dr. Charles R. Sox

Operations, Business Analytics & Information Systems
Carl H. Lindner College of Business
University of Cincinnati
E-mail: soxcr@ucmail.uc.edu
Phone: (513) 556-1531