# **ALAN ERERA**

# Associate Chair for Research Manhattan Associates/Dabbiere Chair and Professor H. Milton Stewart School of Industrial and Systems Engineering

# I. EARNED DEGREES

Ph.D.	University of California, Berkeley, 2000	Industrial Engineering & Operations Research
M.S.	University of California, Berkeley, 1996	Industrial Engineering & Operations Research
B.S.Eng.	Princeton University, 1993	Civil Engineering & Operations Research,
		summa cum laude

# **II. EMPLOYMENT HISTORY**

3/2022 – present	Manhattan Associates/Dabbiere Chair, School of Industrial & Systems Engineering, Georgia Institute of Technology.
7/2014 – present	Professor, School of Industrial & Systems Engineering, Georgia Institute of Technology.
12/2019 – present	Associate Chair for Research, School of Industrial & Systems Engineering, Georgia Institute of Technology.
11/2018 – 3/2022	UPS Professor of Logistics, School of Industrial & Systems Engineering, Georgia Institute of Technology.
12/2013 – 11/2019	Associate Chair for Graduate Studies, School of Industrial & Systems Engineering, Georgia Institute of Technology.
11/2013 – 11/2017	Coca-Cola Early Career Professor, School of Industrial & Systems Engineering, Georgia Institute of Technology.
7/2007 – 6/2014	Associate Professor, School of Industrial & Systems Engineering, Georgia Institute of Technology.
1/2001 – 6/2007	Assistant Professor, School of Industrial & Systems Engineering, Georgia Institute of Technology.
5/2002 - 6/2002	Visiting Associate Professor, National University of Singapore.
8/1997 – 7/2000	Dwight D. Eisenhower Transportation Fellow, University of California, Berkeley.
8/1995 – 12/2000	Berkeley Fellow, University of California, Berkeley.
6/1993 — 7/1995	Programmer/Analyst, ALK Associates, Inc., Princeton, NJ

# **III. HONORS AND AWARDS**

### A. INTERNATIONAL OR NATIONAL AWARDS

- 1. Best Paper, INFORMS Transportation Science and Logistics Society, 2024
- 2. Best Application Paper, IISE Transactions Focus Issue on Supply Chain and Logistics, 2022.
- 3. Innovation in Logistics Education Award, Georgia Center for Innovation: Logistics, 2011.
- 4. INFORMS Transportation Science Dissertation Prize Competition, First Prize, 2001.
- 5. Dwight David Eisenhower Fellowship for Graduate Study in Transportation, 1997-2000.
- 6. INFORMS Doctoral Student Colloquium, 1999.
- 7. Phi Beta Kappa, 1993.
- 8. Sigma Xi, 1993.

### **B.** INSTITUTE OR SCHOOL AWARDS

- 1. University of California Transportation Center, Runner-up Student of the Year, 1997.
- 2. The Berkeley Fellowship for Graduate Study, 1995-97, 2000.
- 3. W. Mack Angas Prize, top CEOR departmental honor, Princeton University, 1993.
- 4. John W. Tukey Statistics Award, Princeton University, 1992.

# **IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES**

### A. PUBLISHED BOOKS, PARTS OF BOOKS, AND EDITED VOLUMES

# A2. Refereed Book Chapters

- B1. A.L. Erera and K.R. Smilowitz. "Intermodal Drayage Routing and Scheduling," In P. Ioannou, editor, Intelligent Freight Transportation, Automation and Control Engineering Series, CRC Press, pp. 171-188, 2008. (\*)
- B2. S.S. Malladi, A.L. Erera, and C.C. White, III, "Value of Production Capacity Mobility," In M. Fathi, M. Khakifirooz and P.M. Pardalos, editors, *Optimization in Large Scale Problems: Industry 4.0 and Society 5.0*, Springer Optimization and Its Applications, pp. 319-327, 2019. (\*)
- B3. I. Bakir, A.L. Erera, and M.W.P. Savelsbergh, "Motor Carrier Service Network Design," In T.G. Crainic, M. Gendreau, and B. Gendron, editors, *Network Design with Applications to Transportation and Logistics*, Springer, pp. 427-467, 2021. (\*)

# B. REFEREED PUBLICATIONS AND SUBMITTED ARTICLES

#### **B1. Published and Accepted Journal Articles**

- J1. A.L. Erera and A.L. Kornhauser. "Design and Analysis of Advanced Transit Systems Using Interactive Computer Animation," *Transportation Research Record*, No. 1402, pp. 110-116, 1993.
- J2. A.L. Erera, T. Lawson, and C.F. Daganzo. "A Simple, Generalized Method for Analysis of a Traffic Queue Upstream of a Bottleneck," *Transportation Research Record*, No. 1646, pp. 132-140, 1998.

- J3. C.F. Daganzo and A.L. Erera. "On Planning and Design of Logistics Systems for Uncertain Environments," In M.G. Speranza and P. Stähly, editors, New Trends in Distribution Logistics, volume 480 of Lecture Notes in Economics and Mathematical Systems, Springer-Verlag, 1999.
- J4. I. Adler, A.L. Erera, D.S. Hochbaum, E.V. Olinick. "Baseball, Optimization, and the World Wide Web," *Interfaces*, Volume 32, Number 2, pp. 12-22, 2002.
- J5. A.L. Erera, C.F. Daganzo, and D.J. Lovell. "The Access Control Problem on Capacitated FIFO Networks with Unique O-D Paths is Hard," *Operations Research*, vol. 50, pp. 736-743, 2002.(\*)
- J6. B.M. Lewis, A.L. Erera, and C.C. White, III. "Optimization Approaches for Efficient Container Security Operations at Transshipment Seaports," *Transportation Research Record*, No. 1822, pp. 1-8, 2003.(\*)
- J7. A.L. Erera, J.C. Morales, and M.W.P. Savelsbergh. "Global Intermodal Tank Container Management for the Chemical Industry," *Transportation Research Part E: Logistics and Transportation Review,* Special Issue on Global Supply Chain Management, vol. 41, pp. 551-566, 2005. (\*)
- J8. B.M. Lewis, A.L. Erera, and C.C. White, III. "Impact of Temporary Seaport Closures on Freight Supply Chain Costs," *Transportation Research Record*, No. 1963, pp. 64-70, 2006. (\*)
- J9. A.L Erera, J.C. Morales, and M.W.P. Savelsbergh, "Robust Optimization for Empty Repositioning Problems," *Operations Research*, vol. 57, pp. 468-483, 2009. (\*)
- J10. B. Karacik, A.L. Erera, and M.W.P. Savelsbergh. "A Dynamic Driver Management Scheme for Less-than-Truckload Carriers," *Computers and Operations Research*, Special Issue on Topics in Real-Time Supply Chain Management, vol. 35, pp.3397-3411, 2008. (\*)
- J11. A. Ak and A.L. Erera, "A Paired-Vehicle Recourse Strategy for the Vehicle Routing Problem with Stochastic Demands," *Transportation Science*, vol. 41, pp. 222-237, 2007. (\*)
- J12. R. Namboothiri and A.L. Erera. "Planning Local Container Drayage Operations Given a Port Access Appointment System," *Transportation Research Part E: Logistics and Transportation Review*, vol. 44, pp. 185-202, 2008. (\*)
- J13. S.M. Morris, A.L. Erera, and C.C. White, III. "Impact of Using Designated Secure Rest Facilities on Single Lane Truck Dispatching Productivity," *Transportation Research Record*, No. 2032, pp. 35-42, 2007. (\*)
- J14. A.L. Erera, M. Hewitt, B. Karacik, and M.W.P. Savelsbergh. "Locating Drivers in a Trucking Terminal Network," *Transportation Research Part E: Logistics and Transportation Review*, vol. 45, pp. 988-1005, 2009. (\*)
- J15. M.A. Nowak and A.L. Erera. "Evaluation of an Expanded Satellite-based Mobile Communications Tracking System," *Journal of Transportation Management*, vol. 18, no. 1, pp. 48-65, 2007. (\*)
- J16. A.L. Erera, M.W.P. Savelsbergh, and E. Uyar, "Fixed Routes with Backup Vehicles for Stochastic Vehicle Routing Problems with Time Constraints," *Networks*, vol. 54, pp. 270-283, 2009. (\*)
- J17. A.L Erera, J.C. Morales, and M.W.P. Savelsbergh, "The Vehicle Routing Problem with Stochastic Demands and Duration Constraints," *Transportation Science*, vol. 44, pp. 474-492, 2010. (\*)
- J18. A. Carbajal, A.L. Erera, and M.W.P. Savelsbergh, "Balancing Fleet Size and Repositioning Costs in LTL Trucking," *Annals of Operations Research*, vol. 203, pp. 235-254, 2013. (\*)

- J19. L.M. Ivey, G.J. Rix, S.D. Werner, and A.L. Erera, "Framework for Earthquake Risk Assessment for Container Ports," *Transportation Research Record*, No. 2166, pp. 116-123, 2010. (\*)
- J20. A.R. Bennett and A.L. Erera, "Dynamic Periodic Fixed Appointment Scheduling for Home Health," *IIE Transactions on Health Care Systems Engineering*, vol. 1, pp. 6-19, 2011. (\*)
- J21. G. Zhang, K. Smilowitz, and A.L. Erera, "Dynamic Planning for Urban Drayage Operations," *Transportation Research Part E: Logistics and Transportation Review*, vol. 47, pp. 764-777, 2011. (\*)
- J22. N. Agatz, A.L. Erera, M.W.P. Savelsbergh, and X. Wang, "Dynamic Ride-Sharing: a Simulation Study in Metro Atlanta," *Transportation Research Part B: Methodological*, vol. 45, pp. 1450-1464, 2011. (\*)
- J23. A.L. Erera, M. Hewitt, M.W.P. Savelsbergh, and Y. Zhang, "Creating Schedules and Computing Operating Costs for LTL Load Plans," *Computers and Operations Research*, vol. 40, pp. 691-702, 2013. (\*)
- J24. B.M. Lewis, A.L. Erera, M. Nowak, and C.C. White, III. "Managing Inventory In Global Supply Chains Facing Port-of-Entry Disruption Risks," *Transportation Science*, vol. 47, pp. 162-180, 2013. (\*)
- J25. Z. Lu, X. Han, L. Xi, and A.L. Erera. "A Heuristic for the Quay Crane Scheduling Problem Based on Contiguous Bay Crane Operations," *Computers and Operations Research*, vol. 39, pp. 2915-2928, 2012. (\*)
- J26. A.L. Erera, M. Hewitt, M.W.P. Savelsbergh, and Y. Zhang, "Improved Load Plan Design Through Integer Programming Based Local Search," *Transportation Science*, vol. 47, pp. 412-427, 2013. (\*)
- J27. N. Agatz, A.L. Erera, M.W.P. Savelsbergh, and X. Wang, "Optimization for Dynamic Ride-sharing: A Review," *European Journal on Operational Research*, vol. 223, pp. 295-303, 2012. (\*)
- J28. K. Lindsey, A.L. Erera, and M.W.P. Savelsbergh, "A Pickup and Delivery Problem using Crossdocks and Truckload Lane Rates," *EURO Journal on Transportation and Logistics*, vol. 2, pp. 5-27, 2013. (\*)
- J29. O. Ortiz, A.L. Erera and C.C. White, III, "State Observation Accuracy and Finite-Memory Policy Performance for Partially Observed Markov Decision Processes," *Operations Research Letters*, vol. 41, pp. 477-481, 2013. (\*)
- J30. Y. Chang, A.L. Erera, and C.C. White, III, "A Leader-Follower Partially-observed, Multi-objective Markov Game," *Annals of Operations Research*, vol. 235, pp. 103-128, 2015. (\*)
- J31. Y. Chang, A.L. Erera, and C.C. White, III, "Value of Information for a Leader-Follower Partially Observed Markov Game", *Annals of Operations Research*, vol. 235, pp. 129-153, 2015. (\*)
- J32. R. Teasley, J. Bemley, L. Davis, Y. Chang and A.L. Erera, "A Markov Chain Model for Quantifying Consumer Risk in Food Supply Chains," *Health Systems*, vol. 5, issue 2, pp. 1469-161, 2016.
   (\*)
- J33. Y. Chang, A.L. Erera, C.C. White, III, "Risk Assessment of Deliberate Contamination of Food Production Facilities," *IEEE Transactions on Systems, Man, and Cybernetics*, vol. 47, no. 3, pp. 381-393, 2017. (\*)
- J34. M. Klapp, A.L. Erera, and A. Toriello, "The One-Dimensional Dynamic Dispatch Waves Problem," *Transportation Science*, vol. 52, pp. 402-415, 2018. (\*)
- J35. N. Umang, M. Bierlaire, and A.L. Erera, "Real-time Management of Berth Allocation with Stochastic Arrival and Handling Times," *Journal of Scheduling*, vol. 20, pp. 67-83, 2017. (\*)

- J36. K. Lindsey, A.L. Erera, and M.W.P. Savelsbergh, "Improved Integer Programming Based Neighborhood Search for LTL Load Plan Design," *Transportation Science*, vol. 50, pp. 1360-1379, 2016. (\*)
- J37. X. Wang, N. Agatz, and A.L. Erera, "Stable Matching for Dynamic Ride-sharing Systems, *Transportation Science*, vol. 52, pp. 850-867, 2018. (\*)
- J38. D. Reyes, A.L. Erera, and M.W.P. Savelsbergh, "Complexity of Routing Problems with Release Dates and Deadlines," *European Journal of Operational Research*, vol. 266, pp. 29-34, 2018.
   (\*)
- J39. M. Klapp, A.L. Erera, and A. Toriello, "The Dynamic Dispatch Waves Problem for Same-day Delivery," *European Journal of Operational Research*, vol. 271, pp. 519-534, 2018. (\*)
- J40. N. Boland, I. Bakir, B. Dandurand, and A.L. Erera, "Scenario Set Partitioning Bounds for Multistage Stochastic Programming: A Hierarchy of Bounds and a Partition Sampling Approach," *INFORMS Journal on Computing*, vol. 32, pp. 145-163, 2020. (\*)
- J41. J. Christensen, D. Pacino, and A.L. Erera, "A Rolling Horizon Heuristic for the Stochastic Cargo Mix Problem," *Transportation Research Part E: Logistics and Transportation Review*, vol. 123, pp. 200-220, 2019. (\*)
- J42. S.S. Malladi, A.L. Erera, and C.C. White, III, "A Dynamic Mobile Production Capacity and Inventory Control Problem," *IISE Transactions*, vol. 52, pp. 926-943, 2020. (\*)
- J43. M. Klapp, A.L. Erera, and A. Toriello, "Request Acceptance in Same-day Delivery," *Transportation Research Part E: Logistics and Transportation Review*, 143, 102083, doi.org/10.1016/j.tre.2020.102083, 2020. (\*)
- J44. A. Stroh, A.L. Erera, and A. Toriello, "Tactical Design of Same-day Delivery Systems," Management Science, vol. 68, pp. 3444-3463, 2022. (\*)
  - Winner, INFORMS Transportation Science and Logistics Society Best Paper Award (2024).
- J45. S.S. Malladi, A.L. Erera, and C.C. White, III, "Managing Mobile Production-inventory Systems Influenced by a Modulation Process," *Annals of Operations Research*, vol. 304, pp. 299-330, 2021. (\*)
- J46. R. Khir, A.L. Erera, and A. Toriello, "Two-stage Sort Planning for Express Parcel Delivery," *IISE Transactions*, vol. 53, pp. 1353-1368, 2021 (\*).
  - Winner, Best Application Paper Award, IISE Transactions Focus Issue on Supply Chain and Logistics (2022).
- J47. Y. Yang, Y. Ridouane, N. Boland, A.L. Erera, and M.W.P. Savelsbergh, "Substitution-based Equipment Balancing in Service Networks with Multiple Equipment Types," *European Journal of Operational Research*, vol. 300, pp. 966-978, 2022. (\*)
- J48. I. Herszterg, Y. Ridouane, N. Boland, A.L. Erera, and M.W.P. Savelsbergh, "Near Real-time Loadplan Adjustments for Less-than-Truckload Carriers," *European Journal of Operational Research*, vol. 301, pp. 1021-1034, 2022. (\*)
- J49. D. Banerjee, A.L. Erera, and A. Toriello, "Fleet Sizing and Service Region Partitioning for Same-Day Delivery Systems," *Transportation Science*, vol. 56, pp. 1327-1347, 2022. (\*)
  - Finalist, INFORMS Transportation Science and Logistics Society Best Student Paper Award (2023)
- J50. M. Ulmer, A.L. Erera, and M.W.P. Savelsbergh, "Dynamic Service Area Sizing in Urban Delivery," OR Spectrum, vol. 44, pp. 763-793, 2022. (\*)

- J51. I. Dayarian, A. Rocco, A.L. Erera, and M.W.P. Savelsbergh, "Operations Design for High-velocity Intra-city Package Service," *Transportation Research Part B: Methodological*, vol. 161, pp. 150-168, 2022. (\*)
- J52. R. Khir, A.L Erera, and A. Toriello, "Robust Planning of Sorting Operations in Express Delivery Systems", *European Journal of Operational Research*, vol. 306, pp. 615-631, 2023. (\*)
- J53. S.S. Malladi, A.L. Erera, and C.C. White, III, "Inventory Control with Modulated Demand and a Partially Observed Modulation Process," *Annals of Operations Research*, vol. 321, pp. 343-369, 2023. (\*)
- J54. I. Bakir, A.L. Erera, and M.W.P. Savelsbergh, "A Robust Rolling Horizon Framework for Empty Repositioning," *Transportation Research Part C: Emerging Technologies*, vol. 144, 103903, doi.org/10.1016/j.trc.2022.103903, 2022. (\*)
- J55. R. Auad, A.L. Erera, and M.W.P. Savelsbergh, "Courier Satisfaction in Rapid Delivery Systems using Dynamic Operating Regions," *Omega*, vol. 121, 102917, doi.org/10.1016/j.omega.2023.102917, 2023. (\*)
- J56. D. Banerjee, A.L. Erera, A. Stroh, and A. Toriello, "Who Has Access to E-Commerce and When? Time-Varying Service Regions in Same-Day Delivery," *Transportation Research Part B: Methodological*, vol. 170, pp. 148-168, 2023. (\*)
- J57. L. Greening, M. Dahan, and A.L. Erera, "Lead-Time-Constrained Middle Mile Consolidation Network Design with Fixed Origins and Destinations," *Transportation Research Part B: Methodological*, vol. 174, 102782, doi.org/10.1016/j.trb.2023.102782, 2023. (\*)
- J58. R. Auad, A.L. Erera, and M.W.P. Savelsbergh, "Dynamic Courier Capacity Acquisition in Rapid Delivery Systems: a Deep Q-learning Approach," *Transportation Science*, vol. 58, pp. 67-93, 2024. (\*)
- J59. R. Auad, A.L. Erera, and M.W.P. Saveslbergh, "Capacity Requirements and Demand Management Strategies in Meal Delivery," *EURO Journal on Transportation and Logistics*, vol. 13, 100135, doi.org/10.1016/j.ejtl.2024.100135, 2024.
- J60. R. Ojha and A.L. Erera, "Cross-Dock Trailer Scheduling with Workforce Constraints: A Dynamic Discretization Discovery Approach," published online, *Transportation Science*, doi.org/10.1287/trsc.2023.0406, 2024. (\*)
- J61. D. Banerjee, A.L. Erera, and A. Toriello, "Pricing and Demand Management for Integrated Sameday and Next-day Delivery Systems," published online, *Transportation Science*, doi.org/10.1287/trsc.2023.0381, 2024. (\*)

#### **B2.** Conference Presentation with Proceedings (Refereed)

- C2. A. Erera, R. Grandinetti, and A.L. Kornhauser. "Interactive Design and Real-Time 3-Dimensional Simulation of Personal Rapid Transit Networks," In *Proceedings of the National Conference on Advanced Technologies for Urban Transit*, San Francisco, Aug 1992.
- C3. A.L. Kornhauser, A. Erera, and J.E. Anderson. "Interactive Design, Simulation and Photo-realistic Animation of a Personal Rapid Transit System," In *Advanced Transport Telematics: Proceedings of the 27th International Symposium on Automotive Technology and Automation*, Aachen, Germany, Oct 31-Nov 4, 1994.
- C4. B.M. Lewis, A.L. Erera, and C.C. White, III. "Efficient Container Security Operations at Transshipment Seaports," In *Proceedings of the Inaugural Annual Intelligent Transportation Society (Singapore) Symposium*, Singapore, Sep 5-6, 2002. (\*)

- C5. R. Namboothiri and A.L. Erera. "A Set Partitioning Heuristic for Local Drayage Routing under Time-Dependent Port Delay", In *IEEE SMC 2004 Conference Proceedings*, 2004 IEEE International Conference on Systems, Man and Cybernetics, pp. 3921-3926, The Hague, Netherlands, Oct 2004. (\*)
- C6. R. Namboothiri and A.L. Erera. "A Column Generation Heuristic for Local Drayage Routing Given a Port Access Appointment System", In *Proceedings of the METRANS National Urban Freight Conference*, Long Beach California, Feb 2006. (\*)
- C7. O. Ortiz, A.L. Erera and C. White. "Bounds on the Value of Demand Observability for Inventory Control with Markovian Demand and Unobserved Lost Sales", In *Proceedings of the 2006 MSOM (Manufacturing and Service Operations Management) Conference*, Atlanta, GA, Jun 2006. (\*)
- C8. N. Agatz, A.L. Erera, M.W.P. Savelsbergh, and X. Wang. "Dynamic Ride-sharing: A Simulation Study in Metro Atlanta," In *Procedia – Social and Behavioral Sciences*, vol. 17, papers selected for the 19<sup>th</sup> International Symposium on Transportation and Traffic Theory (36 of 500 submissions selected), 2011. (\*)
- C9. L.M. Ivey, G.J. Rix, S.D. Werner, and A.L. Erera. "Estimating Repair Cost and Downtime Due to Earthquake-Induced Damage at Container Ports," In *GeoRisk 2011: Geotechnical Risk Assessment and Management (GSP 224): Proceedings of the GeoRisk 2011 Conference*, American Society of Civil Engineers, 2011. (\*)
- C10. Y. Zhang and A.L. Erera. "Consequence Assessment for Complex Food Transportation Systems Facing Catastrophic Disruptions," *Homeland Security Affairs*, Supplement 4: Recognized Student White Papers from The DHS Science Conference – Fifth Annual University Network Summit, Article 5, Apr 2012. (\*)
- C11. Y. Chang, Y. Zhang, A.L. Erera, and C.C. White, III. "Vulnerability Assessment of a Food Supply Chain to an Intentional Attack," In *Proceedings of the 2012 IEEE Conference on Technologies* for Homeland Security, pp. 319-324, Waltham, MA, Nov 2012. (\*)
- C12. J. Bemley, R. Teasley, L. Davis, A.L. Erera, and C.C. White, III. "Assessing Consumer Morbidity from Liquid Egg Contamination in Multiple Distribution Channels," In *Proceedings of 2013 Industrial Engineering Research Conference*, IIE Annual Conference, San Juan, Puerto Rico, May 18-22, 2013. (\*)
- C13. X. Han and A.L. Erera. "Berth and Quay Crane Allocation Problems: Dynamic Modeling and Nested Tabu Search," In *Proceedings of the 2<sup>nd</sup> INFORMS TSL Society Workshop—Marine Transportation and Port Logistics*, pp. 7-10, Asilomar, CA, Jun 16-19, 2013. (\*)
- C14. N. Umang, M. Bierlaire, and A.L. Erera. "Pro-active and Reactive Methods to Solve the Berth Allocation Problem with Stochastic Arrival and Handling Times," In *Proceedings of the 2<sup>nd</sup> INFORMS TSL Society Workshop—Marine Transportation and Port Logistics*, pp. 11-15, Asilomar, CA, Jun 16-19, 2013. (\*)
- C15. R. Khir, A.L. Erera, and A. Toriello, "Robust Planning of Sort Operations in Express Parcel Delivery Systems," In *Proceedings of the 2020 IISE Annual Conference and Expo*, pp. 411-416, 2020. (\*)
  - 2<sup>nd</sup> place, *Best Student Paper Award*, IISE Logistics and Supply Chain (LSC) Division, 2020.
- C16. R. Ojha, A.L. Erera, N. Boland, and M. Savelsbergh. "Long-term Inventory-aware Equipment Planning in Service Networks," In *Proceedings of the 2021 IISE Annual Conference and Expo*, pp. 465-470, 2021. (\*)

- Winner, *Best Student Paper Award*, IISE Logistics and Supply Chain (LSC) Division, 2021.
- C17. R. Khir, A.L. Erera, and A. Toriello. "Dynamic Workload Balancing with Limited Adaptability for Facility Logistics," In *Proceedings of the 2022 IISE Annual Conference and Expo*, pp. 1025-1030, 2022. (\*)
  - Winner, *Facilities Design and Planning Track Best Paper Award*, IISE Logistics and Supply Chain (LSC) Division, 2022.
- C18. L. Greening, J. Park, M. Dahan, A.L. Erera, and B. Montreuil. "Middle-mile Consolidation Network Design: Maximizing Profit through Flexible Lead Times," In *Proceedings of the 2023 IISE Annual Conference and Expo*, pp. 1-6, 2023. (\*)

#### **B3. Other Refereed Material**

- O1. A.L. Erera, P. Warier, and M. Savelsbergh. "Operational Support for Regional LTL Carriers," extended abstract, *TRISTAN V: Triennial Symposium on Transportation Analysis*, Le Gosier, Guadeloupe, Jun 13-18, 2004. (\*)
- O2. A.L. Erera, J.C. Morales, and M.W.P. Savelsbergh. "Robust Optimization for Empty Repositioning Problems," extended abstract, *Odysseus 2006: Third International Workshop on Freight Transportation and Logistics*, Altea, Spain, May 23-26, 2006. (\*)
- O3. M.W.P. Savelsbergh, A.L. Erera, and J.C. Morales. "A Robust Optimization Framework for the Vehicle Routing Problem with Uncertain Demands and Duration Constraints," extended abstract, *Odysseus 2006: Third International Workshop on Freight Transportation and Logistics*, Altea, Spain, May 23-26, 2006. (\*)
- O4. A.L. Erera, J. Morales, and M. Savelsbergh. "Robust Duration-Constrained Tours for Vehicle Routing Problems with Stochastic Demands," extended abstract, *TRISTAN VI: Triennial Symposium on Transportation Analysis*, Phuket, Thailand, Jun 10-15, 2007. (\*)
- O5. A.L. Erera, M. Hewitt, M.W.P. Savelsbergh, and Y. Zhang. "Improved Load Plan Design through Integer Programming-Based Local Search," extended abstract, *Odysseus 2009: Fourth International Workshop on Freight Transportation and Logistics*, Cesme, Turkey, May 26-29, 2009. (\*)
- O6. A.L. Erera, M. Hewitt, M.W.P. Savelsbergh, and Y. Zhang. "Refined Execution Cost Estimation for LTL Load Plans," extended abstract, *Odysseus 2009: Fourth International Workshop on Freight Transportation and Logistics*, Cesme, Turkey, May 26-29, 2009. (\*)
- O7. N. Agatz, A.L. Erera, M.W.P. Savelsbergh, and X. Wang. "Dynamic Ride-sharing in Metro Atlanta," extended abstract, *TRISTAN VII: Triennial Symposium on Transportation Analysis*, Tromso, Norway, Jun 20-25, 2010. (\*)
- O8. T. Cheong, A.L. Erera, and C.C. White, III. "Improved Tour Determination for the Dynamic Traveling Salesman Problem," extended abstract, Odysseus 2012: Fifth International Workshop on Freight Transportation and Logistics, Mykonos, Greece, May 21-25, 2012. (\*)
- O9. A. Carbajal, M.W.P. Savelsbergh, and A.L. Erera. "Robust Empty Repositioning in Large-scale Freight Consolidation Networks," extended abstract, *Odysseus 2012: Fifth International Workshop on Freight Transportation and Logistics*, Mykonos, Greece, May 21-25, 2012. (\*)
- O10. N. Agatz, X. Wang, and A.L. Erera. "Finding Optimal Stable Ride Matches for Dynamic Ridesharing Systems," extended abstract, *TRISTAN VIII: Triennial Symposium on Transportation Analysis*, San Pedro de Atacama, Chile, Jun 10-14, 2013. (\*)

- O11. B.J. Kues and A.L. Erera. "The Multiple-Job Repair Kit Problem with Forward Stocking Location Recourse," extended abstract, 3<sup>rd</sup> INFORMS Transportation and Logistics Society Workshop, Chicago, IL, Jun 30-Jul 2, 2014. (\*)
- O12. B.J. Kues and A.L. Erera. "Multiple Job Repair Kit and Technician Routing Problems with Forward Stocking Locations," extended abstract, *Odysseus 2015: Sixth International Workshop on Freight Transportation and Logistics,* Ajaccio, France, May 31-Jun 5, 2015. (\*)
- O13. M. Klapp, A.L. Erera, and A. Toriello, "The One-dimensional Dynamic Dispatch Waves Problem," extended abstract, *Odysseus 2015: Sixth International Workshop on Freight Transportation and Logistics,* Ajaccio, France, May 31-Jun 5, 2015. (\*)
- O14. S.S. Malladi (speaker), A.L. Erera, and C.C. White, III. "Control of Production and Inventory Systems with Transportable Mobile Production Modules," extended abstract, 5<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Atlanta, GA, Jun 20-Jun 22, 2016. (\*)
- O15. I. Bakir (speaker) and A.L. Erera. "An Integrated Fleet Management Model for Introducing Alternative Fuel Trucks into Existing Long-Haul Fleets," extended abstract, 5<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Atlanta, GA, Jun 20-Jun 22, 2016. (\*)
- O16. M. Klapp (speaker), A.L. Erera, and A. Toriello. "The Dynamic Dispatch Waves Problem for Same-day Delivery," extended abstract, 5<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Atlanta, GA, Jun 20-Jun 22, 2016. (\*)
- O17. M. Klapp (speaker), A.L. Erera, and A. Toriello. "Order Acceptance Mechanisms for Same-day Delivery," extended abstract, 1<sup>st</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 26-29, 2017. (\*)
- O18. A.L. Erera (speaker), D. Reyes, and M. Savelsbergh. "Optimization Algorithms for Meal Delivery Operations," extended abstract, 1<sup>st</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 26-29, 2017. (\*)
- O19. S. Malladi (speaker), A.L. Erera, and C.C. White, III. "Dynamic Capacity Logistics and Inventory Control," extended abstract, 1<sup>st</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 26-29, 2017. (\*)
- O20. A.L. Erera (speaker), D. Reyes, R. Auad, and M. Savelsbergh. "Managing Demand in Dynamic Delivery Operations," extended abstract, *Odysseus 2018: Seventh International Workshop on Freight Transportation and Logistics*, Cagliari, Sardinia, Italy, Jun 3-8, 2018. (\*)
- O21.1. Dayarian, A.R. Rocco, A. Stroh, M.W.P. Savelsbergh, A. Toriello, and A.L. Erera (speaker). "Operations Design for High-velocity Intra-city Package Service," extended abstract, *TRISTAN X: Triennial Symposium on Transportation Analysis*, Hamilton Island, Australia, Jun 17-21, 2019. (\*)
- O22. A. Stroh, A.L. Erera, and A. Toriello (speaker). "Tactical Design of Same-day Delivery Systems," extended abstract, *TRISTAN X: Triennial Symposium on Transportation Analysis*, Hamilton Island, Australia, Jun 17-21, 2019. (\*)
- O23. L. Greening (speaker) and A.L. Erera, "A Heuristic Approach for Improving Utilization in Micro-Mobility Systems with Crowd-Sourced Resupply," conference presentation paper, Poster Session: *Micromobility, Mobility as a Service and Shared Automated* Vehicles, Transportation Research Board Annual Meeting, Washington, D.C., Jan 12-16, 2020. (\*)
- O24. D. Banerjee (speaker), A.L. Erera, and A. Toriello, "Fleet Sizing and Service Region Partitioning for Same-day Delivery Systems," extended abstract, 8<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Rotterdam and Online, Jul 19-20, 2021. (\*)

- O25. R. Khir (speaker), A.L. Erera, and A. Toriello, "The Value of Limited Adaptability for Workload Balance in Parcel Sort Sytems," extended abstract, 9<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Ahmedabad, India and Online, Dec 13-15, 2021. (\*)
- O26. R. Ojha (speaker) and A.L. Erera, "Cross-dock Truck Scheduling with Worker Constraints," extended abstract, 9<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Ahmedabad, India and Online, Dec 13-15, 2021. (\*)
- O27. D. Banerjee (speaker), A. Stroh, A.L. Erera, and A. Toriello, "Who Has Access to E-commerce and When? Time-varying Service Regions in Same-day Delivery," extended abstract, 9<sup>th</sup> *INFORMS Transportation and Logistics Society Workshop*, Ahmedabad, India and Online, Dec 13-15, 2021. (\*)
- O28. L. Greening (speaker), M. Dahan, and A.L. Erera, "Middle Mile Consolidation Network Design Problems: A Time-constrained Continuous-rate Model," extended abstract, 9<sup>th</sup> INFORMS Transportation and Logistics Society Workshop, Ahmedabad, India and Online, Dec 13-15, 2021. (\*)
- O29. D. Banerjee, A. Stroh, A.L. Erera, and A. Toriello (speaker). "Who Has Access to E-Commerce and When? Time-Varying Service Regions in Same-Day Delivery," extended abstract, *TRISTAN XI: Triennial Symposium on Transportation Analysis*, Mauritius, Jun 19-25, 2022. (\*)
- O30. L. Greening (speaker), M. Dahan, and A.L. Erera. "Middle Mile Consolidation Network Design with Robust Lead Time Constraints," extended abstract, *TRISTAN XI: Triennial Symposium* on Transportation Analysis, Mauritius, Jun 19-25, 2022. (\*)
- O31. R. Ojha (speaker), W. Chen, R. Khir, H. Zhang, A.L. Erera, and P. Van Hentenryck. "Learningbased Optimization for Tactical Load Plan Modification in Service Networks," extended abstract, 2<sup>nd</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 23-26, 2023. (\*)
- O32. R. Pichayavet (speaker), A. Toriello, A.L. Erera, and A.M. Stroh. "Rate-based Vehicle Routing Problem for Delivery in Densely Populated Urban Areas," extended abstract, 2<sup>nd</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 23-26, 2023. (\*)
- O33. L. Greening (speaker), J. Park, M. Dahan, A.L. Erera, and B. Montreuil. "Middle-Mile Consolidation Network Design: Maximizing Profit through Flexible Lead Times," extended abstract, 2<sup>nd</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 23-26, 2023. (\*)
- O34. D. Banerjee (speaker), A.L. Erera, and A. Toriello. "Customer Satisfaction and Differentiated Pricing in E-Retail Delivery," extended abstract, 2<sup>nd</sup> Triennial Conference: INFORMS Transportation and Logistics Society, Chicago, IL, Jul 23-26, 2023. (\*)
- O35. A.L. Erera, R. Ojha, W. Chen, H. Zhang, P. Van Hentenryck, and R. Khir. "Learning to Optimize Load Plans with Volume Splitting," extended abstract, *Odysseus 2024: Ninth International Workshop of Freight Transportation and Logistics*, Sevlla, Spain, May 19-24, 2024. (\*)

#### **B4. Submitted Journal Articles**

- R1. D. Banerjee, A.L. Erera, and A. Toriello, "On Linear Threshold Policies for Continuous-time Dynamic Yield Management," submitted, *Operations Research Letters*, 2024. (\*)
- R2. R. Ojha, W. Chen, H. Zhang, R. Khir, A.L. Erera, and P. Van Hentenryck, "Optimization-based Learning for Dynamic Load Planning in Trucking Service Networks," major revision submitted, *Transportation Science*, 2024. (\*)

- R3. D. Ulch, A.L. Erera, and M.W.P. Savelsbergh, "A Greedy Approach for Extremely Large Flow and Load Planning," under revision for resubmission, *Transportation Science*, 2024. (\*)
- R4. L. Greening, J. Park, M. Dahan, A.L. Erera, and B. Montreuil, "Integrating Order-to-Delivery Time Sensitivity in E-Commerce Middle-Mile Consolidation Network Design," revised and submitted, *IISE Transactions*, 2024. (\*)
- R5. Y. Ridouane, N. Boland, A.L. Erera, and M.W.P. Savelsbergh, "Short-Term Inventory-Aware Equipment Management in Service Networks," revised and resubmitted, *Computers and Operations Research*, 2022. (\*)
- R6. L. Greening and A.L. Erera, "Locating Vehicles to Improve Utilization in Micromobility Systems with Crowdsourced Repositioning," under revision, 2022. (\*)
- R7. R. Auad, A.L. Erera, and M.W.P. Savelsbergh, "Using simple integer programs to assess capacity requirements and demand management strategies in meal delivery," 2020. (\*)

# C. OTHER PUBLICATIONS AND CREATIVE PRODUCTS

### **C4. Other Creative Products**

- T1. B.M. Lewis, A.L. Erera, and C.C. White. "Port Security and Efficiency: A U.S. Perspective," *Port of Singapore Magazine*, Maritime and Port Authority of Singapore, Issue 9, pp. 6-9, Jul 2002.
- T2. A.L. Erera, K.H. Kwek, N. Goswami, C.C. White III, and H. Zhang. "Comparison of Singapore and U.S. Sea Cargo Container Export Processes," The Logistics Institute—Asia Pacific White Paper Series, National University of Singapore and Georgia Institute of Technology, May 2003.
- T3. A.L. Erera, K.H. Kwek, N. Goswami, C.C. White III, and H. Zhang. "Cost of Security for Sea Cargo Transport," The Logistics Institute—Asia Pacific White Paper Series, National University of Singapore and Georgia Institute of Technology, May 2003.
- T4. A.L. Erera and M.W.P. Savelsbergh. "ROUTE 2007: Recent Advances in Vehicle Routing Optimization," *Networks*, vol. 54, pp. 165—166, 2009.
- T5. N. Agatz, A.L. Erera, M.W.P. Savelsbergh, and X. Wang. "Sustainable Passenger Transportation: Dynamic Ride-Sharing," *ERIM Report Series: Research in Management*, No. ERS-2010-010-LIS, Erasmus Universiteit, Rotterdam, 2010.
- T6. A.L. Erera and Y. Zhang. "Models to Assess Supply Chain Cost Impacts of Disruptions to Freight Transportation," White Paper, The DHS Science Conference – Fifth Annual University Network Summit, Washington, DC, Mar 30-Apr 1, 2011.
- T7. K. Gue, E. Akcali, A. Erera, B. Ferrell, and G. Forger. "U.S. Roadmap for Material Handling and Logistics," Industry Position White Paper, U.S. Roadmap for Material Handling & Logistics' Open Community (American Society of Transportation and Logistics, Center for Excellence in Logistics and Distribution, College Industry Council on Material Handling Education, Material Handling Equipment Distributors Association, MHI, and Warehousing Education and Research Council), <u>http://www.mhlroadmap.org</u>, 2014.

### **D. PRESENTATIONS**

#### **D1. Keynote Addresses and Plenary Lectures**

- Optimizing Transportation Capacity for a Physical Internet E-commerce Package Network," IPIC 2024: 10<sup>th</sup> International Physical Internet Conference, Savannah, Georgia, May 2024.
- 2. "Modern Transportation Logistics Systems Optimization," Supply Chain Summit 2016, CSCMP Peru, Lima, Nov 10, 2016.

### **D2. Invited Conference and Workshop Presentations**

- A.L. Erera (speaker), A. Stroh, and A.L. Erera. "Tactical Design of Same-day Delivery Systems," TSL Best Paper Award Invited Session, INFORMS 2024 Annual Meeting, Seattle, WA, Oct 20-23, 2024. (\*)
- A.L. Erera (speaker), D. Banerjee, and A. Toriello, "Customer Satisfaction and Differentiated Pricing in E-retail Delivery," 23rd Conference of the International Federation of Operational Research Societies (IFORS), Santiago, Chile, Jul 10-14, 2023.
- A.L. Erera (speaker), L.M. Greening, and M. Dahan, "Middle Mile Network Design," Conference of the Capítulo Estudiantil Ingeniería Industrial y de Sistemas, Santiago, Chile (virtual), Dec 2, 2021.
- A.L. Erera (speaker). "Transportation and Resilience of Food Supply Chains," Workshop II: Sustainability, Resilience, and Risk, The National Academies of Sciences, Engineering, and Medicine Sustainable and Resilient Supply Chains with Emerging Technologies Workshop Series, Washington, DC (virtual), Feb 4, 2021.
- A.L. Erera (speaker). "Perspectives on Industry-focused Research in Transportation Logistics," Ph.D. Student Workshop on Transportation and Logistics Challenges and Opportunities, National Science Foundation and Loyola University Chicago, Chicago, May 22, 2019.
- 6. A.L. Erera (speaker). "Innovation Ecosystem for Supply Chain and Logistics Systems," 2019 Georgia Foreign Trade Conference, Georgia Ports Authority, Sea Island, Georgia, Feb 5, 2019.
- A.L. Erera (speaker). "Building Understanding of Modern Last-mile Delivery Systems," Transportation Symposium to Honor Carlos Daganzo, University of California, Berkeley, Jun 21, 2018.
- A.L. Erera (speaker). "Evolution and Revolution in the Trucking Industry," Optym Convergence 2017, Miami Beach, Sep 21-22, 2017 (only academic invited to leading industry logistics optimization conference).
- A.L. Erera (speaker), M. Klapp, A. Toriello. "Dynamic Dispatch Waves for Same-day Delivery," ROUTE 2016 International Workshop on Vehicle Routing and Transportation, Rambouillet, France, Jun 1-4, 2016.
- 10. A.L. Erera (speaker). "Next-generation Logistics Optimization," Technical Track 4: Next Generation Logistics, Supply Chain Asia Forum 2015, Singapore, Sep 9-10, 2015.

- A.L. Erera (speaker). "Application of Intelligent Adversary Concepts to Analyze Food Supply Chain Risks," International Association for Food Protection Annual Meeting, Portland, Jul 25-28, 2015.
- A.L. Erera (speaker). "Risk Assessment and Mitigation for Food Supply Chains," The Food Defense Conference 2014, DHS National Center for Food Protection and Defense, University of Minnesota, Minneapolis, Sep 15-16, 2014.
- 13. A.L. Erera (speaker and panelist). "Challenges in Urban Logistics," Supply Chain and Transportation USA 2014, Atlanta, GA, Mar 17-20, 2014.
- A.L. Erera (speaker). "Balancing Risk and Reward in Complex Supply Chains," THINK Logistics 2013: Advanced Logistics Practices—Efficiency, Responsiveness, and Risk Mitigation, Nov 12, 2013.
- 15. A.L. Erera (speaker and panelist). "Freight Logistics and Strategies: Fundamentals of Freight Decisions," Eighth Annual Southeast Diesel Collaborative Partners Meeting, U.S. Environmental Protection Agency, Atlanta, GA, Sep 17-18, 2013.
- 16. A.L. Erera (speaker and panelist). "A Panel Discussion on Academic-Industry Collaboration," INFORMS 2013 Annual Meeting, Minneapolis, MN, Oct 6-9, 2013.
- A.L. Erera and C.C. White, III (speakers). "Food Supply Chain Risk Analyzer: Case Study on Liquid Egg Production System," National Center for Food Protection and Defense Biennial Meeting, Oct 29-31, 2012.
- A.L. Erera (speaker and panelist) and Y. Zhang. "Models to Assess Supply Chain Cost Impacts of Disruptions to Freight Transportation," The DHS Science Conference – Fifth Annual University Network Summit, Washington, DC, Mar 30-Apr 1, 2011.
- A.L. Erera (speaker), M. Hewitt, K. Lindsey, and M.W.P. Savelsbergh. "Improved Integer Programming-Based Neighborhood Search for LTL Load Plan Design," Integer Programming Down Under: Theory, Algorithms and Applications, Newcastle, NSW, Australia, Jul 6-8, 2011.
- A.L. Erera (speaker), "Stochastic and Robust Optimization in Logistics," Spring School on Combinatorial Optimization in Logistics, CIRRELT, Universite de Montreal, Quebec, Canada, May 18, 2010.
- A.L. Erera (speaker), J. Morales, and M.W.P. Savelsbergh. "Tour Duration Considerations in Vehicle Routing Problems with Stochastic Demands," ROUTE 2007 International Workshop on Vehicle Routing and Transportation, Jekyll Island, Georgia, May 13-16, 2007.
- 22. A.L. Erera (panelist). "Security Issues and Requirements in Agricultural and Food Truck Movements—Keeping America's Food Supply Safe," National Summit on Agricultural and Food Truck Transport for the Future, Agricultural and Food Transporters Conference, Washington, DC, Apr 25-26, 2007.
- 23. A.L. Erera (speaker). "Perspectives on Research in Supply Chain Security and Resiliency," Invited Session on Supply Chain Security and Vulnerability, Junior Faculty Interest Group Cluster, INFORMS 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
- A.L. Erera (speaker). "Benchmarking and Assessment of Food Supply Chain Protection and Defense: Transportation Service Providers," Terrorism, Pandemics, and Natural Disasters: Food Supply Chain Preparedness-Response-Recovery Symposium, The Food Industry Center, University of Minnesota, Minneapolis, MN, Nov 1, 2006.

- 25. A.L. Erera (speaker). "Providing Security to Food Transportation Systems without Compromising Productivity," First Annual Food Protection and Defense Research Conference, Institute of Food Technologists, Atlanta, GA, Nov 3-4, 2005.
- 26. A.L. Erera (speaker), J.C. Morales, and M.W.P. Savelsbergh. "Robust Optimization for Empty Repositioning Problems," 3<sup>rd</sup> U.S.-European Workshop on Logistics and Supply Chain Management: An International Research Perspective, RWTH-Aachen and U.C. Berkeley, Berkeley, CA, Oct 12, 2005.
- 27. A.L. Erera (speaker) and C.C. White, III. "Economics of Security: A Cost/Benefit Analysis," Logistics Security in the Supply Chain Forum: Strengthening the Link, Frontline's International Supply Chain Week Conference and Expo, Chicago, IL, Sep 15-18, 2003.
- 28. A.L. Erera and K.R. Smilowitz (speakers). "Logistics and Network Design," Special Session: Foundations of Traffic Flow Theory: In Memory of Gordon Newell, Transportation Research Board Annual Meeting, Washington, D.C., Jan 13-17, 2002.
- C.F. Daganzo (speaker) and A.L. Erera. "Coordinated Vehicle Routing with Uncertain Demand," ROUTE 2000 International Workshop on Vehicle Routing, Skodsborg, Denmark, Aug 16-19, 2000.

# D3. Conference and Workshop Presentations (without Proceedings)

- M. Eom (speaker), A. Toriello, and A.L. Erera. "A Scalable Algorithm for Large-scale Network Design with Service Time Guarantees," INFORMS 2024 Annual Meeting, Seattle, WA, Oct 20-23, 2024. (\*)
- D. Banerjee (speaker), A.L. Erera, and A. Toriello. "Continous-time Dynamic Yield Management: Near-optimal Policies and Applications to Multi-channel Fulfillment," INFORMS 2024 Annual Meeting, Seattle, WA, Oct 20-23, 2024. (\*)
- R. Ojha (speaker) and A.L. Erera. "Inbound-outbound Load Plan Adjustments for Terminals in Parcel Delivery Service Networks," INFORMS 2024 Annual Meeting, Seattle, WA, Oct 20-23, 2024. (\*)
- L. Greening (speaker), S. Dey, and A.L. Erera. "Valid Inequalities for Service Network Design Models," INFORMS 2024 Annual Meeting, Seattle, WA, Oct 20-23, 2024. (\*)
- R. Pichayavet (speaker), D. Ulch, A. Toriello, and A.L. Erera. "Improvement Heuristics for Largescale LTL Service Network Design," INFORMS 2024 Annual Meeting, Seattle, WA, Oct 20-23, 2024. (\*)
- 6. D. Banerjee (speaker), A.L. Erera, and A. Toriello. "Customer Satisfaction and Differentiated Pricing in E-Retail Delivery," INFORMS 2023 Annual Meeting, Phoenix, AZ, Oct 15-18, 2023. (\*)
- L. Greening (speaker) and A.L. Erera. "Guided Large Neighborhood Search for Middle Mile Consolidation Network Design," INFORMS 2023 Annual Meeting, Phoenix, AZ, Oct 15-18, 2023. (\*)
- R. Ojha (speaker), W. Chen, H. Zhang, R. Khir, A.L. Erera, and P. Van Hentenryck. "Optimization-Based Learning for Tactical Load Plan Modification in Trucking Service Networks," INFORMS 2023 Annual Meeting, Phoenix, AZ, Oct 15-18, 2023. (\*)
- L. Greening (speaker), J. Park, M. Dahan, A.L. Erera, and B. Montreuil. "Middle Mile Consolidation Network Design: Maximizing Profit Through Flexible Lead Times," INFORMS 2022 Annual Meeting, Indianapolis, IN, Oct 16-19, 2022. (\*)

- D. Banerjee (speaker), A.L. Erera, and A. Toriello. "System Design and Management for Concurrent Same-day and Next-day E-retail Fulfillment," INFORMS 2022 Annual Meeting, Indianapolis, IN, Oct 16-19, 2022. (\*)
- R. Ojha (speaker) and A.L. Erera. "An Integer Programming Based Local Search Algorithm to Modify Base Load Plans for Small Package Carriers," INFORMS 2022 Annual Meeting, Indianapolis, IN, Oct 16-19, 2022. (\*)
- L. Greening (speaker), M. Dahan, and A.L. Erera. "The Middle Mile Consolidation Network Design Problem with Fixed Origins and Destinations: A Time-constrained Continuous Rate Model," INFORMS 2021 Annual Meeting, Anaheim, CA, Oct 24-27, 2021. (\*)
- 13. R. Ojha (speaker) and A.L. Erera. "Cross-dock Truck Scheduling with Workforce Constraints in Freight Transportation," INFORMS 2021 Annual Meeting, Anaheim, CA, Oct 24-27, 2021. (\*)
- D. Banerjee (speaker), A. Stroh, A.L. Erera, and A. Toriello. "Who Has Access to E-commerce and When? Time-varying Service Regions in Same-day Delivery," INFORMS 2021 Annual Meeting, Anaheim, CA, Oct 24-27, 2021. (\*)
- R. Khir (speaker), A.L. Erera, and A. Toriello. "The Value of Limited Adaptability for Workload Balance in Logistics Operations," INFORMS 2021 Annual Meeting, Anaheim, CA, Oct 24-27, 2021. (\*)
- Y. Ridouane (speaker), N. Boland, A.L. Erera, and M.W.P. Savelsbergh. "Inventory Aware Equipment Management in Service Networks," INFORMS 2020 Annual Meeting, Virtual, Nov 8-11, 2020. (\*)
- D. Ulch (speaker), I. Arsik, A.L. Erera, and M.W.P. Savelsbergh. "A Marginal Cost Pathing Approach for Large Scale Service Network Design," INFORMS 2020 Annual Meeting, Virtual, Nov 8-11, 2020. (\*)
- L. Greening (speaker) and A.L. Erera. "Crowdsourced-focused Distribution Operations in Freefloating Scooter Systems," INFORMS 2020 Annual Meeting, Virtual, Nov 8-11, 2020. (\*)
- 19. R. Khir (speaker), A.L. Erera, and A. Toriello. "Robust Sort Planning for Express Parcel Delivery," INFORMS 2020 Annual Meeting, Virtual, Nov 8-11, 2020. (\*)
- 20. D. Banerjee (speaker), A.L. Erera, and A. Toriello. "Fleet Sizing and Region Partitioning for Sameday Delivery Systems," INFORMS 2020 Annual Meeting, Virtual, Nov 8-11, 2020. (\*)
- 21. R. Khir (speaker), A.L. Erera, and A. Toriello. "Sort Plan Design for Express Parcel Sortation Systems," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)
- 22. Y. Cohen (speaker), J. Zribi, A.L. Erera, and B. Montreuil. "Logistics Network Design for Fresh Flowers," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)
- Y. Ridouane (speaker), I. Herszterg, N. Boland, A.L. Erera, and M.W.P. Savelsbergh. "Day-to-day Load Planning Strategies in Less-than-truckload Service Networks," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)
- 24. R. Auad (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Courier Management in Crowd-sourced Food Delivery Operations," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)
- 25. A. Rocco (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Inter-city Package Service Flow Planning," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)
- L. Greening (poster) and A.L. Erera. "A Heuristic Approach for Improving Utilization In Micro-Mobility Systems With Crowd-Sourced Resupply," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)

- Y. Ridouane (speaker), Y. Yang, N. Boland, A.L. Erera, and M.W.P. Savelsbergh. "A Substitution Based Model for Equipment Balancing in Service Networks," INFORMS 2019 Annual Meeting, Seattle, WA, Oct 20-23, 2019. (\*)
- 28. A. Stroh (speaker), A.L. Erera, and A. Toriello. "Tactical Design of Same-day Delivery Systems," INFORMS 2018 Annual Meeting, Phoenix, AZ, Nov 4-7, 2018. (\*)
- 29. R. Khir (speaker), A.L. Erera, and A. Toriello. "Optimization of Sorting Center Operations in Express Parcel Delivery Network," INFORMS 2018 Annual Meeting, Phoenix, AZ, Nov 4-7, 2018. (\*)
- I. Bakir (speaker) and A.L. Erera. "An Integrated Fleet Management Model Introducing Alternative Fuel Trucks into Existing Diesel Fleets," INFORMS 2018 Annual Meeting, Phoenix, AZ, Nov 4-7, 2018. (\*)
- S. Malladi (speaker), A.L. Erera, and C.C. White, III. "Transporting Capacity vs. Transshipping Inventory under Nonstationarity," INFORMS 2017 Annual Meeting, Houston, TX, Oct 22-25, 2017. (\*)
- 32. M. Klapp (speaker), A.L. Erera, and A. Toriello. "Order Acceptance Mechanisms for Same-day Delivery," INFORMS 2017 Annual Meeting, Houston, TX, Oct 22-25, 2017. (\*)
- I. Bakir (speaker) and A.L. Erera. "An Integrated Fleet Management Model Introducing Alternative Fuel Trucks into Existing Diesel Long-haul Fleets," INFORMS 2017 Annual Meeting, Houston, TX, Oct 22-25, 2017. (\*)
- 34. S. Malladi (speaker), A.L. Erera, and C.C. White, III. "Dynamic Mobile Capacity Logistics and Multilocation Inventory Control," INFORMS 2017 Annual Meeting, Houston, TX, Oct 22-25, 2017. (\*)
- 35. I. Bakir (speaker), N. Boland, B. Dandurand, "Scenario Set Partition Dual Bounds For Multi-stage Stochastic Programming," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- S. Malladi (speaker), A.L. Erera, and C.C. White, III. "Joint Capacity Logistics And Inventory Control Of Mobile Modular Production Systems," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- D. Reyes (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Complexity Of Dynamic Delivery Problems With Release Dates And Deadlines," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- M. Klapp (speaker), A.L. Erera, and A. Toriello. "Cost Efficiency Versus Customer Service In The Dynamic Dispatch Waves Problem," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- 39. S. Malladi (speaker), A.L. Erera, and C.C. White, III. "A Partially Observed Inventory Control Problem," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- L. Marshall (speaker), M.W.P. Savelsbergh, N. Boland, A.L. Erera, and I. Dayarian. "Dynamic Load Planning For Less-than-truckload Carriers," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- 41. I. Bakir (speaker) and A.L. Erera. "An Integrated Fleet Management Model Introducing Alternative Fuel Trucks," INFORMS 2016 Annual Meeting, Nashville, TN, Nov 13-16, 2016. (\*)
- S. Malladi (speaker), A.L. Erera and C.C. White, III. "Joint Capacity and Inventory Logistics of Mobile Modular Production Systems," abstract, *POMS 27th Annual Conference*, Orlando, FL, May 6-May 9, 2016. (\*)
- I. Bakir (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Empty Repositioning under Demand Uncertainty in Large-scale Transportation Networks," INFORMS 2015 Annual Meeting, Philadelphia, PA, Nov 1-4, 2015.

- J. Norback (speaker) and A.L. Erera. "Georgia Tech's Systematic Approach to Improving PhD Students' Academic Job Talks and Interviews," INFORMS 2015 Annual Meeting, Philadelphia, PA, Nov 1-4, 2015.
- 45. S. Malladi (speaker), A.L. Erera, and C.C. White III. "Supply Chain Design Implications of Modular Production Systems," INFORMS 2015 Annual Meeting, Philadelphia, PA, Nov 1-4, 2015.
- 46. M. Klapp (speaker), A.L. Erera, and A. Toriello. "The Deterministic Dispatch Waves Problem," INFORMS 2015 Annual Meeting, Philadelphia, PA, Nov 1-4, 2015.
- Y. Chang (speaker), A.L. Erera, and C.C. White III. "Value of Communication in a One-leader, Twofollowers Partially Observed Markov Game," INFORMS 2015 Annual Meeting, Philadelphia, PA, Nov 1-4, 2015.
- Y. Chang (speaker), A.L. Erera, and C.C. White III. "A Leader-Follower Partially Observed Markov Game: Value of Information", INFORMS 2014 Annual Meeting, San Francisco, CA, Nov 9-12, 2014.
- 49. A. Parcham-Kashani (speaker) and A.L. Erera. "Comprehensive Operational Dynamic Real-time Train Re-routing for a Freight Train Network", INFORMS 2014 Annual Meeting, San Francisco, CA, Nov 9-12, 2014.
- 50. X. Wang (speaker), N. Agatz, and A.L. Erera. "Finding Optimal Stable Ride Matches for Dynamic Ride-sharing Systems", INFORMS 2014 Annual Meeting, San Francisco, CA, Nov 9-12, 2014.
- 51. I. Bakir (speaker) and A.L. Erera. "Greening the Fleet with Alternative Fuel Long-Haul Trucks", INFORMS 2014 Annual Meeting, San Francisco, CA, Nov 9-12, 2014.
- 52. M. Klapp (speaker), A.L. Erera, and A. Toriello. "The One-dimensional Dynamic Dispatch Waves Problem", INFORMS 2014 Annual Meeting, San Francisco, CA, Nov 9-12, 2014.
- 53. A. Toriello (speaker), M. Klapp, and A.L. Erera. "", 4th International Conference on Logistics and Maritime Systems (LOGMS 2014), Rotterdam, Netherlands, Aug 27-29, 2014.
- I. Bakir (speaker) and A.L. Erera. "Robust Empty Trailer Repositioning in Large-scale Transportation Networks", INFORMS 2013 Annual Meeting, Minneapolis, MN, Oct 6-9, 2013.
- 55. Y. Chang (speaker), A.L. Erera, and C.C. White III. "Value of Information for the Partially Observed MDP and Partially Observed Markov Game", INFORMS 2013 Annual Meeting, Minneapolis, MN, Oct 6-9, 2013.
- A.L. Erera (speaker), K. Lindsey, and M.W.P. Savelsbergh. "A Pickup and Delivery Problem using Crossdocks and Truckload Lane Rates," INFORMS 2012 Annual Meeting, Phoenix, AZ, Oct 14-17, 2012.
- 57. Y. Zhang (speaker) and A.L. Erera. "LTL Load Plans to Mitigate Impact of Transit Time Variability," INFORMS 2012 Annual Meeting, Phoenix, AZ, Oct 14-17, 2012.
- T. Cheong (speaker), A.L. Erera, and C.C. White, III. "Improved Tour Determination for the Dynamic Traveling Salesman Problem," INFORMS 2012 Annual Meeting, Phoenix, AZ, Oct 14-17, 2012.
- 59. N. Agatz (speaker), X. Wang, and A.L. Erera. "Optimizing Stable Rides for Dynamic Ride-sharing Systems," INFORMS 2012 Annual Meeting, Phoenix, AZ, Oct 14-17, 2012.
- 60. Y. Chang (speaker), A.L. Erera, C.C. White, III, and Y. Zhang. "Vulnerability Assessment of a Food Supply Chain to an Intentional Attack," INFORMS 2012 Annual Meeting, Phoenix, AZ, Oct 14-17, 2012.

- 61. K. Lindsey (speaker) and A.L. Erera. "Load Plan Improvement through IP-Based Local Search," INFORMS 2011 Annual Meeting, Charlotte, NC, Nov 13-16, 2011.
- 62. Y. Lin (speaker) and A.L. Erera. "Multi-scenario Heuristics for a Dynamic Traveling Salesman Problem with Fixed Appointment Times," INFORMS 2011 Annual Meeting, Charlotte, NC, Nov 13-16, 2011.
- 63. Y. Zhang (speaker) and A.L. Erera. "Consequence Assessment for Complex Food Transportation Systems Facing Catastrophic Disruptions," The DHS Science Conference – Fifth Annual University Network Summit, Washington, DC, Mar 30-Apr 1, 2011 (student prize-winner for white paper).
- B. Kamali (speaker), A. Bennett, and A.L. Erera. "Evaluating Operating Costs in Routing Problems with Fixed Appointment Times," INFORMS 2010 Annual Meeting, Austin, TX, Nov 7-10, 2010.
- 65. T.S. Cheong (speaker), A.L Erera, and C.C. White, III. "Inventory Control with Supply Chain Yield Information," INFORMS 2010 Annual Meeting, Austin, TX, Nov 7-10, 2010.
- 66. K. Lindsey (speaker), A.L Erera, and M.W.P. Savelsbergh. "Network Design for Origin-Destination Freight Flows," INFORMS 2010 Annual Meeting, Austin, TX, Nov 7-10, 2010.
- A. Carbajal (speaker), A.L Erera, and M.W.P. Savelsbergh. "Robust Empty Repositioning in Large Scale Freight Consolidation Networks," INFORMS 2010 Annual Meeting, Austin, TX, Nov 7-10, 2010.
- 68. X. Wang (speaker), N. Agatz, A.L Erera, and M.W.P. Savelsbergh. "The Value of Optimization in Dynamic Ride-sharing," INFORMS 2010 Annual Meeting, Austin, TX, Nov 7-10, 2010.
- 69. Y. Zhang (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Dynamic Load Planning for Less-than-Truckload Carriers," INFORMS 2009 Annual Meeting, San Diego, CA, Oct 11-14, 2009.
- 70. K. Abercrombie (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Network Design for Origin-Destination Freight Flows," INFORMS 2009 Annual Meeting, San Diego, CA, Oct 11-14, 2009.
- 71. Tae Su Cheong (speaker), C.C. White III, and A.L. Erera. "Optimal Policy Structure for Discrete State/Action Inventory Model with Random Yield," INFORMS 2009 Annual Meeting, San Diego, CA, Oct 11-14.
- 72. N. Agatz (speaker), A.L. Erera, M.W.P. Savelsbergh, and X. Wang. "Real-time Matching of Supply and Demand for Sustainable Passenger Transportation," INFORMS 2009 Annual Meeting, San Diego, CA, Oct 11-14.
- 73. J. Antonio Carbajal (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Tractor Fleet Sizing and Repositioning Strategies," INFORMS 2009 Annual Meeting, San Diego, CA, Oct 11-14.
- M. Hewitt (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Improved Load Plan Design Through Integer Programming Based Local Search," CORS-INFORMS 2009 Joint International Meeting, Toronto, Jun 14-17, 2009.
- 75. A.L. Erera (speaker), M. Hewitt, M.W.P. Savelsbergh, and Y. Zhang. "Improving Service Network Design and Control for Less-than-truckload Carriers," CORS-INFORMS 2009 Joint International Meeting, Toronto, Jun 14-17, 2009.
- 76. M. Hewitt (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Day-differentiated Load Planning for LTL Carriers," INFORMS 2008 Annual Meeting, Washington, D.C., Oct 12-15, 2008.
- 77. Y. Zhang (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Execution Cost Estimation for LTL Load Plans," INFORMS 2008 Annual Meeting, Washington, D.C., Oct 12-15, 2008.

- 78. A. Bennett (speaker) and A.L. Erera. "Dynamic Periodic Scheduling of Home Health Practitioners," INFORMS 2008 Annual Meeting, Washington, D.C., Oct 12-15, 2008.
- 79. O. Ortiz (speaker), C.C. White, III, and A.L. Erera. "Performance of Zero-Memory Policies in a Single Product Inventory System with Inaccurate Counts," INFORMS 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
- 80. G. Zhang (speaker), A.L. Erera, and K.R. Smilowitz. "Branch-and-price for Dynamic Drayage Vehicle Routing Problem," INFORMS 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
- E. Uyar (speaker), M.W.P. Savelsbergh, and A.L. Erera. "Constructing Fixed Routes for Vehicle Routing Problems with Stochastic Demands," INFORMS 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
- 82. A. Ak (speaker) and A.L. Erera. "Simultaneous Berth and Quay Crane Scheduling for Container Ports," INFORMS 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
- 83. M. Hewitt (speaker), M.W.P. Savelsbergh, and A.L. Erera. "Service and Day-differentiated Load Planning for the LTL Industry," INFORMS 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
- A. Bennett (speaker) and A.L. Erera. "Home Health Nurse Routing and Scheduling," INFORMS 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
- 85. A.L. Erera (speaker), J. Morales, and M.W.P. Savelsbergh. "Robust Duration-Constrained Tours for Vehicle Routing Problems with Stochastic Demands," INFORMS International Conference, Puerto Rico, Jul 8-11, 2007.
- 86. A. Bennett (poster) and A.L. Erera. "Home Health Nurse Routing and Scheduling," First Annual Conference on Operations Research in Healthcare, Operations Research Center, Massachusetts Institute of Technology, Boston, May 22-23, 2007.
- A.L. Erera (speaker), S.M. Morris, and C.C. White, III. "Impact of Using Designated Secure Rest Facilities on Single Lane Truck Dispatching Productivity," Transportation Research Board Annual Meeting, Washington, D.C., Jan 21-25, 2007.
- A. Ak (speaker) and A.L. Erera. "Simultaneous Berth and Quay Crane Scheduling for Container Ports," INFORMS 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
- A.L. Erera (speaker) and A. Ak. "Configuring a Paired-Vehicle Recourse Strategy for the VRP with Stochastic Demand using Tabu Search," INFORMS 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
- 90. O. Ortiz (speaker), A.L. Erera, and C.C. White, III. "Two-product Inventory Control Systems with Substitution," INFORMS 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
- B. Karacik (speaker), A.L. Erera, and M.W.P. Savelsbergh. "A Dynamic Driver Management Scheme for Less-than-Truckload Carriers," INFORMS 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
- 92. A. Ak (speaker) and A.L. Erera. "A Paired-Vehicle Recourse Strategy for the Vehicle Routing Problem with Stochastic Demands," Annual Meeting of the Canadian Operations Research Society and Optimization Days Joint Conference, GERAD and HEC Montreal, Montreal, Quebec, May 9, 2006.
- 93. A.L. Erera (speaker), B.M. Lewis, and C.C. White, III. "Understanding the Impacts of Temporary Seaport Closures on Freight Supply Chains," Ports and Channels Committee Meeting, Transportation Research Board Annual Meeting, Washington, D.C., Jan 22-26, 2006.

- O. Ortiz (speaker), A.L. Erera, A. Saroop, L.T. Truss, C.C. White, III. "Value of Demand Sensing for Inventory System Control," INFORMS 2005 Annual Meeting, San Francisco, CA, Nov 13-16, 2005.
- 95. R. Namboothiri (speaker) and A.L. Erera. "Seaport Drayage Routing Given a Time Slot Appointment System," INFORMS 2005 Annual Meeting, San Francisco, CA, Nov 13-16, 2005.
- J.C. Morales (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Robust Formulations for Empty Repositioning Problems," INFORMS 2005 Annual Meeting, San Francisco, CA, Nov 13-16, 2005.
- A.L. Erera (speaker), B.M. Lewis, and C.C. White, III. "Managing Supply Chain Inventory Given Risk of Border Disruptions," INFORMS 2005 Annual Meeting, San Francisco, CA, Nov 13-16, 2005.
- 98. O. Ortiz (speaker), A.L. Erera, A. Saroop, L.T. Truss, C.C. White, III. "Bounds on the Value of Demand Sensing for an Inventory-Production Problem," SIAM Conference for Mathematics in Industry, Detroit, MI, Oct 24-26, 2005.
- 99. A.L. Erera (speaker), J.C. Morales, and M.W.P. Savelsbergh. "Robust Models for Dynamic Transportation Asset Repositioning," The Seventeenth Triennial Conference of the International Federation of Operational Research Societies (IFORS), Honolulu, HI, Jul 11-15, 2005.
- M.W.P. Savelsbergh (speaker), S.Y. Choi, A.L. Erera, B. Karacik. "Linehaul Network Resource Management," Optimization Days, GERAD and HEC Montreal, Montreal, Quebec, May 9-11, 2005.
- 101. B. Karacik (speaker), A.L. Erera, and M.W.P. Savelsbergh. "Driver Assignment in Less-than-Truckload Trucking Systems," Industrial Engineering Research Conference, IIE Annual Conference, Atlanta, GA, May 14-18, 2005.
- 102. A.L. Erera (speaker), M.W.P. Savelsbergh, and J.C. Morales. "Robust Models for Tank Container Repositioning," INFORMS 2004 Annual Meeting, Denver, CO, Oct 24-27, 2004.
- 103. A.L. Erera (speaker) and R. Namboothiri. "Planning Container Drayage Operations at Congested Seaports," INFORMS 2004 Annual Meeting, Denver, CO, Oct 24-27, 2004.
- 104. B.M. Lewis (speaker), A.L. Erera, and C.C. White, III. "An Inventory Control Model with Border Security Considerations," INFORMS 2004 Annual Meeting, Denver, CO, Oct 24-27, 2004.
- 105. A.L. Erera (speaker), C.C. White, III, and B.M. Lewis. "Security Challenges to Global Supply Chain Productivity," INFORMS 2003 Annual Meeting, Atlanta, GA, Oct 19-22, 2003.
- 106. B.M. Lewis (speaker), A.L. Erera, and C.C. White, III. "Modeling the Trade-off between Security and Efficiency of Container Operations at Seaports," INFORMS 2003 Annual Meeting, Atlanta, GA, Oct 19-22, 2003.
- J.C. Morales (speaker), A.L. Erera, and M. Savelsbergh. "Global Intermodal Tank Container Management for the Chemical Industry," INFORMS 2003 Annual Meeting, Atlanta, GA, Oct 19-22, 2003.
- 108. C.C. White III (speaker), B.M. Lewis, and A.L. Erera. "Efficient Container Security Operations in Transshipment Seaports," Session 256: Trends in the Efficiency and Security of Container Movements, Transportation Research Board Annual Meeting, Washington, D.C., Jan 12-16, 2003.

- 109. A.L. Erera (speaker). "Petrochemical Container Management," Maritime Logistics Workshop, sponsored by The Logistics Institute Asia-Pacific and Norwegian Science and Technology University, Georgia Institute of Technology, Nov 21, 2002.
- 110. A.L. Erera (speaker), C.C. White, III and B.M. Lewis. "Efficient Container Security Operations in Transshipment Seaports," Maritime Logistics Workshop, sponsored by The Logistics Institute Asia-Pacific and Norwegian Science and Technology University, Georgia Institute of Technology, Nov 21, 2002.
- 111. A.L. Erera (speaker), B.M. Lewis, and C.C. White, III. "Efficient Container Security Operations in Transshipment Seaports," INFORMS 2002 Annual Meeting, San Jose, CA, Nov 17-20, 2002.
- 112. R. Gatica (speaker), A.L. Erera and J. VandeVate. "A Binary Dynamic Programming Problem with Linear Transition and Reward Functions," INFORMS 2002 Annual Meeting, San Jose, CA, and Nov 17-20, 2002.
- 113. A.L. Erera (speaker) and C.F. Daganzo. "Real-time coordination in vehicle routing systems," The Sixteenth Triennial Conference of the International Federation of Operational Research Societies (IFORS), Edinburgh, Scotland, Jul 8-12, 2002.
- 114. A.L. Erera (speaker) and C.F. Daganzo. "Dynamic Coordination for a Deadline Vehicle Routing Problem with Uncertainty," INFORMS 2001 Annual Meeting, Miami Beach, Florida, Nov 3-7, 2001.
- 115. A.L. Erera (speaker) and C.F. Daganzo. "Dynamic Coordination for Load-Constrained Vehicle Routing with Uncertain Demands," INFORMS 2001 Annual Meeting, Miami Beach, Florida, Nov 3-7, 2001.
- 116. A.L. Erera (speaker), CF. Daganzo, and D.J. Lovell. "The Access Control Problem on Capacitated FIFO Networks with Unique O-D Paths is Hard," Transportation Research Board Annual Meeting, Washington, D.C., Jan 2000.
- 117. A.L. Erera (speaker). "Capacity-Sharing Strategies for Stochastic Vehicle Routing Problems," INFORMS Philadelphia, Fall 1999, Philadelphia, Pennsylvania, Nov 7-10, 1999.
- 118. A.L. Erera (speaker) and C.F. Daganzo. "Design and Operation of Robust Commercial Airline Networks," INFORMS Seattle, Fall 1998, Seattle, Washington, Oct 25-28, 1998.
- 119. A.L. Erera (speaker), T. Lawson, and C.F. Daganzo. "A Simple, Generalized Method for Analysis of a Traffic Queue Upstream of a Bottleneck," Transportation Research Board Annual Meeting, Washington, D.C., Jan 1998.
- 120. A.L. Erera (speaker), I. Adler, D.S. Hochbaum, E.V. Olinick. "Baseball Playoff Elimination with Wildcard Teams," INFORMS Dallas, Fall 1997, Dallas, Texas, Oct 26-29, 1997.
- 121. A.L. Erera (speaker), I. Adler, D.S. Hochbaum, E.V. Olinick. "Baseball Playoff Race Problems and the World Wide Web," INFORMS San Diego, Spring 1997, San Diego, California, May 4-7, 1997.

# **D4. Invited Seminar Presentations**

 "Design of Middle-mile Fulfillment Consolidation Networks for E-commerce: Minimizing Logistics Cost and Maximizing Profitability," Centre de Gestion Scientifique, École Nationale Supérieure des Mines de Paris, Jun 16, 2023.

- 2. "Logistics and Supply Chain Research: Towards Integrating Optimization and ML," IVADO (HEC Montreal, Polytechnique Montreal, U. de Montreal), Montreal, Canada, Jun 13, 2022.
- 3. "Tactical Design of Same-day Delivery Systems," ERIM Seminar, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands, Nov 21, 2019.
- 4. "Tactical Design of Same-day Delivery Systems," Department of Industrial and Systems Engineering Colloquium, University of Wisconsin, Madison, Oct 25, 2019.
- "Optimization Algorithms for Meal Delivery Operations," SF Express, Shenzhen, China, Aug 7, 2019.
- 6. "Advances in Last Mile Logistics," Manhattan Associates, Atlanta, Sep 8, 2017.
- "Issues and Opportunities in Last Mile Logistics," SCL Seminar Series, Atlanta, Apr 26, 2017 (with M. Savelsbergh).
- 8. "Application of Intelligent Adversary Concepts to Analyze Food Supply Chains Risks with a Case Study," USDA: APHIS: VS Simulation and Modeling Seminar Series, Oct 20, 2015.
- 9. "Dynamic Dispatch Waves for Same-day Delivery," Institute for Transportation Studies, University of California, Berkeley, Feb 20, 2015.
- 10. "Educating Supply Chain Engineers," 3<sup>rd</sup> Workshop on Supply Chain Education, Georgia Tech Logistics Innovation and Research Center, Panama City, Panama, Aug 8, 2013.
- "Designing Truck Freight Consolidation Plans Using Integer Programming-Based Local Search," ARC-RIM Industry Day, Algorithms and Randomness Center and Robotics & Intelligent Machines, Georgia Tech, May 4, 2012.
- 12. "Dynamic Ride-Sharing in Metro Atlanta," Atlanta Model Users Group Meeting, Atlanta Regional Commission, Feb 26, 2010 (with N. Agatz).
- "Constructing Fixed Delivery Routes for Vehicle Routing Problems with Stochastic Customers," Dipartimento di Elettronica, Informatica e Sistemistica (DEIS), Università di Bologna, Bologna, Italy, Oct 5, 2007.
- 14. "Building Robust Plans for Freight Repositioning," Department of Industrial Engineering," Campus Toluca, Tecnológico de Monterrey, May 4, 2007.
- 15. "Building Robust Plans for Freight Repositioning," Department of Industrial Engineering and Management Sciences, Northwestern University, Apr 11, 2006.
- 16. "Building Robust Plans for Freight Transportation Systems," Institute for Transportation Studies, University of California, Berkeley, Mar 17, 2006.
- 17. "Using a Partially-Observed Markov Decision Model to Estimate Value of Demand Sensing Data", General Motors Research Laboratory, Bangalore, India, Jan 5, 2005.
- 18. "Robust Models for Dynamic Transportation Asset Repositioning," Department of Industrial and Systems Engineering, Auburn University, Dec 2, 2004.
- 19. "Transportation Security and Productivity," Spring School on Transportation, HEC Montreal, Montreal, Quebec, Canada, May 12-14, 2004.
- 20. "Models for Design and Operation of Freight Transportation Logistics Systems," TLI-AP Industry Seminar Series, National University of Singapore, Mar 11, 2003.
- "Transportation Logistics System Design via Continuous Approximations: Fundamentals and Recent Results," TLI-AP Academic Seminar Series, National University of Singapore, Feb 28, 2003.

- 22. "Real-time Coordination in Stochastic and Dynamic Vehicle Scheduling," TLI-AP Academic Seminar Series, National University of Singapore, Jun 11, 2002.
- 23. "Vehicle Routing and Scheduling in Real-time: a User's Guide," TLI-AP Industry Seminar Series, National University of Singapore, Jun 7, 2002.
- 24. "Design of large-scale vehicle routing systems for uncertain environments," School of Industrial and Systems Engineering, Georgia Institute of Technology, Apr 2000.
- 25. "Design of large-scale vehicle routing systems for uncertain environments," Department of Civil Engineering, Texas A&M University, Mar 2000.
- 26. "Design of large-scale vehicle routing systems for uncertain environments," Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, Mar 2000.
- 27. "Design of large-scale vehicle routing systems for uncertain environments," Department of Industrial Engineering and Management Sciences, Northwestern University, Feb 2000.
- 28. "Design of large-scale vehicle routing systems for uncertain environments," Department of Industrial Engineering and Management Sciences, Purdue University, Feb 2000.

#### E. GRANTS AND CONTRACTS

#### E1. As Principal Investigator

- Determining the Feasibility of an Intermodal Facility in Cordele, Georgia Agency/Company: Cordele-Crisp Industrial Development Commission Total Amount: \$17,205 Role: Principal Investigator (TLI) Collaborators: R. Lann (co-PI) and B.W. Riall (co-PI) (GT-EDI) Period of Contract: 2003
- Determining the Feasibility of an Inland Intermodal Facility along I-16, Georgia Agency/Company: Swainsboro/Emanuel County Joint Development Authorities Total Amount: \$50,000 (2005) Role: Principal Investigator (TLI) Collaborators: R. Lann (PI) (GT-EDI) Period of Contract: 2005
- Dynamic Route Guidance: Application within Cross-town Improvement Project Agency/Company: SAIC on contract from FHWA Total Amount: \$25,000 Role: Principal Investigator Period of Contract: 2009-10
- Distribution Network Re-planning Agency/Company: Farmers Furniture Total Amount: \$17,000 Role: Principal Investigator Period of Contract: 2010

5. Railyard Operations Planning

Agency/Company: Olin Corporation grant to Supply Chain and Logistics Institute Total Amount: \$20,000 Role: Principal Investigator Period of Contract: 2011

- Disruption Management System Enhancement Agency/Company: Union Pacific Railroad Total Amount: \$80,428 Role: Principal Investigator Period of Contract: 2012
- Risk Mitigation and Food Supply Chain Design and Control Agency/Company: DHS National Center for Food Protection and Defense Total Amount: \$876,238 Role: Principal Investigator Collaborators: C. White (co-PI) Follow-on Award: Host, 2012 DHS Summer Research Team Program for Minority Serving Institutions for Dr. Lauren Davis, North Carolina A&T Period of Contract: 2010-2016
- Georgia Ports Authority Big Ship Impacts
   Agency/Company: Georgia Ports Authority; Georgia Center of Innovation for Logistics
   Total Amount: \$65,000
   Role: Principal Investigator
   Collaborators: M. Savelsbergh, T. Brown (co-PIs)
   Period of Contract: 2019
- UPS Freight Dock Operations Optimization and Load Planning Agency/Company: United Parcel Service Total Amount: \$150,676 Role: Principal Investigator Period of Contract: 2021-22
- UPS Strategic Load Plan Optimization Agency/Company: United Parcel Service Total Amount: \$175,838 Role: Principal Investigator Collaborators: A. Toriello (Senior Personnel) Period of Contract: 2022-23
- 11. UPS Automating Tactical Load Planning with Machine Learning and Optimization Agency/Company: United Parcel Service Total Amount: \$298,745 Role: Principal Investigator Collaborators: P. Van Hentenryck (co-PI) Period of Contract: 2022-23

- 12. UPS Automating Tactical Load Planning with Machine Learning and Optimization, Continuation Agency/Company: United Parcel Service Total Amount: \$448,000 Role: Principal Investigator Collaborators: P. Van Hentenryck (co-PI) Period of Contracts: 2023-24, 24-25
- Panama Logistics Innovation and Research Center Agency/Company: Georgia Tech Panama Foundation Total Amount: \$752,323 Role: Principal Investigator Collaborators: H.D. Ratliff (Senior Personnel) Period of Contracts: 2022-23, 23-24, 24-25

#### E2. As Co-Principal Investigator

- Intermodal Freight Security, Efficiency, and Reliability
   Agency/Company: National University of Singapore, TLI-AP, grant from Singapore EDB
   Total Amount: \$158,708
   Role: Co-principal Investigator
   Collaborators: C. White (co-PI)
   Period of Contract: 2002-04
- Leaders in Logistics: Roadway Express and Yellow-Roadway Corporation Agency/Company: Yellow-Roadway Corporation Total Amount: \$272,000 Role: Co-principal Investigator Collaborators: M. Savelsbergh (co-PI) Period of Contract: 2002-09
- Workshop on Supply Chain Security and Productivity: Research and Education Implications Agency/Company: National Science Foundation (NSF) DMII#0334492 Total Amount: \$30,000 (2003-2004) Role: Co-principal Investigator Collaborators: M. Savelsbergh (co-PI); C. White (PI) Period of Contract: 2003-04
- Petrochemical Logistics Research Group Agency/Company: National University of Singapore, TLI-AP, grant from Singapore EDB Total Amount: \$192,720 Role: Co-principal Investigator Collaborators: F. Al-Khayyal (co-PI), M. Goetschalckx (co-PI); M. Savelsbergh (PI) Period of Contract: 2003-04
- SGER: Multi-scale Modeling for Homeland Security and Supply Chain Logistics Efficiency Agency/Company: National Science Foundation (NSF) DMS/Green# 0426056 Total Amount: \$75,000 Role: Co-principal Investigator

Collaborators: P. Kvam (co-PI), C. White (co-PI), C. Wu (co-PI); J.C. Lu (PI) Period of Contract: 2004-05

- Value of Supply Chain Efficiencies from Improved Demand Sensing Agency/Company: General Motors Total Amount: \$82,611 Role: Co-principal Investigator Collaborators: C. White (PI) Period of Contract: 2004-05
- Security and Post-harvest Food Supply Chain Productivity and Resiliency Agency/Company: DHS National Center for Food Protection and Defense Total Amount: \$360,343 (2004-2007) Role: Co-principal Investigator Collaborators: C. White (PI) Period of Contract: 2004-07
- NEES-GC: Risk Mitigation for Strategic Ports
   Agency/Company: National Science Foundation (NSF)
   Total Amount: \$3,600,000
   Role: Co-Principal Investigator
   Collaborators: A. Bostrom (co-PI), S. Werner (co-PI), R. Desroches (co-PI); G. Rix (PI); 12
   additional Investigators
   Funding Portion: \$525,000
   Leadership Role: Integrated System Performance Team Co-Leader
   Period of Contract: 2005-10
- SGER: Digital Technology Enhanced Collection of Perishable Hurricane Damage Data Agency/Company: National Science Foundation (NSF) Total Amount: \$28,000 (2005-06) Role: Co-principal Investigator Collaborators: G. Rix (co-PI), H. Fritz (co-PI); J.D. Frost (PI) Period of Contract: 2005-06
- Transportation Research Center for Freight, Trade, Security, and Economic Strength Agency/Company: Federal Highway Administration Total Amount: \$430,791 (2005-2007) \$967,308 (2007-2009) Role: Co-principal Investigator and Center Associate Director Collaborators: C. White (PI); 13 additional supported Investigators from GT and Georgia Southern Funding Portion: \$126,000 (2005-2007), \$193,000 (2007-2009) Period of Contract: 2005-09
- Independent Evaluation of an Expanded Satellite Based Mobile Communications Tracking System Agency/Company: Federal Motor Carrier Safety Administration (FMCSA) Total Amount: \$148,799

Role: Co-principal Investigator Collaborators: C. White (co-PI); M. Nowak (Investigator) Period of Contract: 2005-07

12. Globalization and Energy Use

Agency/Company: Creating Energy Options (CEO) Program, Georgia Institute of Technology Total Amount: \$20,000 Role: Co-principal Investigator Collaborators: E. Johnson (co-PI), U. Nair-Reichert (co-PI), and M.W.P. Savelsbergh (co-PI); V. Thomas (PI) Period of Contract: 2006-07

- Leaders in Logistics: United Distributors
   Agency/Company: United Distributors, Inc.
   Total Amount: \$65,000
   Role: Co-principal Investigator
   Collaborators: M. Savelsbergh (co-PI)
   Period of Contract: 2006-07
- 14. Leaders in Logistics: Saia

Agency/Company: Saia Total Amount: \$330,000 Role: Co-principal Investigator Collaborators: M. Savelsbergh (co-PI) Period of Contract: 2007-10

- Freight Transportation Risk and Resiliency in International Food Supply Chains Agency/Company: DHS National Center for Food Protection and Defense Total Amount: \$230,811 Role: Co-principal Investigator Collaborators: C. White (co-PI) Period of Contract: 2007-09
- Methodologies to Estimate the Economic Impacts of Disruptions to Goods Movement System Agency/Company: The National Academies Total Amount: \$300,000 Role: Co-principal Investigator Collaborators: M. Meyer (PI), F. Southworth (co-PI) Period of Contract: 2010-12
- Leaders in Logistics: NCR: Planning Spare Parts Inventory System Agency/Company: NCR Total Amount: \$160,000 Role: Co-principal Investigator Collaborators: J. Forrest (co-PI), A. Ramudhin (co-PI) Period of Contract: 2012-13

Future of Logistics: Next Generation Supply Chain System
 Agency/Company: National University of Singapore, Georgia Tech
 Total Amount: \$960,000
 Role: Co-principal Investigator
 Collaborators: C. White (Georgia Tech, co-PI) and Chew Ek Peng, Lee Loo Hay (National
 University of Singapore, co-PIs)
 Period of Contract: 2014-16

 GrubHub: Building Driver Scheduling Approaches Agency/Company: GrubHub Total Amount: \$340,000 Role: Co-principal Investigator Collaborators: M. Savelsbergh (Georgia Tech, co-PI) Period of Contract: 2015-19

20. Cisco: Supply Chain Gamification/Visualization
 Agency/Company: Cisco
 Total Amount: \$125,000
 Role: Co-principal Investigator
 Collaborators: B. Montreuil (Georgia Tech, co-PI), M. Coleman (Georgia Tech IMTC, co-PI)
 Period of Contract: 2015-16

21. UPS: Optimizing Real-time Line-haul Dispatch

Agency/Company: UPS Total Amount: \$240,000 Role: Co-principal Investigator Collaborators: M. Savelsbergh, N. Boland (Georgia Tech, co-PIs) Period of Contract: 2016-18.

22. UPS: Line-haul Equipment Management

Agency/Company: UPS Total Amount: \$320,000 Role: Co-principal Investigator Collaborators: M. Savelsbergh, N. Boland (Georgia Tech, co-PIs) Period of Contract: 2018-20.

- Data-Driven Design and Operation of Hyperconnected Inter-city Logistics Systems Agency/Company: SF Express Total Amount: \$1,338,000 Role: Co-principal Investigator Collaborators: B. Montreuil (PI); M. Savelsbergh, A. Toriello, S. Pokutta (co-PIs) Period of Contract: 2017-19.
- 24. Bulky-Item Supply Service Network Optimization with Delivery-Time Sensitive Clients Agency/Company: The Home Depot Total Amount: \$262,754

Role: Co-principal Investigator Collaborators: B. Montreuil (PI); M. Dahan (co-PI) Period of Contract: 2020-21.

 Shipment Pattern Identification, Consolidation, and Optimization Agency/Company: Michelin Total Amount: \$175,323 Role: Co-principal Investigator Collaborators: B. Montreuil (PI); Y. Xie (co-PI) Period of Contract: 2024-25.

#### E3. As Senior Personnel or Contributor

- Productivity of Port Container Operations under Congestion Agency/Company: Sloan Trucking Industry Program, Sloan Foundation Total Amount: \$97,562 Role: Senior Personnel Collaborators: C. White (PI) Funding Portion: \$97,562 Period of Contract: 2003-06
- A\*STAR Strategic Research Program—Integrated Supply Chain Networks Agency/Company: Singapore Agency for Science, Technology, and Research (A\*STAR) Total Amount: \$287,356 Role: Senior Personnel Collaborators: J. Bartholdi (PI) Period of Contract: 2003-05
- Development of Databases and Models for an Interstate Food & Agriculture Transportation System Agency/Company: DHS Science & Technology Directorate, University Programs Total Amount: \$600,000 Role: Senior Personnel Collaborators: C. White (GT, co-PI) and M. Orosz (U. Southern California, co-PI) Funding Portion: \$45,000 Period of Contract: 2007-08
- Freight Movement, Port Facilities, and Economic Competitiveness Agency/Company: Georgia Tech UTC Total Amount: \$17,365 (subcontract) Role: Investigator Collaborators: C. White (Investigator) Period of Contract: 2013-14
- 5. Al Institute: Decision Making at Massive Scales: Fusing Artificial Intelligence and Mathematical Optimization

Agency/Company: National Science Foundation Total Amount: \$20,000,000 Role: Senior Personnel and Logistics and Supply Chains Thrust Lead. Collaborators: P. Van Hentenryck (PI); G. Lan, J. Romberg (GT co-PIs). Period of Contract: 2021-2026

6. THD Sourcing Analysis

Agency/Company: The Home Depot Total Amount: \$395,342 Role: Senior Personnel Collaborators: B. Montreuil (PI); M. Dahan (Senior Personnel). Period of Contract: 2022-2023

 Steelcase: Data Driven Agile and Resilient Logistics Agency/Company: Steelcase Total Amount: \$150,000 Role: Senior Personnel Collaborators: B. Montreuil (PI); M. Dahan (Senior Personnel). Period of Contract: 2022-2024

# H. OTHER PROFESSIONAL ACTIVITIES

- Versatile Mobile Systems, Lynwood, WA, 2002-2004. Advised on development of advanced mobile workforce scheduling and management systems.
- ESRI, Redlands, CA, 2006-2007.
   Enabled technology transfer of advanced service network design methodologies into commercial software tools.
- Bex, Seattle, WA, 2007. Provided analysis and design services for an advanced, crowd-sourced package logistics system.
- 4. *EnergeticX/Zebigo*, Seattle, WA, 2008-2012.

Provided analysis and design services for a startup focused on providing dynamic ridesharing services for personal mobility.

- Kimberly-Clark Healthcare, Alpharetta, GA, 2009. Performed inbound transportation plan analysis and proposed redesign of medical devices and supplies movements into distribution centers.
- Ridescout, Austin, TX, 2011-2016.
   Member, Industry Advisory Board. Provided technical expertise on multi-modal trip planning and ride-share optimization for first successful provider of personal mobility planning aggregation services via smartphone.
- Fitz Gate Ventures, Princeton, NJ, 2017-present. Member of "Friends of Fitz" advisory group, providing expertise and analysis informing investments on freight transportation and logistics start-up enterprises.
- Chick-fil-A, College Park, GA, 2019.
   Provided advisory services for the design and operation of meal delivery from retail stores.

# **V.** EDUCATION

# A. COURSES TAUGHT

- 1. Logistics Systems Analysis (CE298-6), University of California, Berkeley
  - Fal 1997.
- 2. Introduction to Supply Chain Modeling: Logistics (ISyE 3103)
  - Spr 2001, Fal 2002, Fal 2004, Spr 2007, Spr 2010, Spr 2013, Fal 2013, Fal 2015, Fal 2024.
- 3. Senior Design (ISyE 4104/05, 4106)
  - Fal 2003, Spr 2004, Spr 2008, Fal 2008, Fal 2010, Spr 2012
- 4. Transportation and Supply Chain Systems (ISyE 6203)
  - Fal 2001, Spr 2002, Fal 2003, Fal 2005, Fal 2006, Spr 2009, Sum 2010, Spr 2011, Sum 2011, Sum 2012.
- 5. Operations Research for Supply Chains I: Optimization (ISyE 6333)
  - Fal 2011.
- 6. Operations Research for Supply Chains II: Stochastic Modeling (ISyE 6334)
  - Fal 2013, Fal 2016.
- 7. Supply Chain Engineering II: Freight Transportation (ISyE 6336)
  - Spr 2011, Spr 2012, Spr 2013, Spr 2014, Spr 2015, Spr 2016, Spr 2018, Spr 2019, Spr 2020, Spr 2021, Spr 2022, Spr 2023, Spr 2024.
- 8. Supply Chain Seminar (ISyE 6340)
  - Spr 2020, Spr 2021, Spr 2022, Spr 2023, Spr 2024.
- 9. Manufacturing Supply Chain Operations (ISyE 6383)
  - Fal 2017.
- 10. Logistics and Transportation Systems Analysis (ISyE 8813A, 8813C, 8852)
  - Spr 2005, Spr 2006, Fal 2007.
- 11. Logistics Systems Engineering (ISyE 7203)
  - Fal 2008, Fal 2009, Fal 2010, Fal 2011, Fal 2012, Fal 2017, Fal 2018.
- 12. Advanced Real-world Transportation Systems (ISyE 7653)
  - Spr 2005.
- 13. First-year Ph.D. Student Seminar (ISyE 8803 ALE, ISyE 8802 ERE)
  - Fal 2014, Spr 2015, Fal 2015, Spr 2016, Fal 2016, Spr 2017, Fal 2017, Spr 2018, Fal 2018, Spr 2019, Fal 2019.

# **B.** INDIVIDUAL STUDENT GUIDANCE

# B1. Ph.D. Students

- B1.a. Graduated Ph.D. Students
- 1. Ricardo Gatica, A Binary Dynamic Programming Problem with Affine Transition and Reward Functions: Properties and Algorithm, 2003 (co-advised with J. VandeVate).

Research Sponsor: The Logistics Institute: United States Postal Service Current Position: Professor and School Chair, Industrial Engineering, Pontificia Universidad Católica de Valparaíso, Chile

2. Brian Lewis, *Inventory Control with Risk of Major Supply Chain Disruptions*, 2005 (co-advised with C. White).

Research Sponsor: Dwight D. Eisenhower Graduate Transportation Fellowship Current Position: Chief Data Scientist, Fractal Sciences

- Rajeev Namboothiri, Planning Container Drayage Operations at Congested Seaports, 2006. Research Sponsor: Sloan Trucking Industry Program Current Position: Lead Scientist, GE Global Research, India
- 4. Juan Carlos Morales, *Planning Robust Freight Transportation Operations*, 2006 (co-advised with M. Savelsbergh).

 Honors: Dissertation awarded First Prize, 2007 Transportation Science and Logistics Society Dissertation Award, INFORMS
 Research Sponsor: The Logistics Institute Asia-Pacific
 Current Position: Director, Operations Research and Advanced Analytics, BNSF Railway
 Company

5. Burak Karacik, *Driver Assignment for Less-than-Truckload Carriers*, 2006 (co-advised with M. Savelsbergh).

Research Sponsor: The Logistics Institute: Yellow-Roadway Corporation Current Position: Senior Product Manager, Amazon.com

6. Prashant Warier, *Dynamic Decision Support for Regional Less-than-truckload Carriers*, 2007 (co-advised with M. Savelsbergh).

Research Sponsor: The Logistics Institute: ORTEC Current Position: Director, Optimization Services and Solutions Development, Fractal Analytics

7. Steve Morris, Truck Dispatching and Fixed Driver Rest Locations, 2007.

Research Sponsor: National Center for Food Protection and Defense, DHS First Position: Senior Operations Analysis Manager, Capital One

8. Olga Ortiz, *Stochastic Inventory Control with Partial Demand Observability*, 2008 (co-advised with C. White).

Research Sponsor: General Motors Corporation First Position: Operations Research Analyst, Frito Lay Corporation

- Aykagan Ak, Berth and Quay Crane Scheduling: Problems, Models, and Solution Methods, 2008. Research Sponsor: National Science Foundation, USDOT Current Position: Director, Supply Chain Optimization, Manhattan Associates
- Emrah Uyar, Routing in Stochastic Environments, 2008 (co-advised with M. Savelsbergh).
   Research Sponsor: National Science Foundation, United Distributors
   First Position: Senior Operations Research Consultant, JDA Software Group
- 11. Mike Hewitt, *Integer Programming Based Search*, 2009 (co-advised with M. Savelsbergh and G. Nemhauser).

Research Sponsor: Saia Motor Freight Current Position: Professor, Loyola University Chicago

12. Ashlea Bennett, Home Health Care Logistics Planning, 2009.

Honors: Richard P. Covert FHIMSS Scholarship for Management Systems Research Sponsor: National Science Foundation Graduate Fellowship Current Position: Associate Professor, University of Arkansas (NSF CAREER Award, 2016)

13. Yang Zhang, Advances in LTL Load Plan Design, 2010 (co-advised with M. Savelsbergh).

Research Sponsor: Saia Motor Freight Current Position: Vice President, One William Street Capital

14. Tae Su Cheong, Value of Information and Supply Uncertainty in Supply Chains, 2011 (co-advised with C.C. White, III).

Research Sponsor: Georgia Tech Foundation, Schneider Chair First Academic Position: Assistant Professor, National University of Singapore Current Position: Associate Professor, Korea University

15. J. Antonio Carbajal, *Transportation Resource Management in Large-scale Freight Consolidation Networks*, 2011 (co-advised with M. Savelsbergh).

> Honors: INFORMS 2017 Wagner Prize Finalist (Turner Broadcasting), INFORMS 2018 Edelman Award Finalist (Turner Broadcasting) Research Sponsor: Yellow-Roadway Corporation Current Position: Head of Analytics, Data, and Decision Science, iHeartMedia

16. Kate Lindsey, *Improving Freight Consolidation Networks Using IP-Based Local Search*, 2012 (co-advised with M. Savelsbergh).

Research Sponsor: Saia Motor Freight First Position: Advanced Analytics Supervisor, United Parcel Service

17. Yu Zhang, Contributions in Supply Chain Risk Assessment and Mitigation, 2013.

Research Sponsor: National Center for Food Protection and Defense, DHS First Position: Operations Research Scientist, Amazon.com

18. Xing Wang, Optimizing Ride Matches for Dynamic Ride-sharing Systems, 2013.

Research Sponsor: General Electric (internship) First Position: Operations Researcher, General Electric Research

19. Yanling Chang, A Leader-follower Partially-Observed Markov Game, (co-advised with C. White), 2015.

Research Sponsor: National Center for Food Protection and Defense Current Position: Assistant Professor, Southern Methodist University

- 20. Brian Kues, On Spare Parts Supply Chains with Forward Stocking Location Recourse, 2016. Research Sponsors: Olin, NCR, DHS National Center for Food Protection and Defense First Position: Operations Research Consultant, Revenue Analytics
- 21. Mathias Klapp, *Dynamic Optimization for Same-day Delivery Operations*, 2016 (co-advised with A. Toriello).

Research Sponsor: None First Position: Assistant Professor, Pontificia Universidad Católica de Chile, Santiago

22. Ilke Bakir, Large Scale Optimization Methods for Fleet Management in Long-Haul Transportation Networks, 2017.

> Research Sponsor: None First Position: Associate Professor, University of Groningen, Netherlands

23. Luis Damian Reyes Rodriguez, *Large Scale Optimization Methods for Fleet Management in Long-Haul Transportation Networks*, 2018 (co-advised with M. Savelsbergh).

> Research Sponsor: GrubHub First Position: Research Scientist, Amazon

24. Satya Malladi, Data-Driven Reconfigurable Supply Chain Design and Inventory Control, 2018 (coadvised with C. White).

> Research Sponsor: National Center for Food Protection and Defense First Position: Post-doctoral Student Researcher, Technical University of Denmark. Current Position: Senior Data Scientist, Kantar

25. Alborz Parcham-Kashani, Data-Driven Reconfigurable Supply Chain Design and Inventory Control, 2018.

Research Sponsor: Union Pacific Railroad First Position: Research Scientist, Amazon.

26. Yassine Ridouane, Data-Driven Reconfigurable Supply Chain Design and Inventory Control, 2020 (co-advised with M. Savelsbergh and N. Boland).

Research Sponsor: UPS First Position: Research Scientist, Amazon.

27. Adolfo Rocco Rocco, Service Network Design for Parcel Trucking, 2021 (co-advised with A. Toriello).

Research Sponsor: SF Express First Position: Research Scientist, Amazon.

 Alexander Stroh, Tactical Design of Last Mile Logistical Systems, 2021 (co-advised with A. Toriello).

> Research Sponsor: SF Express First Position: Lead Operations Research Scientist, Target.

29. Ramon Auad, Demand and Capacity Management for Meal Delivery Systems, 2021 (co-advised with M. Savelsbergh).

Research Sponsor: Grubhub First Position: Research Scientist, Amazon.

- Reem Khir, Sort Planning for Express Parcel Delivery Systems, 2022 (co-advised with A. Toriello). Research Sponsor: SF Express First Position: Assistant Professor, Purdue University.
- 31. Daniel Ulch, Greedy Approaches for Large-Scale Flow and Load Planning, 2022.

Research Sponsor: SF Express, United Parcel Service First Position: Research Scientist, Amazon.

32. Dipayan Banerjee, Demand Management and Delivery Optimization for E-retail Fulfillment, 2024 (co-advised with A. Toriello).

Research Sponsor: National Science Foundation Graduate Fellowship, The Home Depot. First Position: Assistant Professor, Loyola University Chicago

33. Lacy Greening, Models and Algorithms for E-commerce Fulfillment Network Design, 2024.

Research Sponsor: The Home Depot, Dwight D. Eisenhower Graduate Transportation Fellowship First Position: Assistant Professor, Arizona State University

34. Ritesh Ojha, Advances in Tactical Planning Decision Problems in Trucking Service Networks, 2024.

Research Sponsor: United Parcel Service First Position: Research Scientist, Amazon.

#### B1.b. In Process Ph.D. Students

35. Ravit Pichayavet, 2021-present.

Research Sponsor: United Parcel Service, Michelin. Milestone: Passed Comprehensive Examination, Fal 2022.

36. Tasnim Ahmed Tahasin, 2024-present.

Research Sponsor: None. Milestone:

37. Ceren Konak, 2024-present. Research Sponsor: United Parcel Service. Milestone:

# B4.b. External

- 1. Jenny Díaz Ramírez, An Integrated Approach for the Single-Fleet Aircraft and Crew Scheduling Problem, External Advisor and Ph.D. Dissertation Committee Member, Department of Industrial Engineering, Campus Toluca, Tecnológico de Monterrey, F. Trigos (advisor), May 2007.
- Guangming Zhang, Operational Flexibility in Drayage Vehicle Routing: Multi-Resource Routing Problem with Flexible Tasks, Ph.D. Dissertation Committee Member, Department of Industrial Engineering and Management Systems, Northwestern University, K. Smilowitz (advisor), Oct 2007.
- 3. Nitish Umang, From Container Terminals to Bulk Ports: Models and Algorithms for Integrated Planning and Robust Scheduling, Ph.D. Thesis Jury Member, Ecole Polytechnique Federale de Lausanne, M. Bierlaire (advisor), Feb 2014.
- 4. Alp Arslan, *Operational Strategies for On-demand Delivery Services*, Ph.D. Thesis Committee Member, Rotterdam School of Management, Erasmus University, N. Agatz (advisor), Nov 2019.

#### **B5. Mentorship of Post-doctoral Fellows or Visiting Scholars**

1. Niels Agatz, *Dynamic Ride-Sharing*, 2009-2010, post-doctoral fellow (co-advised with M. Savelsbergh).

Research Sponsor: Netherlands Organisation for Scientific Research (NWO) First Position: Assistant Professor, Rotterdam School of Management, Erasmus Current Position: Professor, Rotterdam School of Management, Erasmus

2. Xiaole Han, Berth and Quay Crane Scheduling at Container Seaports, 2011-12, visiting Ph.D. student.

Home Department: School of Mechanical Engineering, Shanghai Jiao Tong University

3. Jessye (Bemley) Talley, *Markov Game Models for Food Supply Chain Risk Assessment*, 2012, visiting Ph.D. student.

Home Department: Industrial and Systems Engineering, North Carolina A&T First Position: Assistant Professor, Morgan State University

4. Nitish Umang, *Dynamic Berth and Quay Crane Scheduling Under Uncertainty*, 2012-13, visiting Ph.D. student.

Home Department: École Polytechnique Fédérale de Lausanne, Switzerland

5. Jonas Christensen, *Stochastic Cargo Mix Problems*, 2017, visiting Ph.D. student Home Department: Technical University of Denmark (DTU), Denmark

### **B6. Additional Student Advising Activities**

1. DHS Summer Research Team Program for Minority Serving Institutions, *Food Supply Chain Risk* Assessment, Summer 2012.

Research Sponsor: U.S. DHS, Science and Technology Directorate Visiting Faculty Member: Dr. Lauren Davis, Assistant Professor Visiting Students: Jessye Bemley, Raquel Teasley Institution: North Carolina A&T State University Center Faculty Member: Alan Erera Host Institution: Georgia Institute of Technology Description: One of 6 teams selected in a nationwide competition, each to work with key researchers at a DHS university center at a host institution

# C. EDUCATIONAL INNOVATIONS AND OTHER CONTRIBUTIONS

#### **Degree Program Development and Administration**

Faculty Director, Master of Science in Supply Chain Engineering (2011-present)

Created new, premium-tuition Master's degree program designed to meet emerging industry demand for rigorously-trained industrial engineers with in-depth knowledge of the supply chain domain, along with colleague J. Bartholdi. In role as Faculty Director for the program, I recruit students and manage admissions, manage partnerships with international universities, and build and manage a network of industry partners that provide experiential course and Capstone project opportunities for students and placement opportunities upon graduation.

- International Partner Universities: Pontificia Universidad Católica de Chile, Universidad Tecnológica de Panamá, Universidad Latina de Panamá
- Industry Partners: Amazon, BMW, Caterpillar, Menlo Worldwide, ExxonMobil, IBM, UPS, Siemens, Philips, Intel, Home Depot, Wal-mart, Sandisk, Llamasoft, Schlumberger, Kimberly Clark, DB Schenker, Whirlpool, Knapp, KIA, Michelin, Chainalytics, King's Hawaiian, Johnson and Johnson

### **Curriculum Development**

# Logistics and Transportation Systems Analysis (ISyE 8813A, 8813C, 8852); Logistics Systems Engineering (ISyE 7203)

Developed to provide in-depth coverage of modeling, analysis, and solution approaches for the design and control of freight transportation and logistics systems. Targeted at Ph.D. students and advanced master's students, the course covers research on the design and control of vehicle routing systems (including dynamic and stochastic systems), dynamic transportation resource management, service network planning, and inventory systems.

Supply Chain Engineering II: Freight Transportation (ISyE 6336)

Developed core freight course for the professional MS in Supply Chain Engineering degree program. The course introduces students to advanced engineering methods, based on operations research analysis, for the design, planning, and control of freight transportation systems from the perspective of both the shippers using transport services and the public carriers providing transport services.

### **Professional Education Courses Taught**

- Invited instructor, *Transportation/Distribution/Logistics Modeling*, The Logistics Institute, Georgia Institute of Technology, Feb 6, 2003. Topic: "Dynamic Vehicle Routing and Scheduling Systems."
- Invited instructor, Logistics Short Course, The Supply Chain and Logistics Institute, Georgia Institute of Technology, 2003, 2007, 2008, 2009. Topics: "Securing the Transportation Chain"; "Supply Chain Security"
- Invited instructor, Logistics Optimization, The Logistics Institute, Georgia Institute of Technology, 2004, 2005, 2006. Topics: "Dynamic Vehicle Routing and Scheduling Systems"; "Truckload Transportation"; "Vehicle Routing and Scheduling"
- Invited instructor, Supply Chain and Logistics Optimization, The Supply Chain and Logistics Institute, Georgia Institute of Technology, 2007, 2008. Topics: "Truckload Transportation"; "Vehicle Routing and Scheduling"
- Invited instructor, Coca-Cola Supply Chain Excellence Leadership Development Program, Georgia Institute of Technology and Coca-Cola, Nov 1-12, 2010. Topic: "Demand Fulfillment— Transportation"
- 6. Invited instructor, *Transportation and Distribution Planning*, The Supply Chain and Logistics Institute, Georgia Institute of Technology, 2015, 2016, 2017, 2018. Topics: "Transportation and Distribution Fundamentals"; "Next Generation Last-mile Logistics"

# **VI. SERVICE**

# A. PROFESSIONAL CONTRIBUTIONS

# A1. Editorial Board Memberships

### INFORMS

• Associate Editor, *Transportation Science*, 2015-18.

# Encyclopedia of Operations Research and Management Science, Wiley

• Topical Editor, *Freight Transportation and Warehousing*, 2009-present.

# Institute of Industrial Engineers

- Associate Editor, IISE Transactions: Focused Issue on Supply Chain and Logistics, 2024present.
- Associate Editor, IIE Transactions: Focused Issue on Operations Engineering and Analysis, Homeland Security Department, 2010-12.

# Institute of Electrical and Electronics Engineers

Associate Editor, IEEE Transactions on Intelligent Transportation Systems, 2003-09.

# Flexible Services and Manufacturing Journal

Associate Editor, 2007-09.

# Networks

Guest Editor, Special Issue: Route 2007, 2008-2009

# A2. Society Offices, Activities and Membership

# Institute for Operations Research and Management Science (INFORMS)

- INFORMS Subdivision Council Representative, *Transportation Science and Logistics* Society, 2021-24.
- Past President, *Transportation Science and Logistics Society*, 2020.
- President, *Transportation Science and Logistics Society*, 2019.
- Judging Committee Member, *INFORMS Student Competition*, 2019.
- Vice President and President-Elect, *Transportation Science and Logistics Society*, 2018.
- Chair, *Membership and Member Services Committee*, 2011-12.
- Chair, Freight Transportation and Logistics Special Interest Group, *Transportation Science and Logistics Society*, 2010-11.
- Vice Chair, Freight Transportation and Logistics Special Interest Group, *Transportation Science and Logistics Society*, 2008-09.
- Co-Editor, INFORMS Editor's Cut, Volume 6, *Fueling Transportation with Analytics and Technology*, 2016.
- Member, Junior Faculty Interest Group Best Paper Award Committee, 2014.
- Member, George Nicholson Student Paper Award Committee, 2012-13.

- Member, Dissertation Award Committee, *Transportation Science and Logistics Society*, 2006-08, Chair 2008.
- Member, Best Paper Award Committee, *Transportation Science and Logistics Society*, 2011-12.
- Member, Student Paper Award Reviewing Panel, Rail Applications Section, 2013.
- Member, *Membership and Member Services Committee*, 2006-12.
- Secretary and Co-Founder, Junior Faculty Interest Group Forum, 2001-02.
- Member, Transportation Science and Logistics Society, 2001-present.

# National Center for Food Protection and Defense (U.S. DHS Center of Excellence)

• Member, *Research Evaluation and Advisory Panel (REAP)*, 2010-11.

# Council on Competitiveness

Invited Member, Competitiveness and Security Advisory Committee, 2005-07.

# Transportation Research Board

- Member, ADB30 Transportation Network Modeling Committee, 2003-06.
- Friend, AT025 Urban Freight Committee, 2013-present.
- Friend, AT060T Task Force on Trucking Industry Research, 2006-present.
- Friend, ADB30 Transportation Network Modeling Committee, 2007-present.

# A3. Organization and Chairmanship of Technical Sessions, Workshops, and Conferences

- Organizing Committee Member, *TSL Conference 2020*, Arlington, Virginia, May 2020.
- Organizing Committee Member, 22<sup>nd</sup> International Symposium on Transportation and Traffic Theory (ISTTT), Evanston, Illinois, Jul 2017.
- Co-organizer, 5<sup>th</sup> INFORMS Transportation Science and Logistics Workshop, Atlanta, Georgia, Jun 2016.
- Co-organizer, *ROUTE 2007: International Workshop on Vehicle Routing and Transportation*, Jekyll Island, Georgia, May 2007.
- Track Chair, Logistics and Fleet Management, *The 11<sup>th</sup> World Conference on Transport Research*, Berkeley, California, Jun 2007.
- Cluster Chair, *Transportation Science Section*, INFORMS 2003 Annual Meeting, Atlanta, Oct 2003.

# A4. Technical Journal or Conference Referee Activities

# Technical Journal Referee

Operations Research Management Science Transportation Science Transportation Research: Part B Transportation Research: Part E Networks International Symposium on Transportation and Traffic Theory Operations Research Letters Computers and Operations Research Naval Research Logistics Journal of Transportation Engineering Production and Operations Management IIE Transactions on Scheduling and Logistics IEEE Transactions on Intelligent Transportation Systems IEEE Transactions on Vehicular Technology Computers and Industrial Engineering Electronic Commerce Research Journal

#### **Conference Program Review Committees**

- Scientific Review Committee Member, 12<sup>th</sup> Triennial Symposium on Transportation Analysis (TRISTAN), Okinawa, Japan, Jun xx-xx, 2025.
- Scientific Committee Member, 2<sup>nd</sup> Triennial INFORMS Transportation Science and Logistics Conference, Chicago, IL, Jul 23-26, 2023.
- Scientific Review Committee Member, 11<sup>th</sup> Triennial Symposium on Transportation Analysis (TRISTAN), Mauritius, Jun 19-26, 2022.
- Scientific Committee Member, 9<sup>th</sup>INFORMS Transportation Science and Logistics Workshop, Ahmedabad, India and Online, Dec 13-15, 2021.
- Scientific Committee Member, 8<sup>th</sup>INFORMS Transportation Science and Logistics Workshop, Rotterdam and Online, Jul 19-20, 2021.
- Scientific Committee Member, 1<sup>st</sup> Triennial INFORMS Transportation Science and Logistics Conference, Chicago, IL, Jul 26-29, 2017.
- Host and Scientific Committee Member, 22<sup>nd</sup> International Symposium on Transportation and Traffic Theory, Chicago, IL, Jul 24-27, 2017.
- Scientific Review Committee Member, 9<sup>th</sup> Triennial Symposium on Transportation Analysis (TRISTAN), Oranjestad, Aruba, Jun 13-17, 2016.
- Scientific Committee Member, 3<sup>rd</sup> INFORMS Transportation Science and Logistics Workshop, Jun 30-Jul 2, 2014.
- Review Board Member, 2006 Manufacturing and Service Operations Management Conference, 2006.
- International Program Committee Member, *First International Conference on Transportation Logistics*, Tsinghua University, Tokyo University, and the National University of Singapore, 2005.

#### A5. Proposal Panels and Reviews

National Science Foundation Canada Foundation for Innovation Netherlands Organisation for Scientific Research UCCONNECT Transportation Research Center (USDOT) University of California Transportation Center (USDOT) METRANS Transportation Center (USDOT)

#### A6. Other Involvement

European Commission and US Department of Transportation

 Invited Participant, City Logistics Research: A Trans-Atlantic Perspective: EU-US Transportation Research Symposium No. 1, co-sponsored by Transportation Research Board of the National Academies, 2013 (one of 25 US delegates from academia, industry, and government).

# **Eno Transportation Foundation**

 Invited Participant, *Logistics Education Forum*, co-sponsored by Federal Highway Administration and USDOT Secretary's Office, 2006.

# B. PUBLIC AND COMMUNITY SERVICE

- Georgia Logistics Educator and Industry Forum Member, 2013-2015.
   In conjunction with the Georgia Center of Innovation for Logistics, this forum focuses on aligning Georgia's educational offerings with the needs of the supply chain industry.
- 2. *Advisory Committee Member*, Georgia Department of Transportation (GDOT) Statewide Truck Lanes Needs Identification Study, 2006.

# C. INSTITUTE CONTRIBUTIONS

# **C1. Institute Committees**

Member, Institute Graduate Curriculum Committee, 2017-2023.

# **C2.** College Committees

# College of Engineering

- Member, School of Industrial and Systems Engineering Chair Search Committee, 2014.
- Attendee, *Strategic Planning Retreat*, Dec 2011.

# C3. School Committees

# School of Industrial and Systems Engineering

- Co-Chair, Ad Hoc Strategic Planning Committee, 2023-24.
- Chair, Endowed Faculty Search Committee, 2022-24.
- Chair, Faculty Search Committee, 2008-10.
- Chair, Awards Committee, 2006-07.
- Chair, Undergraduate Committee, 2005-06.
- Member, *Faculty Search Committee*, 2007-10; 2021-24.
- Member, *Endowed Faculty Search Committee*, 2021-24.
- Member, Industrial Engineering Coordinating Committee, 2022-24.
- Member, Awards Committee, 2005-07; ex officio 2020-23.
- Member, *Graduate Committee*, 2012-13.
- Member, *Strategic Planning Committee*, 2012-13.
- Member, Faculty Retreat Planning Committee, 2011.
- Member, Information Technology Committee, 2006-10.

- Member, Undergraduate Committee, 2004-06.
- Member, Manufacturing and Logistics Ph.D. Examination Committee, 2004-05; 2006-07.
- Member, Supply Chain Engineering Ph.D. Examination Committee, 2008-09; 2010-11; 2012-13; 2018-19.

# School of Civil and Environmental Engineering

- Member, Dickerson Chair in Information Intensive Urban Transportation Systems Search Committee, 2012-13.
- Member, *Transportation Search Committee*, 2004-06.

# C4. Program Development: Research

- Co-Director, *Center for Global Transportation*, Supply Chain and Logistics Institute, 2007present.
- Member, *Georgia Transportation Institute* (GATI), 2005-present.
- Organizing Committee Member, Savannah Maritime Logistics Innovation Center (SMLIC), 2002-03.