

Kevin R. Gue

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Education

Ph.D., Industrial Engineering, Georgia Institute of Technology, 1995

M.S., Operations Research, Georgia Institute of Technology, 1992

B.S., Mathematics, U.S. Naval Academy, 1985

Employment

Auburn University: Tim Cook Associate Professor, Department of Industrial & Systems Engineering, 2004–present (Tim Cook Professorship, 2010; Tenured, 2008)

Naval Postgraduate School: Associate Professor (2002–2004); Assistant Professor (1997–2002); Visiting Assistant Professor (1995–1997), Graduate School of Business & Public Policy, 1995–2004 (Tenured, 2002)

Georgia Tech: Ph.D. student, School of Industrial & Systems Engineering, 1990–1995

U.S. Navy: Officer, U.S. Naval Reserve, Atlanta, GA (1990–1995), U.S.S. GUITARRO, SSN-665, San Diego, CA (1987–1990), Training pipeline (1985–1987)

Honors and awards

Industrial & Systems Engineering Professor of the Year, Auburn University, 2014, 2010, 2008.

Tim Cook Professorship in Industrial Engineering, 2010.

Best Applied Paper, *IIE Transactions in Design and Manufacturing*, 2009, for “Aisle Configurations for Unit-Load Warehouses,” with Russell D. Meller.

Technical Innovation in Industrial Engineering Award, Institute of Industrial Engineers, 2009.

Best Paper in Material Handling Award (2006–2007), Material Handling Industry of America; for “Improving the Unit-Load Warehouse,” with Russell D. Meller, 2008.

Second Place, Best Paper in Material Handling (2004–2005), Material Handling Industry of America; for “The Best Shape for a Crossdock,” with John J. Bartholdi, 2006.

The Louis D. Liskin MBA Faculty Award, Naval Postgraduate School, December, 2003.

Outstanding Research Achievement award, Department of Systems Management, Naval Postgraduate School, 1999.

Publications

Journal articles—submitted

1. Erdem Çeven and Kevin R. Gue, “Wave Release Policies for Order Fulfillment Systems with Multiple Customer Classes,” submitted to *International Journal of Production Economics*.
2. Erdem Çeven and Kevin R. Gue, “Wave Release Strategies for Order Fulfillment Systems with Deadlines,” submitted to *Transportation Science*.
3. Kevin R. Gue and Hyun Ho Kim, “An Approximation Model for Sojourn Time Distributions in Acyclic Multi-Server Queueing Networks,” in revision at *Computers & Operations Research*.
4. Rohit Kota, G. Don Taylor, and Kevin R. Gue, “Retrieval Time Performance in Puzzle-Based Storage Systems,” in revision at *Journal of Manufacturing Technology Management*.

Journal articles—forthcoming

1. Kevin R. Gue, Kai Furmans, Züzilia Seibold, and Onur Uludağ, “GridStore: A Puzzle-Based Storage System with Decentralized Control,” forthcoming in *IEEE Transactions on Automation Science and Engineering*.
2. Kristin L. Cullen, Bryan D. Edwards, W. Camron Caspar, and Kevin R. Gue, “Employees’ reaction to change: The role of uncertainty and adaptability,” forthcoming in *Journal of Business and Psychology*.

Journal articles—published

1. Ömer Öztürkoglu, Kevin R. Gue, and Russell D. Meller, “A Constructive Aisle Design Model for Unit-Load Warehouses with Multiple Pickup & Deposit Points,” *European Journal of Operational Research* 236, 382–394, 2014.
2. Kenneth H. Doerr and Kevin R. Gue, “A Performance Metric and Goal Setting Procedure for Order Fulfillment Operations,” *Production and Operations Management* 22:3, 691–710, 2013.
3. Kevin R. Gue and Hyun Ho Kim, “Predicting Departure Times in Multi-Stage Queueing Systems,” *Computers & Operations Research* 39:7, 1734–1744, 2012.
4. Ömer Öztürkoglu, Kevin R. Gue, and Russell D. Meller, “Optimal Unit-Load Warehouse Designs for Single-Command Operations,” *IIE Transactions* 48:6, 459–475, 2012.
5. Kevin R. Gue, Goran Ivanović, and Russell D. Meller, “A Unit-Load Warehouse with Multiple Pickup and Deposit Points and Non-Traditional Aisles,” *Transportation Research E: Logistics and Transportation Review* 48, 795–806, 2012.
6. Marc Schleyer and Kevin R. Gue, “Throughput Time Distribution Analysis for a One-Block Warehouse using Discrete Time Techniques,” *Transportation Research E: Logistics and Transportation Review* 48:3, 652–666, 2012.
7. Burak Aksoy, Harry Cullinan, David Webster, Kevin Gue, Sujith Sukumaran, and Mario Eden, “Woody Biomass and Mill Waste Utilization Opportunities in Alabama: Transportation Cost Minimization, Optimum Facility Location, Economic Feasibility and Impact,” *Journal of Environmental Progress & Sustainable Energy* 30:4, 720–732, 2011.
8. Letitia M. Pohl, Russell D. Meller, and Kevin R. Gue, “Turnover-Based Storage in Non-Traditional Unit-Load Warehouse Designs,” *IIE Transactions* 43:10, 703–720, 2011.

9. Letitia M. Pohl, Russell D. Meller, and Kevin R. Gue, "Optimizing the Fishbone Aisle Design for Dual-Command Operations in a Warehouse," *Naval Research Logistics* 56:5, 389–403, 2009.
10. Letitia M. Pohl, Russell D. Meller, and Kevin R. Gue, "An Analysis of Dual Command Operations in Common Warehouse Designs," *Transportation Research E: Logistics and Transportation Review* 45:3, 367–379, 2009.
11. Kevin R. Gue and Russell D. Meller, "Aisle Configurations for Unit-Load Warehouses," *IIE Transactions* 41:3, 171–182, 2009. Awarded Best Applied Paper of the year.
12. Kevin R. Gue, "Warehouses Without Inventory," *International Commerce Review* 7:2, 125–132, 2007 (invited article).
13. Kevin R. Gue and Byung Soo Kim, "Puzzle-Based Storage Systems," *Naval Research Logistics* 54:5, 556–567, 2007.
14. Kevin R. Gue, Russell D. Meller, and Joseph D. Skufca "The Effects of Pick Density on Order Picking Areas with Narrow Aisles," *IIE Transactions* 38:10, 859–868, 2006.
15. Kevin R. Gue, "Very High Density Storage Systems," *IIE Transactions* 38:1, 93–104, 2006.
16. John J. Bartholdi III and Kevin R. Gue, "The Best Shape for a Crossdock," *Transportation Science* 38:2, 235–244, 2004.
17. Kevin R. Gue, "A Dynamic Distribution Model for Combat Logistics," *Computers & Operations Research* 30, 367–381, 2003.
18. John J. Bartholdi III and Kevin R. Gue, "Reducing Labor Costs in an LTL Crossdocking Terminal," *Operations Research* 48:6, 823–832, 2000.
19. Kevin R. Gue, "The Effects of Trailer Scheduling on the Layout of Freight Terminals," *Transportation Science* 33:4, 419–428, 1999.
20. Kevin R. Gue, George L. Nemhauser, and Mario Padron, "Production Scheduling in Almost Continuous Time," *IIE Transactions* 29:5, 391–398, 1997.

Other Documents

U.S. Material Handling and Logistics Roadmap (Editor-in-Chief), 2014.

Books

Kimberly Ellis, Kevin Gue, René de Koster, Russell Meller, Benoit Montreuil, and Mike Ogle, editors, *Progress in Material Handling Research: 2010*, Material Handling Institute, 2010.

Book chapters

John J. Bartholdi III, Kevin R. Gue, and Keebom Kang "Staging Protocols for Unit-Load Crossdocking," in *Facility Logistics: Approaches and Solutions to Next Generation Challenges*, ed. Maher Lahmar, Auerbach Publications, 153–172, 2007.

Refereed conference papers

1. Kevin R. Gue and Onur Uludağ, "A High-Density Puzzle-Based Order Picking System," *Progress in Material Handling Research: 2012*.
2. Kevin R. Gue, Kai Furmans, and Onur Uludağ, "A High-Density System for Carton Sequencing," Proceedings of the 6th International BVL Symposium on Logistics, Hamburg, Germany, 2012.
3. Kai Furmans, Kevin R. Gue and Zázilia Seibold, "Optimization of Failure Behavior of a Decentralized High-Density 2D Storage System," in Proceedings of the Third International Conference on Dynamics in Logistics, Bremen, Germany, 2012.
4. Kevin R. Gue, Jeffrey S. Smith, and Ozgur Ozmen, "Predicting Results of a Match-Play Golf Tournament with Markov Chains," Proceedings of the 3rd Conference on Mathematics in Sport, Salford Quays, UK, 2011.
5. Kevin R. Gue and Kai Furmans, "Decentralized Control in a Grid-Based Storage System," Proceedings of the 2011 Industrial Engineering Research Conference, eds. T. Doolen and E. Van Aken, 2011.
6. Kai Furmans, Frank Schönung, and Kevin R. Gue, "Plug-and-Work Material Handling Systems," *Progress in Material Handling Research: 2010*, pg. 132–142, 2010.
7. Kevin R. Gue, "The Human-Centric Warehouse," *Progress in Material Handling Research: 2010*, pg. 175–185, 2010.
8. Letitia M. Pohl, Russell D. Meller, and Kevin R. Gue, "A New Aisle Design for Dual-Command Travel," Proceedings of the 2010 Industrial Engineering Research Conference, eds. A. Johnson and J. Miller, 2010.
9. Kota V. Rohit, G. Don Taylor, and Kevin R. Gue, "Retrieval Time Performance in Puzzle-Based Storage Systems," Proceedings of the 2010 Industrial Engineering Research Conference, eds. A. Johnson and J. Miller, 2010.
10. G. Don Taylor and Kevin R. Gue, "Design and Performance of Multi-Level Puzzle-Based Storage Systems," Proceedings of the 2009 International Conference on Value Chain Sustainability, 2009.
11. Kevin R. Gue, Goran Ivanović, and Russell D. Meller, "Improving a Unit-Load Warehouse that has Multiple Pickup & Deposit Points," *Progress in Material Handling Research: 2008*, pg. 234–250, 2008.
12. G. Don Taylor and Kevin R. Gue, "The Effects of Empty Storage Locations in Puzzle-Based Storage Systems," Proceedings of the 2008 Industrial Engineering Research Conference, eds. J. Fowler and S. Mason, 2008.
13. Letitia M. Pohl, Russell D. Meller, and Kevin R. Gue, "Travel Models for Warehouses with Task Interleaving," Proceedings of the 2008 Industrial Engineering Research Conference, eds. J. Fowler and S. Mason, 2008. Awarded Best Paper in the Facility Logistics Track.
14. Letitia M. Pohl, Russell D. Meller, and Kevin R. Gue, "An Evaluation of Two New Warehouse Aisles Designs for Dual-Command Travel," Proceedings of the 2007 Industrial Engineering Research Conference, eds. G. Bayraksan, W. Lin, Y. Son, and R. Wysk, 2007. Awarded Best Paper in the Facility Logistics Track.
15. Kevin R. Gue and Russell D. Meller, "Improving the Unit-Load Warehouse," *Progress in Material Handling Research: 2006*, pg. 187–194, 2006.
16. Kevin R. Gue, "A Layout Algorithm for Very High Density Storage Systems," *Progress in Material Handling Research: 2004*, pg. 133–142, 2004.

17. Kevin R. Gue and Keebom Kang, "Staging Queues in Material Handling and Transportation Systems," *Proceedings of the 2001 Winter Simulation Conference*, 2001.
18. John J. Bartholdi III, Kevin R. Gue, and Keebom Kang, "Staging Freight in a Crossdock," *Proceedings of the International Conference on Industrial Engineering and Production Management*, 2001.
19. Keebom Kang, Kevin R. Gue, and Donald Eaton, "Cycle Time Reduction for Naval Aviation Depots," in *Proceedings of the 1998 Winter Simulation Conference*, 1998.
20. Keebom Kang and Kevin R. Gue, "Sea Based Logistics: Distribution Problems for Future Global Contingencies," in *Proceedings of the 1997 Winter Simulation Conference*, 1997.

Non-refereed conference papers

Erdem Çeven and Kevin Gue, "Wave Release Strategies to Improve Service in Order Fulfillment Systems," *Proceedings of the Acquisition Research Conference*, 2013.

Patents

(Pending) Automated Item Sequencing in a High-Density Grid-Based Material Handling System, Application No. 14079292, filed November 13, 2013.

Invited seminars

1. "Material Handling Legos," INFORMS Student Chapter Seminar Series, Texas A&M University, 2013.
2. "Advances in Distribution Center Design," Pan-American Advanced Studies Institute: Modeling, Simulation and Optimization of Globalized Physical Distribution Systems, Santiago, Chile, 2013.
3. "Plug-and-Work Material Handling," Algorithms, Randomness, and Combinatorics (ARC) and Robots and Intelligent Machines (RIM) Industry Day, Georgia Tech, Atlanta, GA, 2013.
4. "Designing a Worker-Centric Facility," Manual Material Handling Workshop, Promat Show, Chicago, IL, 2013.
5. "Personal Impact Factor," International Material Handling Research Colloquium, Gardanne, France 2012.
6. "Material Flow on a Grid," Institute for Conveying Technology and Logistics, Karlsruhe Institute of Technology, Karlsruhe, Germany, 2012.
7. "GridSequence: A High Density System for Carton Sequencing," 6th International Bundesvereinigung Logistik (BVL) Symposium on Logistics, Hamburg, Germany 2012.
8. "Plug and Work Material Handling," Warehouse Education and Research Council, Atlanta Chapter meeting, December 2011.
9. "Storage Systems Design," Material Handling Teachers' Institute, Auburn, AL 2011.
10. "Plug-and-Work Design," HK Systems Material Handling & Logistics Conference, Park City, UT, 2010.
11. "Fishbones, Herringbones, and Chevrons: New Ways to Design a Warehouse," with Russell Meller, 2010 INFORMS Conference on OR Practice, Orlando FL, 2010.

12. "New Ways to Get From Point A to Point B in a Warehouse," California Polytechnic State University, San Luis Obispo CA, July 2009.
13. "The Aisle Design Problem for Unit-Load Warehouses," Universität Karlsruhe, Karlsruhe, Germany, March 2009.
14. "Surprising Designs for Unit-Load Warehouses, Part 2: Somebody Actually Did This" Warehouse Education and Research Council, Atlanta Chapter meeting, February 2009.
15. "Aisle Designs for Unit-Load Warehouses," Annual Meeting of the Association of Professional Material Handling Consultants, Baltimore, MD, October 2007.
16. "Surprising Designs for Unit-Load Warehouses," National University of Singapore, August 2007.
17. "Surprising Designs for Unit-Load Warehouses," Singapore Management University, August 2007.
18. "Surprising Designs for Unit-Load Warehouses," Web Seminar, hosted by the Warehouse Education and Research Council, January, 2007. Attended by 107 practitioners.
19. "Surprising Designs for Unit-Load Warehouses," Warehouse Education and Research Council, Atlanta Chapter meeting, December 2006.
20. "Surprising Designs for Order Picking Areas," Mississippi State University, October 2006.
21. "New Warehouse Designs," Rack Manufacturer's Institute, Material Handling Industry of America, April, 2006.
22. "Storage Systems Modeling," Material Handling Teacher's Institute, Quebec City, Canada, 2005.
23. "Very High Density Storage Systems", Auburn University, January 2004.
24. "Very High Density Storage Systems", Texas A&M University, January 2004.
25. "Crossdocking in the Retail and Transportation Industries", Institute of Transportation Studies, University of California, Berkeley, October 2001.
26. "Crossdocking in the Retail and Transportation Industries", Purdue University, October 2001.
27. "Sea Based Logistics," DoD Logistics Conference, Monterey, CA. November 17, 1997. (Given with Don Eaton, Keebom Kang, and Kevin Mooney.)
28. "Layout and Design of LTL Freight Terminals," given at the following locations during January–February, 1995: London School of Economics, London, England; Naval Postgraduate School, Monterey, CA; Graduate School of Business, University of Chicago; and The Wharton School, University of Pennsylvania.

Conference talks

1. "A Two-Sided GridPick System," INFORMS National Conference, Minneapolis, MN, 2013.
2. "Optimal Work Release Policies for Order Fulfillment Operations," INFORMS National Conference, Phoenix, AZ, 2012.
3. "GridPick: A Dynamic Pickface for Order Fulfillment," Industrial Engineering Research Conference, Orlando, FL 2012.

4. "Decentralized Control in a Grid-Based Storage System," Industrial Engineering Research Conference, Reno, NV 2011.
5. "Decentralized Control of High Density Storage Systems," INFORMS National Conference, Austin TX, 2010.
6. "Aisle Configurations for Unit-Load Warehouses," with Russell Meller, Industrial Engineering Research Conference, Cancún, Mexico, 2010.
7. "A Storage System with Virtual Aisles," Industrial Engineering Research Conference, Cancún, Mexico, 2010.
8. "A Warehouse Without Aisles," INFORMS National Conference, San Diego CA, 2009.
9. "Dynamic Worker Allocation in Order Fulfillment Systems," INFORMS National Conference, San Diego CA, 2009.
10. "Designing Aisles in a Warehouse: A Tutorial," with Russell Meller, Industrial Engineering Research Conference, Miami FL, May 2009.
11. "The Optimal Shape for a Middle Aisle in a Warehouse with Multiple P&D Points," INFORMS National Conference, Washington DC, 2008.
12. "Aisle Designs for Unit-Load Warehouses with Multiple P&D Points," Industrial Engineering Research Conference, Nashville TN, May 2007.
13. "The Aisle Design Problem for Unit-Load Warehouses," INFORMS National Conference, Pittsburgh, PA, November 2006.
14. "Surprising Designs for Order Picking Areas," Industrial Engineering Research Conference, Orlando, FL, May 2006.
15. "Aisle and Puzzle-Based Storage Systems," INFORMS National Conference, San Francisco, CA, November 2005.
16. "Throughput and Density in Storage Systems," Industrial Engineering Research Conference, Atlanta, GA. May 2005.
17. "A Storage System Based on the 15-Puzzle," INFORMS National Conference, Denver, CO. November, 2004.
18. "Very High Density Storage Systems", INFORMS National Conference, Atlanta, GA. November, 2003.
19. "Choosing Picking Strategies in an Order Fulfillment Center", Industrial Engineering Research Conference, Portland, OR, May 2003.
20. "Staging Queues for Material Handling and Transportation Systems", Winter Simulation Conference, Washington, DC, December 2001.
21. "Staging Freight in a Crossdock", International Conference on Industrial Engineering and Production Management, Quebec City, August 2001.
22. "A Model for Single-Stage Staging in a Crossdock", INFORMS National Conference, Maui, HI. June, 2001.
23. "Shape and Dimension for Crossdocking Facilities," INFORMS National Conference, San Antonio, TX. November, 2000.

24. "Optimizing Picking Waves in a Warehouse," INFORMS National Conference, Salt Lake City, UT. May, 2000.
25. "A Dynamic Distribution Model for Combat Logistics," INFORMS National Conference, Salt Lake City, UT. May, 2000.
26. "RSLES: The Recruit Station Location Evaluation System," Military Operations Research Society Symposium, West Point, NY, June, 1999.
27. "Dynamic Distribution Models for Combat Service Support," Military Operations Research Society Symposium, West Point, NY, June, 1999.
28. "Improving Crossdocking Operations in the LTL Trucking Industry," INFORMS National Conference, Cincinnati, OH. May 4, 1999.
29. "Layouts for Multiple Operations in a Freight Terminal," Congress of the American Society of Mechanical Engineers, Anaheim, CA. November 14, 1998.
30. "Locating Facilities that Compete and Cooperate," INFORMS National Conference, Seattle, WA. October 27, 1998.
31. "Locating Recruiting Stations for Competing Services," Military Operations Research Society Symposium, Monterey, CA. June 24, 1998.
32. "Toward Good Structure in the Layout of Freight Terminals," INFORMS National Conference, Dallas, TX. October 27, 1997.
33. "Reducing the Footprint of a Combat Service Support Element," Military Operations Research Society Symposium, Quantico, VA. June 12, 1997.
34. "The Effects of Scheduling on the Layout of a Freight Terminal," INFORMS National Conference, Atlanta, GA. November 3, 1996.
35. "Balancing Travel Cost and Congestion in an LTL Freight Terminal," INFORMS National Conference, Washington, DC. April 28, 1996.
36. "Improving the Performance of Freight Terminals with Facility Layout," INFORMS National Conference, New Orleans, LA. October 30, 1995.
37. "Assigning Doors in an LTL Freight Terminal", ORSA/TIMS National Conference, Detroit, MI. October 28, 1994.

Selected media coverage

60 Seconds with Kevin Gue, *Modern Materials Handling*, January 2014.

Tease Your Brain to Succeed, *MH&L Magazine*, July 2012.

Looking for a more efficient warehouse layout? *Distribution Center Management*, December 2011.

Supply Chain News: Understanding Retail Distribution Models, *Supply Chain Digest* (www.scdigest.com), Jan. 4, 2011.

Research Executive Summaries: *IE Magazine*, September 2011, March 2009, January 2006.

Moving toward worker-centric warehouses could ease labor woes, *Distribution Center Management*, January 2010.

New warehouse designs may reduce picking costs 20%, *Modern Materials Handling*, September 2006.

Similar articles appeared in print, web, or both at Cisco-Eagle, DC Velocity, Food Production Daily, Industrial Engineer, International Foodservice Distributors Association, Journal of Commerce, Modern Materials Handling, Material Handling Management, Live Science, Newswise, Reliable Plant, Traffic World (July–October 2006).

Profile: Getting to Know Today's Leaders in Distribution, *WERC Sheet*, November 2002.

Sponsored research

Non-Traditional Designs for Order Picking Warehouses (2012–2015, \$455,000, \$255,000 to AU), Principal Investigator with Russell Meller and Alice Smith. Sponsored by the National Science Foundation.

Order Release Strategies to Improve Service in Order Fulfillment Systems (2011–2012, \$84,585), Principal Investigator. Sponsored by the Acquisition Research Program at the Naval Postgraduate School.

Storage Systems with Virtual Aisles (2009–2012, \$289,429), Principal Investigator. Sponsored by the National Science Foundation.

Are Distribution Workers Happy? The State of the Distribution Workforce and What It Means for the Material Handling Industry (2009–2010, \$53,085), Principal Investigator with Bryan D. Edwards. Sponsored by the Material Handling Industry of America.

Dynamic Resource Allocation to Improve Service Performance in Order Fulfillment Systems (2009–2010, \$145,177), Principal investigator. Sponsored by the Office of Naval Research.

Surge Operations for Distribution Centers (2007–2008, \$137,084), Principal investigator. Sponsored by the Office of Naval Research.

A Nationwide Maglev Train Network for Very High-Speed Freight Distribution (2006–2007, \$100,000; \$20,000 to AU), Co-Investigator with Russell Meller. Sponsored by the Mack Blackwell Transportation Center, University of Arkansas.

Designing Distribution Centers for the Service Economy (2006–2009, \$400,000; \$170,000 to AU), Principal Investigator with Russell Meller (U. Arkansas). Sponsored by the National Science Foundation.

Very High Density Storage Systems (2005–2006, \$135,000), Principal investigator. Sponsored by the Office of Naval Research.

Very High Density Storage Systems (2003–2004, \$120,000), Principal investigator. Sponsored by the Office of Naval Research.

Optimal Slotting of Forward Pick Areas for the Defense Distribution Center (2003, \$110,000; \$55,000 to NPS), Co-Investigator with John Bartholdi. Sponsored by the Defense Logistics Agency.

Designing a Sea Based Warehouse (2002–2003, \$100,000), Principal investigator. Sponsored by the Office of Naval Research.

Sea Based Warehousing (2000–2001, \$100,000), Principal investigator. Sponsored by the Office of Naval Research.

Wave Optimization for Rapid Response in a Defense Distribution Depot (1999–2000, \$50,000), Principal investigator. Sponsored by the Defense Logistics Agency.

Distribution Problems in Sea Based Logistics (1998–1999, \$70,000), Principal investigator. Sponsored by Office of Naval Research.

Maintenance Deployment Commodity Planning Tool (1997–1998, \$20,000), Principal investigator. Sponsored by Naval Facilities Engineering Services Center.

Analysis of Recruit Station Location (1997–1999, \$375,000), Co-Investigator with Steve Mehay. Sponsored by The Office of the Secretary of Defense, Directorate for Accession Policy.

Professional Education

Engineering the Warehouse, Georgia Tech Professional Education, Atlanta, GA; three hours, 2013.

Warehouse Planning & Management, Georgia Tech Professional Education, Atlanta, GA; five hours, 2011.

Warehouse Design and Operations, Tech Data Corporation, Dallas, TX; four hours, 2010.

Teaching

Supply Chain Engineering (Undergraduate/Graduate, Auburn)—a course in supply chain network design and analysis, using commercial software and other tools; also includes basics of order fulfillment operations (2013).

Operations Planning & Control (Undergraduate, Auburn)—covers the fundamentals of operations planning, including forecasting, aggregate planning, inventory, scheduling and so on (2005–2013).

Stochastic Operations Research (Undergraduate, Auburn)—a course in basic probability models, including decision trees, Markov chains, and queueing (2008–2014).

Manufacturing Systems Design (Graduate, Auburn)—a course in the design and analysis of manufacturing and service systems. Focuses on analytical and computer models of single-server systems, serial lines, job shops, and order fulfillment systems (2005–2009, 2011–2012).

Operations Management (MBA/EMBA, NPS)—focuses on theoretical foundations and current trends in operations management and business processes, with special emphasis on the role of information in operations (1998–2004, 2011).

Distribution Center Design and Operations (Graduate, Auburn)—covers design and operational problems in warehouses and order fulfillment centers, with particular emphasis on analytical models of material flows, storage policies, and spacial structures (2010).

Senior Design (Undergraduate, Auburn)—the capstone course for industrial engineering majors. Students work with local companies to solve real problems in a semester-length project (2007, 2008, 2010).

Facility Logistics (Undergraduate/Graduate, Auburn)—a special topics course that addresses facilities design, layout models, and an extensive treatment of storage systems and warehouse operations (2005).

Supply Chain Management (MBA, NPS)—covers recent developments in supply chain design and execution, including network design, the role of incentives and metrics, dynamic behavior of supply chains, and managing supplier relationships (2002–2004).

Advising

Postdocs

Marc Schleyer (2009–2010), Karlsruhe Institute of Technology, Germany. Current position: Consultant, 4flow, AG.

Ph.D. students

Gökhan Özden (expected 2014), Aisle Design for Order Picking Warehouses.

Onur Uludağ (expected 2014), GridPick: A High Density Puzzle Based Order Picking System with Decentralized Control.

Erdem Çeven (2013), Work Release Strategies for Order Fulfillment Systems, Current position: seeking postdoc.

Ömer Öztürkoglu (2011), New Warehouse Designs: Angled Aisles and Their Effects on Travel Distance. Current position: Assistant Professor, Yasar University, Turkey.

Hyun Ho Kim (2009), Dynamic Resource Allocation Policies for Order Fulfillment Systems. Current position: Battalion Commander, ROK Army.

Master's students

Gertrude Profio, MISE, Grid-Based Storage Systems: Systems and Games, 2011.

Sujith Sukumaran, M.S., A Feedstock Supply Chain Model to Support Bio-Refineries, 2009.

Hatice Uysal, MISE, The Best Shape for a Container Terminal, 2009.

Goran Ivanović, M.S., Aisle Configurations for Unit-Load Warehouses with Multiple Pickup and Deposit Points, 2007.

Ozge Sumer, MISE, The Distribution of Containerized Imports from Ports to Shelves, 2006.

Arash Dadvand, MISE, Process Improvement at Milliken Laser Cutting Division, 2005.

Satish Subramanian, MISE, RFID and Data Synchronization, 2005.

Advised more than 40 Master's theses at the Naval Postgraduate School.

Service

Memberships

Institute for Industrial Engineers, Senior Member

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

Editorial Duties

Associate Editor, *Naval Research Logistics*, 2007–Present.

Editor-in-Chief, U.S. Material Handling & Logistics Roadmap, 2014.

Co-Editor, *Transportation Science* Special Issue on Facility Logistics, 2013 (ongoing).

Co-Editor, *IIE Transactions* Special Issue on Facility Logistics, 2008.

Ad hoc referee for *Operations Research*, *Management Science*, *Manufacturing & Service Operations Management*, *IIE Transactions*, *Transportation Science*, *Naval Research Logistics*, *Computers & Operations Research*, *Production and Operations Management Journal*, *Transportation Research*, *European Journal of Operational Research*, *Computers & Industrial Engineering*, *OMEGA*, *IEEE Transactions on Robotics & Automation*, *IEEE Transactions on Automation Science & Engineering*.

Leadership

President, College-Industry Council on Material Handling Education, 2006–2007; Past-President, 2008–2009; Liaison to the Board of Governors, Material Handling Industry of America, 2010–2011.

Director at Large, Material Handling Industry of America, 2006–2007.

Co-Founder and Chair, Facility Logistics Special Interest Group of the Transportation Science & Logistics Section of INFORMS. 2005–2006.

Chair, Organizing Committee, International Material Handling Research Colloquium, 2010.

Cluster Chair, Facility Logistics, IERC, Miami, 2009.

Cluster Chair, Transportation Science & Logistics Society, INFORMS National Meeting, Seattle, WA, 2007.

Service to Auburn University

Committee to select professorships in the College of Business (2011), Committee to select Director, Nuclear Power Generation Systems Program (2011); Faculty advisor, Alpha Pi Mu (2010–Present); Faculty search committee (2009); Reviewer, Ralph E. Powe Junior Faculty Enhancement Program (2004).

Service to the Naval Postgraduate School

Academic Associate, Operations & Logistics Management Group (2003); Committees to select interim and permanent Deans of the Graduate School of Business & Public Policy (2001); Chair, OM faculty search committee, (2001); Ad hoc committee to review NPS Faculty By-Laws (2001); Department Chairman Appointment Committee (1998); Core curriculum review committee (1997).

Personal

Married to the former Bonnie Lynn Johnson of Chula Vista, CA since 1985; father of eight children; grandfather of three.