PRATIK J. PARIKH

Department of Industrial Engineering, J.B. Speed School of Engineering
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EDUCATION

Virginia Polytechnic Institute and State University, Blacksburg, VA Aug '03 - Sep '06
Ph.D. in Industrial and Systems Engineering
Advisor: Russell D. Meller, Ph.D. (NAE Member; IISE Fellow)

Binghamton University (S.U.N.Y.), Binghamton, NY Aug '01 - Dec '02
Master of Science in Systems Science

The Maharaja Sayajirao University of Baroda, India Aug '97 - May '01
Bachelor of Engineering in Mechanical Engineering

PROFESSIONAL EXPERIENCE

Department Chair / Mary Lee and George Duthie Endowed Professor Aug '20 - current
Department of Industrial Engineering, University of Louisville, KY
Director: Data Analytics and Optimization Laboratory

Professor (Aug '18–Jul '20), **Assoc. Professor** (Aug '14–Jul '18), **Asst. Professor** (Feb '09-Jul '14) Feb '09 - Jul '20
Primary: Department of Biomedical, Industrial and Human Factors Engineering
Joint: Department of Surgery and Department of Computer Science
Wright State University, Dayton, OH

Member, Science Team | Global R&D Oct '06 - Feb '09
Manhattan Associates, Inc., Atlanta, GA

Visiting Scholar Sep '05 - Aug '06
Department of Industrial Engineering, University of Arkansas, Fayetteville, AR

PROFESSIONAL AFFILIATIONS

- Fellow, Institute of Industrial and Systems Engineers (IISE)
- Former Member, Institute for Operations Research and Management Science (INFORMS)

HONORS AND AWARDS

1. Fellow Award, IISE (2024)
2. Best Application Paper, IISE Transactions Focus Issue on Operation Engineering and Analytics (2022)
3. Division Teaching Award, Logistics and Supply Chain Division, IISE (2020)
4. Best Track Paper, Facilities Design and Planning, IISE Annual (2020)
5. Global Outstanding Faculty Advisor and Outstanding Advisor (Great Lakes Region), IISE (2019)
6. Faculty Excellence in Research Award, College of Engineering and Computer Science, WSU (2019)
7. Dayton Forty Under 40 Award, Dayton Business Journal (2019)
8. Best Student Paper (Sagar Hirpara), Logistics and Supply Chain Track, IISE Annual (2019)
9. Volunteer Service Award, INFORMS (2018)
10. Best Track Paper, Facilities Design and Planning, IISE Annual (2018)
11. Best Track Paper, Healthcare Systems, IISE Annual (2017)
12. Best Track Paper, Facilities Design and Planning, IISE Annual (2017)
13. Best Student Paper – 2nd place (Bradley Guthrie), Logistics and Supply Chain Track, IISE Annual (2017)
14. Outstanding Engineers and Scientists Award, Affiliate Societies Council of Dayton (2017)
15. Gold award (as President) – Dayton-Cincinnati Professional Chapter, IISE (2016 and 2017)
16. Gold award (as Newsletter Editor) – Newsletter Competition, IISE (2016)
17. Outstanding Faculty of the Year, College of Engineering and Computer Science, WSU (2016)
18. Six advisees awarded Graduate Student Excellence Award (1 PhD in 2019 and 5 MS in 2011-14, 16)
19. ISE Senior Design advisees won the College Senior Design Showcase Award (2016)
20. Panelist, National Science Foundation (2014–22)
21. Advisor of the Year, WSU (2014)

22. Outstanding Faculty Advisor Award, IISE Great Lakes Region (2013)
23. WSU President's Award for Faculty Excellence: Early Career Achievement (2013)
24. Faculty Early Career Achievement Award, College of Engineering and Computer Science, WSU (2013)
25. Selected to attend the Material Handling Teachers Institute sponsored by the College-Industry Council on Material Handling Education (CICMHE) and Material Handling Industry (2010 and 2013)
26. New Faculty Colloquium, Industrial and Systems Engineering Research Conference 2009, Miami, FL

SCHOLARSHIP

* = medical collaborator; underlined = Parikh's student

REFEREED JOURNALS

Published or In Press

1. Karki, U. and **Parikh, P. J.** (2024), "Joint Determination of Nurse and Patient Bed Positions in an Inpatient Unit Considering Equity in Visibility," *Operations Research for Health Care*, accepted.
2. Ziegler, C. and **Parikh, P. J.** (2024), "Interruptions in a Dental Setting and Evaluating the Efficacy of an Intervention: A Pilot Study," *PLOS One*, https://doi.org/10.1371/journal.pone.0296677.
3. Karki, U. and **Parikh, P. J.** (2024), "Visibility-Based Layout of a Hospital Unit – An Optimization Approach," *Health Care Management Science*, https://doi.org/10.1007/s10729-024-09670-x.
4. Liu, S., Wang, M., Kong, N., and **Parikh, P. J.** (2023), "Optimal Trauma Care Network Redesign with Government Subsidy: A Bilevel Integer Programming Approach," *Omega*, 119, 102885.
5. Hirpara, S., **Parikh, P. J.**, and Kong, N. (2023), "Nested Trauma Network Design Considering Equity and Effectiveness in Patient Safety," *Computers and IE*, 181, 109250.
6. Parikh, P.*, **Parikh, P.J.**, Vaishnav, M., Hirpara, S., Sebastian, S., McCarthy, M.*, Winchell, R.*, and Jansen, J.* (2023), "Performance-Based Assessment of Trauma Systems: Estimates for the State of Ohio," *The American Surgeon*, 89(6):2291-2299.
7. Xiao, L., **Parikh, P.J.**, and Zhang, X. (2023), "Course Scheduling Problem with Room Considerations," *International Journal of Industrial and Systems Engineering*, 45(4):458–483.
8. Gecili, H. and **Parikh, P.J.** (2022), "Joint Shelf Design and Space Allocation Problem for Retailers," *Omega,* 111, 102634.
9. Khatami, M., Alvarado, M., Lawley, M., Kong, N., and **Parikh, P. J.** (2022), "Inpatient Discharge Planning under Uncertainty," *IISE Transactions*, 54(4), 332-347 ***(IISE Transactions Best Application Paper - Focus Issue on Operation Engineering and Analytics)***.
10. Hirpara, S., Vaishnav, M., **Parikh, P. J.**, Kong, N., and Parikh, P.* (2022), "Locating Trauma Centers Considering Patient Safety," *Health Care Management Science*, 25(2):291-310.
11. Repas, S.*, McCarthy, M.*, **Parikh, P.J.**, and Parikh, P.* (2022), "Trauma-Specific Performance Improvement Activities for EMS Providers: A Statewide Perspective," *Journal of Surgical Research*, 279:474-479.
12. Kondapalli, S., **Parikh, P.J.**, Repas, S.*, and Parikh, P.* (2022), "An Approach to Cluster and Benchmark Regional Emergency Medical Service Agencies," *Informatics in Medicine Unlocked,* 29, 100882.
13. Ballester, N., **Parikh, P. J.**, Combs, K., and Peck, J.* (2022), "Inpatient Discharge-by-Noon: Are Fewer Better than All?," *Journal of Maine Medical Center*, 4(1).
14. Karki, U., Guthrie, B., and **Parikh, P. J.** (2021), "Joint Effect of Rack Configuration and Product Assignment on Retail Impulse Revenue," *International Journal of Production Economics*, 234, 107943.
15. Hirpara, S. and **Parikh, P. J.** (2021), "Retail Facility Layout Considering Shopper Travel Path," *Computers and Industrial Engineering,* 154, 106919.
16. Guthrie, B. and **Parikh, P. J.** (2021), "Evaluating Exposure of a Retail Rack Layout in 3D," *Flexible Services and Manufacturing Journal*, 33(1), 107-135.
17. Guthrie, B. and **Parikh, P. J.** (2020), "The Rack Orientation and Curvature Problem for Retailers," *IISE Transactions*, 52(10), 1081-1097.
18. Graham, M.*, **Parikh, P. J.**, Hirpara, S., McCarthy, M.*, Haut, E.*, and Parikh, P. (2020), "Predicting Discharge Disposition in Trauma Patients: Development, Validation, and Generalization of a Model using the National Trauma Data Bank," *The American Surgeon*, 86(12):1703-1709.
19. Ballester, N., **Parikh, P. J.**, Peck, J., and Kong, N. (2019), "The Patient Sequencing Problem for an Ancillary Service Provider in an Inpatient Unit," *IEEE Trans on Automation Science and Engineering*, doi: 10.1109/TASE.2019.2896317.
20. Parikh, P. P., **Parikh, P. J.**, Mamer, L., McCarthy, M.*, and Sakran J.* (2019), "Association of System-Level Factors with Secondary Overtriage in Trauma Patients," *JAMA Surgery*, 154(1), 19-25 (IF: 13.0).
21. Myers, R. and **Parikh, P. J.** (2019), "Nurses' Work with Interruptions: An Objective Model for Testing Interventions," *Health Care Management Science,* 22(1):1-15.

22. Mowrey, C., **Parikh, P. J.**, and Gue, K. R. (2019), "The Impact of Rack Layout on Visual Experience in a Retail Store," *INFOR: Information Systems and Operational Resea*rch, 57, 75-98.
23. Mowrey, C., **Parikh, P. J.**, and Gue, K. R. (2018), "A Model for the Retail Rack Layout Problem," *European Journal of Operational Research*, 271(3), 1100-1112.
24. Sainathuni, B., Guthrie, B., **Parikh, P. J.**, and Kong, N. (2018), "Distribution Planning with Multiple Product Classes," *Flexible Services and Manufacturing Systems*, 31(1), 41-74.
25. Ballester, N., **Parikh, P. J.**, Donlin, M.*, May, E., and Simon, S.* (2018), "An Early-Warning Tool for Predicting-At-Admission the Discharge Disposition of a Hospitalized Patient," *Am J of Managed Care* (IF: 1.32), 24(10), e325-e331.
26. Lee, T.*, Shah, S. V., Leonard, A. C., **Parikh, P. J.**, and Thakar, C. V.* (2018), "Acute Kidney Injury before Dialysis Initiation Predicts Adverse Outcomes in Hemodialysis Patients," *Am J of Nephrology* (IF: 2.54), 47(6):427-434.
27. **Parikh, P. J.**, Mowrey, C., Gallimore, J., Harrell, S., and Burke, B.* (2017), "Evaluating E-Consultation Implementations Based on Use and Time-Line across Various Specialties," *International J of Medical Informatics* (IF: 2.96), 108, 42-48.
28. Wischgoll, T., Glines, M., Whitlock, T., Guthrie, B., Mowrey, C., **Parikh, P. J.**, and Flach, J. (2017), "Display Infrastructure for Virtual Environments (DIVE)," *Journal of Imaging Science and Technology*, 61(6), pp. 60406-1-60406-11(11).
29. Parikh, P.*, **Parikh, P. J.**, Guthrie, B., Mamer, L., Whitmill, M.*, Erskine, T.*, Woods, R.*, and Saxe, J.* (2017), "Impact of Triage Guidelines on Pre-Hospital Triage: Comparison of National and State Guidelines with a Statistical Model," *J of Surgical Research* (IF: 2.05), 220, 255-260.
30. **Parikh, P. J.**, Ballester, N., Bertsch, K., Kong, N., and Pook, N.* (2017), "The *n*-by-*T* Target Discharge Strategy for Inpatient Units," *Medical Decision Making* (IF: 3.01), 37(5), 534-543.
31. Cracker, N.*, Myers, R., Eid, J., Parikh, P. P., Zink, K.*, McCarthy, M.*, and **Parikh, P. J.** (2017), "Nursing Interruptions in a Trauma Intensive Care Unit – A Prospective Study," *J of Nursing Administration* (IF: 1.39), 47(4), 205-211.
32. Guthrie, B., **Parikh, P. J.**, and Kong, N. (2016), "Evaluating Warehousing Strategies for Two-Product Class Distribution Planning," *International J of Production Research*, 55(21), 6470-6484.
33. Myers, R., Whitlatch, A.*, McCarthy, M.*, and **Parikh, P. J.** (2015), "Differentiating Between Detrimental and Beneficial Interruptions: A Mixed Methods Study," *BMJ Quality and Safety* (IF: 6.19), 25(11), 881-888.
34. Zhu, K., Lou, Z., Zhou, J., Ballester, N., Kong, N., and **Parikh, P. J.** (2015), "Predicting 30-day Hospital Readmission with Publicly Available Administrative Database. A Conditional Logistic Regression Modeling Approach," *Methods of Information in Medicine* (IF: 2.25), 54, 560-567.
35. Zoll, B., **Parikh, P. J.**, Harrell, S., Gallimore, J., and Burke, B.* (2015), "Analyzing the Impact of Diabetes E-Consults on Outpatient Clinic Workflow," *Medical Decision Making* (IF: 3.01), 35(6), 745-757.
36. Myers, R., **Parikh, P. J.**, Ekeh, P.*, Denlinger, L.*, and McCarthy, M.* (2014), "Scheduling of Advanced Practice Providers at Level I Trauma Centers," *Journal of Trauma* (IF: 2.74), 77(1), 176-181.
37. Beaulieu, R.*, McCarthy, M.*, Markert, R. J., **Parikh, P. J.**, Ekeh, A. P.*, and Parikh, P. *, (2014), "Predictive Factors and Model for Trauma Patient Disposition," *J of Surgical Research* (IF: 2.05), 190(1), 264-269.
38. Sainathuni, B., **Parikh, P. J.**, Zhang, X., and Kong, N. (2014), "The Warehouse-Inventory-Transportation Problem for Supply Chains," *European J of Operational Research* (IF: 3.42), 237(2), 690-700.
39. Crawford, E., **Parikh, P. J.**, Kong, N., and Thakar, C. V.* (2014), "Analyzing Discharge Strategies during Acute Care: A Discrete-Event Simulation Study," *Medical Decision Making* (IF: 3.01), 34(2), 231-241.
40. Mowrey, C. and **Parikh, P. J.** (2013), "Mixed-Width Aisle Configurations for Order Picking in Distribution Centers," *European J of Operational Research*, 232(1), 87-97.
41. Mowrey, C., **Parikh, P. J.**, Bharwani, G., and Bharwani, M. (2013), "The Effects of the Behavior- Based Ergonomics Therapies on Quality of Life and Medications of Alzheimer's/Dementia Patients," *American J of Alzheimer's Disease and Other Dementia* (IF: 1.86), 28(1), 31-37.
42. Vijayakumar, B., **Parikh, P. J.**, Scott, R.*, Barnes, A., and Gallimore, J. (2013), "A Dual Bin-Packing Approach to Scheduling Surgical Cases at a Publicly-Funded Hospital," *European Journal of Operational Research*, 224(3), 583-591.
43. Hamister, J. and **Parikh, P. J.** (2013), "Improving Price Performance When Price Elasticity of Demand is Difficult to Establish," *Academy of Marketing Studies J*, 17(1), 21-34.
44. Thakar, C.*, **Parikh, P. J.**, and Liu, Y. (2012), "Acute Kidney Injury (AKI) and Risk of Readmissions in Patients with Heart Failure," *The American J of Cardiology* (IF: 3.21), 109(10), 1482-1486.
45. Bharwani, G., **Parikh, P. J.**, Lawhorne, L.*, VanVlymen, E.*, and Bharwani, M. (2012), "Individualized Behavior Management Program for Alzheimer/Dementia Residents using Behavior-Based Ergonomic Therapies," *American J of Alzheimer's disease and Other Dementia* (IF: 1.86), 27(3), 188-195.
46. Ellis, K. P., Meller, R. D., Wilck, J. H., **Parikh, P. J.**, and Marchand, F. (2010), "Effective Material Flow at an Assembly Facility," *International J of Production Research*, 48(23), 7195-7217.
47. **Parikh, P. J.** and Meller, R. D. (2010), "A Note on Worker Blocking in Narrow-Aisle Order Picking Systems When Pick-Time is Non-Deterministic," *IIE Transactions*, 42(6), 392-404.

48. **Parikh, P. J.** and Meller, R. D. (2010), "A Travel-Time Model for an Order Picking System Employing a Person-Onboard Equipment," *European J of Operational Research*, 200(2), 385-394.
49. **Parikh, P. J.** and Meller, R. D. (2009), "Estimating Picker Blocking in Wide-Aisle Order Picking Systems," *IIE Transactions*, 41(3), 232-246.
50. **Parikh, P. J.** and Lam, S. S. Y. (2009), "Solving the Forward Kinematics Problem in Parallel Manipulators Using an Iterative Artificial Neural Network Strategy," *Intl J of Advanced Manufacturing Technology*, 40(5-6), 595-606.
51. **Parikh, P. J.** and Lam, S. S. Y. (2009), "Parameter Estimation for Abrasive Water Jet Machining Process Using Neural Networks," *International J of Advanced Manufacturing Technology*, 40(5-6), 497-502.
52. **Parikh, P. J.** and Meller, R. D. (2008), "Selecting Between Batch and Zone Order Picking Strategies in a Distribution Center," *Transportation Research Part E* (IF: 2.97), 44(5), 696-719.
53. **Parikh, P. J.** and Lam, S. S. Y. (2005), "A Hybrid Approach to Solve the Forward Kinematics Problem in Parallel Manipulators," *IEEE Transactions on Robotics*, 21(1), 18-25.

In Review/Revision/Preparation

1. Hirpara, S., **Parikh, P. J.**, and Kong, N. (2024), "Effect of Errors in Clinical Assessment of Patient Injuries on Patient Safety and Network Design," minor revisions (IISE Transactions in Healthcare).
2. Lin, L. and **Parikh, P. J.** (2024), "Designing a Trauma Network Considering Patient Safety and Subsidy," in 2nd round review (Operations Research for Health Care).
3. Mahmud, P., **Parikh, P. J.**, Aqlan, F., and Noor-e-Alam, Md. (2024), "An Online Dynamic Dual Bin Packing Approach with Lookahead for Server-to-Cell Assignment in Computer Server Industry," minor revisions (Computers and IE).
4. Lin, L. and **Parikh, P. J.** (2024), "Effect of Subsidy Policies on Financial Status of Trauma Centers," in review (HCMS).

BOOK CHAPTER

1. Sun, X., Lou Z., Li M., Kong, N., and **Parikh, P. J.** (2017), "Predictive Modeling of Care Demand and Utilization," to appear in Stochastic Modelling and Analytics in Healthcare Systems. J. Li, N. Kong, and X. Xie (eds). World Sci. Pub.

REFEREED CONFERENCE PROCEEDINGS

1. Mowrey, C., Beagle, J., Hirpara, S. and **Parikh, P. J.** (2021), "Retail Store Layout: Shopper Preference vs. Shopper Access," *Proceedings of Industrial and Systems Engineering Research Conference*, Virtual.
2. Mowrey, C., Beagle, J., Hirpara, S., and **Parikh, P. J.** (2020), "Retail Store Layout Considering Shopper Satisfaction," *Proceedings of Industrial and Systems Engineering Research Conference*, New Orleans, LA **(Best Track Paper, Facilities Design and Planning)**.
3. Hirpara, S. and **Parikh, P. J.** (2019), "Maximizing Impulse Revenue in a Retail Store Considering Shopper Path," *Proceedings of Industrial and Systems Engineering Research Conference*, Orlando, FL, May 18-21 **(Best Student Paper, Logistics and Supply Chain)**.
4. Vaishnav, M., **Parikh, P. J.**, Kong, N., and Parikh, P. (2019), "An Approach to Optimize a Regional Trauma Network," *Proceedings of Industrial and Systems Engineering Research Conference*, Orlando, FL, May 18-21.
5. Guthrie, B., **Parikh, P. J.**, Whitlock, T., Glines, M., Wischgoll, T., Flach, T., and Watamaniuk, S. (2018), "Comparing and Enhancing the Analytical Model for Exposure of a Retail Facility Layout with Human Performance," *Proceedings of Industrial and Systems Engineering Research Conference*, Orlando, FL, May 19-22 **(Best Track Paper, Facilities Planning & Design)**.
6. Ballester, N., **Parikh, P. J.**, Kong, N., and Peck, J. (2017), "Evaluating the Generalizability of an Approach to Improve the Inpatient Day-of-Discharge Process," *Proceedings of Industrial and Systems Engineering Research Conference*, Pittsburgh, PA, May 20-23 **(Best Track Paper, Healthcare Systems)**.
7. Mowrey, C. and **Parikh, P. J.** (2017), "The Retail Rack Layout Problem," *Proceedings of Industrial and Systems Engineering Research Conference*, Pittsburgh, PA, May 20-23 **(Best Track Paper, Facilities Design and Planning)**.
8. Guthrie, B. and Parikh, P. J. (2017), "Analyzing a Shoppers Visual Experience in a Retail Store in 3D," *Proceedings of Industrial and Systems Engineering Research Conference*, Pittsburgh, PA, May 20-23 **(Best Student Paper - 2nd place, Logistics and Supply Chain)**.
9. Guthrie, B., Parikh, P. J., and Kong, N. (2016), "Benchmarking Two Real-World Warehouse Strategies for Two-Product Class Distribution," *Proceedings of Industrial and Systems Engineering Research Conference*, May 22-25, Anaheim, CA.
10. Harrell, S., Gallimore, J., Zoll, B., Mowrey, C., **Parikh, P. J.**, and Burke, B. (2014), "Challenges in the Electronic Consult Process for Diabetes Treatment: A Systems Approach," *Proceedings of International Annual Meeting of the Human Factors and Ergonomics Society*, Oct 27-31, Chicago, IL.
11. **Parikh, P. J.** and Mowrey, C. (2014), "Designing Retail Facilities to Maximize Product Exposure," *Progress in Material Handling Research: 2014*, Material Handling Institute, Charlotte, NC.

12. Ballester, N., Guthrie, B., Martens, S., Mowrey, C., **Parikh, P. J.**, and Zhang, X. (2014), "Effect of Retail Layout on Traffic Density and Travel Distance," *Proceedings of Industrial and Systems Engineering Research Conference*, May 31-June 3, Montreal, Canada.
13. Crawford, E., **Parikh, P. J.**, Kong, N., and Thakar, C. V.* (2013), "An Evaluation of Discharge Policies at Acute Care Hospitals," *Proceedings of Industrial and Systems Engineering Research Conference*, May 18-22, San Juan, PR.
14. Sainathuni, B., **Parikh, P. J.**, Zhang, X., and Kong, N. (2011), "The Effect of Picker Blocking on Warehousing and Distribution Decisions," *Proceedings of Industrial Engineering Research Conference*, May 21-25, Reno, NV.
15. Vijayakumar, B., **Parikh, P. J.**, and Scott, R.* (2011), "Surgery Case Scheduling as a Dual Bin-Packing Problem," *Proceedings of Industrial Engineering Research Conference*, Reno, NV, May 21-25.
16. Veeraragavan, R. and **Parikh, P. J.** (2011), "Drop-Shipping Problem for a Promotional Products Distributor," *Proceedings of Industrial Engineering Research Conference*, Reno, NV, May 21-25.
17. **Parikh, P. J.**, Zhang, X., and Sainathuni, B. (2010), "Distribution Planning Considering Warehouse Decisions," *Progress in Material Handling Research: 2010*, Material Handling Institute, Charlotte, NC.
18. Ellis, K. P., Meller, R. D., Wilck J., **Parikh, P. J.**, and Marchand, F. (2008), "Material Flow Design for Assembly Operations," *Progress in Material Handling Research: 2008*, eds. Ellis et al., Material Handling Institute, Charlotte, NC, pp. 271-286.
19. **Parikh, P. J.** and Meller, R. D. (2007), "Modeling Pick-Face Blocking in Order Picking Systems," *Proceedings of Industrial Engineering Research Conference*, May 19-23, Nashville, TN.
20. Meller, R. D. and **Parikh, P. J.** (2006), "The Effect of Batching Orders on Workload-Imbalance in Order Picking Systems," *Progress in Material Handling Research: 2006*, eds. Meller et al., Material Handling Institute, Charlotte, NC, pp. 95-127.
21. **Parikh, P. J.** and Meller, R. D. (2005), "Stochastic Models for a Manual Pick-to-Belt Order Picking System," *Proceedings of Industrial Engineering Research Conference*, May 14-18, Atlanta, GA, pp. 1-6 (CD proceedings).
22. **Parikh, P. J.**, Lin, C. H., and Lam, S. S. Y. (2002), "Approximating the Forward Kinematics Solution of a Stewart Platform Using Two Concepts in Neural Networks," *Intelligent Engineering Systems Through Artificial Neural Networks: Smart Engineering System Design: Neural Networks, Fuzzy Logic, Evolutionary Programming, Complex Systems and Artificial Life*, eds. Dagli et al., Vol. 12, ASME Press, pp. 847-852.

Conference Presentations/Posters (Presenter or Co-Author)

1. Mahmud, P., **Parikh, P. J.**, Aqlan, F., Noor-E-Alam, M., and Saha, C. (2024), "Online Dynamic Dual Bin Packing with Lookahead for Production Scheduling in Computer Server Industry," IISE Annual Meeting, Montreal, Canada.
2. Radman, A., Aqlan, F., **Parikh, P. J.**, and Noor-e-Alam, Md. (2023), "A Deep Reinforcement Learning Approach for Production Scheduling in Computer Server Industry," Manufacturing Science and Engineering Conference, Knoxville.
3. Mahmud, P., **Parikh, P. J.**, Aqlan, F., Noor-e-Alam, Md., and Saha, C. (2023), "A Modified Online Dynamic Bin Packing Problem with Side Constraints," IISE Annual Meeting, New Orleans.
4. Lin, L., **Parikh, P. J.**, and Kong, N. (2022), "Designing a Trauma Network Considering Patient Safety and Cost," IISE Annual Meeting, Seattle.
5. Hirpara, S., **Parikh, P. J.**, and Kong, N. (2021), "Locating Major and Intermediate Trauma Centers Considering Equity in Patient Safety," IISE Annual Meeting, Virtual.
6. Repas, S., **Parikh, P. J.**, McCarthy, M., and Parikh, P. (2020), "Trauma-Specific Performance Improvement Activities for EMS Providers: A Statewide Perspective," 15th Annual Academic Surgical Congress, Orlando, FL.
7. Mowrey, C., Beagle, J., Hirpara, S. and **Parikh, P. J.** (2020), "Retail Store Layout Considering Shopper Satisfaction," IISE Annual Meeting, New Orleans, LA.
8. Karki, U., Guthrie, B., and **Parikh, P. J.** (2020), "Effect of Rack Configuration on Product Placement in a Store," IISE Annual Meeting, New Orleans, LA.
9. Parikh, P., **Parikh, P. J.**, Vaishnav, M., Sebastian, S., McCarthy, M., and Winchell, R. (2019), "Performance-Based Assessment of Trauma Systems: Estimates for the State of OH," 78th Annual Meeting of AAST and Clinical Congress of Acute Care Surgery, Dallas, TX.
10. Liu, S., Kong, N., Wang, M., and **Parikh, P. J.** (2019), "Optimizing Regional Trauma Network via Bilevel Integer Programming," INFORMS, Seattle, WA (invited).
11. Graham, M., Hirpara, S., **Parikh, P. J.**, McCarthy, M., and Parikh, P., "Development and Generalization of a Score to Predict Trauma Patient Discharge Disposition using NTDB," 14th Annual Academic Surgical Conference, Houston, TX (Feb 2019).
12. Guthrie, B. and **Parikh, P. J.** (2018), "Joint Consideration of Rack Layout and Product Allocation to Maximize Retail Impulse Purchase," INFORMS, Phoenix, AZ (invited).
13. Alvarado, M. M., Khatami, M., Kong, N., Parikh, P. J., and Lawley, M. (2018), "Stochastic Models for Inpatient Discharge Planning," INFORMS, Phoenix, AZ.

14. Guthrie, B. and **Parikh, P. J.** (2018), "Optimizing Rack Orientation and Curvature to Maximize Impulse Buy in a Retail Store," IISE Annual, Orlando, FL (invited).
15. Ballester, N., **Parikh, P. J.**, Kong, N., and Peck, J. (2018), "Patient Sequencing for Ancillary Service Providers in an Inpatient Unit," IISE Annual, Orlando, FL (invited).
16. Myers, R. and **Parikh, P. J.** (2017), "Nurses' Work with Interruptions: An Objective Model for Testing Interventions," INFORMS Healthcare, Jul 27, Rotterdam, The Netherlands.
17. Myers, R. and **Parikh, P. J.** (2017), "Nurses' Work with Interruptions," Engineering Lean and Six Sigma Conference (ELSS), Sep 25-27, Kissimmee, FL.
18. Ballester, N., **Parikh, P. J.**, Kong, N., and Peck, J. (2017), "Sequencing of Ancillary Service Workload in an Inpatient Unit," INFORMS, Houston, TX (invited).
19. Guthrie, B. and **Parikh, P. J.** (2017), "Are Curved Racks Better than Straight Racks in a Retail Rack Layout?," INFORMS 2017, Houston, TX (invited).
20. Ballester, N. and **Parikh, P. J.** (2017), "Inpatient Discharge-by-Noon: Are Fewer Better than All?," INFORMS 2017, Houston, TX (invited).
21. Khatami, M., Alvarado, M., Lawley, M., Kong, N., and **Parikh, P. J.** (2017), "Optimal Inpatient Discharge Planning Under Uncertainty," ISERC, Pittsburgh, PA.
22. Parikh, P. P., **Parikh, P. J.**, Guthrie, B., Mamer, L., Whitmill, M. L., Erskine, T., Woods, R., Saxe, J. (2017), "Impact of triage guidelines on pre-hospital triage errors," 12th Annual Academic Surgical Congress, Las Vegas, NV.
23. **Parikh, P. J.**, Guthrie, B., Erskine, T., McCarthy, M. C., Parikh, P. P. (2017), "Maldistribution of trauma centers: Impact on patient care and resource utilization," 12th Annual Academic Surgical Congress, Las Vegas, NV.
24. Ballester, N. and **Parikh, P. J.** (2016), "Factors that Predict Discharge Disposition at Admission for Veterans," INFORMS, Nashville, TN, Nov 12-15 (invited).
25. Ballester, N., **Parikh, P. J.**, and Kong, N. (2016), "The n-by-T Inpatient Discharge Strategy under Various Occupancy Rates," INFORMS, Nashville, TN, Nov 12-15 (invited).
26. Ballester, N., **Parikh, P. J.**, Donlin, M., and Simon, S. (2016), "Factors that Predict Discharge Disposition at Admission for Veterans," INFORMS, Nashville, TN, Nov 12-15 (invited).
27. **Parikh, P. J.**, Mowrey, C., and Gue, K. (2016), "Retail Layouts for Maximal Exposure," INFORMS, Nashville, TN, Nov 11-13 (invited).
28. Mowrey, C., **Parikh, P. J.**, and Gue, K. (2016), "Retail Layout Considering Product Exposure for Bi-directional Traffic," ISERC, Anaheim, CA, May 21-24 (invited).
29. Myers, R. and **Parikh, P. J.** (2016), "A Patient-centered Framework for Understanding Interruptions," ISERC, Anaheim, CA, May 21-24 (invited).
30. Ballester, N and **Parikh, P. J.** (2016), "The n-by-T Inpatient Discharge Policy under Various Occupancy Rates," ISERC, Anaheim, CA, May 21-24 (invited).
31. Cracker, N., Myers, R. A., Eid, J., Parikh, P. P., McCarthy, M. C., Zink, K., Parikh, P. J. (2016), "The Anatomy of Nursing Interruptions: Who-What-When-Where," Poster, Eastern Association for the Surgery of Trauma (EAST) 29th Annual Scientific Assembly; 2016 Jan 13-15; San Antonio, TX.
32. Mowrey, C. and **Parikh, P. J.** (2015), "Retail Facility Design," INFORMS, Philadelphia, PA, Nov 1-4 (invited).
33. Myers, R., **Parikh, P. J.**, McCarthy, M. (2015), "Differentiating between Detrimental and Beneficial Interruptions: A Mixed Methods Study," Poster presentation at International Forum on Quality & Safety in Healthcare, London, UK, Apr 22-24.
34. Zoll, B., Mowrey, C., **Parikh, P. J.**, Harrell, S., Gallimore, J., and Burke, B. (2015), "Modeling the Impact of E-Consult Process on Outpatient Clinic Workflow," ISERC, Nashville, TN, May 30 – June 2 (invited).
35. Mowrey, C. and **Parikh, P. J.** (2015), "Consideration of Product Exposure in Retail Design," ISERC, Nashville, TN, May 30 - June 2 (invited).
36. Ballester, N., **Parikh, P. J.**, and Kong, N. (2015), "Inpatient Discharge Sequencing for Acute Care Hospitals: A Simulation-Optimization Approach," ISERC, Nashville, TN, May 30 - June 2 (invited).
37. Mowrey, C. and **Parikh, P. J.** (2014), "Consideration of Product Exposure in Retail Design," INFORMS, San Francisco, Nov 9-12 (invited).
38. Ballester, N., Bertsch, K., Kong, N., and **Parikh, P. J.** (2014), "Day-of-Discharge Planning at Acute Care Hospitals," INFORMS, San Francisco, Nov 9-12 (invited).
39. Hagmann, C., Kong, N., and Parikh, P. J. (2014), "A Branch-and-Bound Method for Stochastic Integer Bilinearly-Constrained Programs," INFORMS, San Francisco, Nov 9-12 (invited).
40. Neff, M., Zhu, K., Eckhart, J., Zhou, J., Ballester, N., Parikh, P. J., and Kong, N. (2014), "Comparative Study of Classification Methods for Predicting 30-Day Readmissions after Acute Hospitalization in the U.S.," International Conference on Big Data Analytics in Healthcare, Singapore, Jul 8-10 **(Best Poster, 2nd place)**.
41. Bertsch, K., **Parikh, P. J.**, Kong, N., and Peck, J. (2014), "Evaluating Day-of-Discharge Strategies at an Acute Care Hospital," ISERC, Montreal, Canada, May 31-June 3.

42. Beaulieu, R., Ekeh, A. P., Markert, R., **Parikh, P. J.**, McCarthy, M., and Parikh, P. (2014), "Early Prediction of Trauma Patient Discharge Disposition." Academic Surgical Congress, San Diego, February 4-6.
43. Myers, R., **Parikh, P. J.**, Ekeh, P.*, Denlinger, E.*, and McCarthy, M.* (2014), "Scheduling of Midlevel Providers at Level I Trauma Centers," 27th Annual Scientific Assembly of the Eastern Assoc for the Surgery of Trauma, Naples, FL, Jan 14-18.
44. Lee, T., Leonard, A., **Parikh, P. J.**, and Thakar, C. V.* (2013), "Acute Kidney Injury Prior to Endstage Renal Disease Predicts Poor Dialysis Outcomes," American Society of Nephrology Kidney Week (poster), Atlanta, GA, Nov 5-10.
45. Hagmann, C., Kong, N., and **Parikh, P. J.** (2013), "Integrated Warehouse-Inventory-Transportation Planning under Uncertainty," INFORMS, Minnesota, MN, Oct 6-9 (invited).
46. Roelle, M.*, Tuttle, R.*, Thobe, K.*, Myers, R., **Parikh, P. J.**, Parikh, P. P., and McCarthy, M.* (2013), "A System Analysis of Early Cholecystectomy for Acute Cholecystitis," Midwest Surg. Assoc. Ann. Meeting (poster), Acme, MI, Jul 28-31.
47. Hagmann, C., Kong, N., and **Parikh, P. J.** (2013), "The Integrated Warehouse-Inventory-Transportation Planning: A Stochastic Integer Quadratically-Constrained Programming Approach," the XIII International Conference on Stochastic Programming (ICSP 2013), Bergamo, Italy, July 813 (invited).
48. Kong, N., **Parikh, P. J.**, Crawford, L., and Thakar, C. V.* (2013), "Assessing Dynamic Discharge Policies at Acute Care Hospitals via Discrete-Event Simulation," INFORMS Healthcare Conference, Chicago, IL, June 23-26 (invited).
49. Crawford, L., **Parikh, P. J.**, Kong, N., and Thakar, C. V.* (2013), "Evaluating Discharge Strategies for Acute Care," ISERC, San Juan, PR, May 18-22 (invited).
50. Sainathuni, B., **Parikh, P. J.**, Zhang, X., and Kong, N. (2013), "Distribution Planning with Varying Product Life Cycles," ISERC, San Juan, PR, May 18-22 (invited).
51. Myers, R., **Parikh, P. J.**, Ekeh, P.*, Denlinger, E.*, and McCarthy, M.* (2012), "Staff Planning and Scheduling at a Level 1 Regional Trauma Center: A Simulation-Optimization Approach," Dayton Engineering Science Symposium, Annual Meeting, Dayton, OH, Oct 29.
52. Sainathuni, B., **Parikh, P. J.**, Zhang, X., and Kong, N. (2012), "Developing Distribution Plans Accounting for Warehousing Decisions," Dayton Engineering Science Symposium, Annual Meeting, Dayton, OH, Oct 29.
53. Crawford, L., **Parikh, P. J.**, Kong, N., and Thakar, C. V.* (2012), "Inpatient Discharge Timing: A Simulation Study," INFORMS, Phoenix, AZ, Oct 14-17 (invited).
54. Sainathuni, B., **Parikh, P. J.**, Zhang, X., and Kong, N. (2012), "Distribution Planning Accounting for Warehousing Decisions," INFORMS, Phoenix, AZ, Oct 14-17 (invited).
55. Liu, Y., Fu, T., Hangartner, T., and **Parikh, P. J.** (2012), "Study Associations between Bone-Mineral Density and Relevant Clinical Parameters of Gaucher Disease," INFORMS, Phoenix, AZ, Oct 14-17.
56. Mowrey, C., **Parikh, P. J.**, Meller, R. D., and Gue, K. R., (2012), "Analyzing Mixed-Aisles for Order Picking," IERC, Orlando, FL, May 18-22 (invited).
57. Sainathuni, B., **Parikh, P. J.**, Zhang, X., and Kong, N. (2012), "The Warehouse-Inventory-Transportation Problem for Multi-Echelon Supply Chains," *25th Anniversary of CECS, Wright State University*, May 11, Dayton, OH.
58. Kong, N. and **Parikh, P. J.** (2011), "Optimal Discharge Timing for Traumatic Brain Injury (TBI) Inpatient Rehabilitation," INFORMS Annual Meeting, Charlotte, NC, Nov 13-16 (invited).
59. Thakar, C.*, **Parikh, P. J.**, and Liu, Y. (2011), "Impact of Acute Kidney Injury (AKI) and Chronic Kidney Disease (CKD) on Re-Admissions in Hospitalized Patients with Congestive Heart Failure (CHF)," American Society of Nephrology (ASN) Kidney Week 2011, Philadelphia, PA, Nov 10-13.
60. **Parikh, P. J.**, Vijayakumar, B., Scott, R.*, and Gallimore, J. (2011), "A Dual Bin Packing Analogy for Surgical Case Scheduling," INFORMS Midwest Conference, Columbus, OH, Aug 1-2 (invited).
61. Mowrey, C., **Parikh, P. J.**, Meller, R. D., and Gue, K. R., (2011), "The Aisle-Width Problem for Picking Systems - An Alternate Perspective," IERC, Reno, NV, May 21-25 (invited).
62. **Parikh, P. J.**, Vijayakumar, B., Gallimore, J., and Scott, R.* (2010), "Scheduling Surgeries in a Constrained Environment," INFORMS, Austin, TX, Nov 7-10 (invited).
63. **Parikh, P. J.** and Wallace-Finney, S. (2010), "Determining the Optimal Aisle-width for a Semi-Automated Picking System in a Distribution Center," INFORMS, Austin, TX, Nov 7-10 (invited).
64. **Parikh, P. J.**, Wallace-Finney, S., Meller, R. D., and Gue, K. R. (2009), "The Space versus Throughput Trade-off when Designing a Distribution Center," INFORMS, San Diego, CA, Oct 11-14 (invited).
65. Hamister, J., Kellar, G., and **Parikh, P. J.** (2009), "The Impact of Pricing Policy on Sales Variability with Autoregressive-Moving Average Demand Process," Production and Operations Management Conference, Orlando, FL, May 1-4.
66. Meller, R. D. and **Parikh, P. J.** (2006), "Is Taller Always Better? Configuring the Storage System for Order Picking," INFORMS Annual Meeting, Pittsburgh, PA, November 5-8, 2006 (invited).
67. **Parikh, P. J.** and Meller, R. D. (2006), "The Distribution Center Batch versus Zone Problem," IERC, Orlando, FL, May 20-24 (invited).
68. **Parikh, P. J.** and Meller, R. D. (2005), "Modeling the Pick-Face Blocking Phenomenon in a Batch Picking System," INFORMS, San Francisco, CA, November 13-16 (invited).

INVITED PRESENTATIONS AND SEMINARS

1. "Towards Prompt and Definitive Care of Trauma Patients," Purdue University (Nov 2023).
2. "Towards Prompt and Definitive Care of Trauma Patients," University of Cincinnati (Nov 2022).
3. "Trauma Care: Challenges and Opportunities," The Ohio State University (Sep 2022).
4. "Towards Prompt and Definitive Care of Trauma Patients," Northwestern University (Apr 2022).
5. "Improving Care Delivery of Trauma Patients," University of Houston, virtual (Nov 2021).
6. "Towards Prompt and Definitive Care of Trauma Patients," University of Tennessee - Knoxville, virtual (Sep 2021).
7. "Trauma Care: Approaches for Provision of Prompt and Definitive Care," Penn State CHOT Research Colloquium, virtual (Apr 2021).
8. "Transdisciplinary Approaches to Model and Optimize Service Systems," Univ of Alabama, Tuscaloosa (Jan 2020).
9. "Transdisciplinary Approaches to Engineering Service Systems," University of Louisville (Jan 2020).
10. "Study in the U.S.: Avenues, Challenges, and Tips," National Institute of Technology - Surat, India (Sep 2019).
11. "Trauma Network Design: Approaches for Provision of Prompt and Definitive Care," Zhejiang University, Hangzhou, China (July 2019).
12. "Inpatient Discharge Planning: Approaches to Improve Patient Flow and Reduce Upstream Boarding," Shanghai Jiao Tong University, Shanghai, China (July 2019).
13. "Warehouse Design and Operations: Challenges and Approaches," Alibaba Group, Hangzhou and Shanghai, China (July 2019).
14. "Engineering Product-Service Systems: Distribution, Retail, and Healthcare" AFIT, Dayton (Mar 2019).
15. "Engineering Service Systems: Distribution, Retail, and Healthcare" University of Arkansas, Fayetteville (Mar 2019).
16. "Retail Layout: Optimizing for Visual Experience," Oklahoma State University, Stillwater (Nov 2018).
17. "Trauma Care: Challenges and Approaches for Prompt and Definitive Care," Univ of Florida, Gainesville (Oct 2018).
18. "Designing Retail Stores to Maximize Visual Experience," Indian Institute of Mgt, Ahmedabad, India (Mar 2017).
19. "Predicting At-Admission the Discharge Disposition of Medicine Patients at Boston VA," NE-VERC, Boston (Mar 2016).
20. "Improving Healthcare Delivery - A Systems Engineering Perspective," Grand Rounds, Dept of Surgery, WSU (Mar 2016).
21. "Adaptive Human-Centered Engineered Systems," EAGER Workshop, NSF, Washington DC (Feb 2016).
22. "Engineering Healthcare Delivery," Maine Medical Center, Portland, ME (Jan 2016).
23. "Analyzing E-Consults at VISN 10: Findings and Recommendations," Webinar, NE-VERC, Boston (Jan 2015).
24. "Systems and Human Factors Engineering for VA's Telehealth Process Evaluation," Webinar, NE-VERC, Boston (Dec 2013).
25. "Readmission and Discharge Planning at US Hospitals," Regenstrief Center for Healthcare Engineering, Purdue University, West Lafayette, IN (Feb 2013).
26. "Mixed-Width Aisles for Order Picking in Distribution Centers," Department of Operations and Business Analytics (Carl H. Lindner College of Business), University of Cincinnati, Cincinnati, OH (Feb 2012).
27. "Scheduling Surgeries Using a Dual-Bin Packing Problem Analogy," Department of Integrated Systems Engineering, The Ohio State University, Columbus, OH (Jan 2011).
28. "Designing Distribution Centers for Supply Chains," Department of Industrial Engineering, University of Pittsburgh, Pittsburgh, PA (Oct 2009).
29. "Configuring Storage System in a Distribution Center," Department of Biomedical, Industrial and Human Factors Engineering, Wright State University, Dayton, OH (Feb 2009).
30. "Designing Distribution Centers for Supply Chains," Department of Biomedical, Industrial and Human Factors Engineering, Wright State University, Dayton, OH (Oct 2008).
31. "Supply Chain Planning and Execution – II," The H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA (Apr 2008).
32. "Supply Chain Planning and Execution – I," The H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, GA (Nov 2007).
33. "A Facility Logistics Problem: Design of Order Picking Systems for Distribution Centers," INFORMS chapter, Virginia Polytechnic Institute and State University, Blacksburg, VA (Sep 2006).
34. "Order Picking System Design in Distribution Centers - II," Center for Engineering Logistics and Distribution (CELDi) meeting, Orlando, FL (Apr 2006).
35. "A Facility Logistics Problem: Design of Order Picking Systems in a Distribution Center," Department of Industrial Engineering, University of Louisville, Louisville, KY (Apr 2006).
36. "Facility Logistics," Department of Engineering Technology, Northern Illinois University, Dekalb, IL (Feb 2006)
37. "Order Picking System Design in Distribution Centers - I," Center for Engineering Logistics and Distribution (CELDi) meeting, Louisville, KY (Nov 2005).
38. "Auto-ID Applications in Supply Chain Management," Grado Department of Industrial and Systems Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA (Mar 2005).

GRANTS AND CONTRACTS

FEDERAL AND STATE (>$3.0 million in total)

1. $380,458 (09/23-08/26), *REU Site in Advanced Manufacturing and Supply Chain*, National Science Foundation (#2244119). Lead PI: Aqlan, Co-PI: Parikh.
2. $472,911 (12/21-11/24), *GOALI: Stochastic Optimization Framework for Energy-Smart Re/Manufacturing Systems*, National Science Foundation (#2038325). Lead PI: Aqlan, Co-PIs: Parikh, Noor-e-Alam (Northeastern), Saha (IBM).
3. $75,000 (07/19-06/21), *Trauma cost vs. care: Estimations for Ohio's current trauma system and evaluation of alternative configurations.* Ohio Department of Public Safety. Role: PI, Co-PIs: Mary McCarthy and Priti Parikh (Surgery), Brendan Deere (Miami Valley Hospital).
4. $492,735 (09/18-08/20), *Collaborative Research: Optimizing trauma care network design*, National Science Foundation (#1761009). Lead PI: P. J. Parikh, Sr. Personnel: P. Parikh; Purdue PI: N. Kong (WSU: $243,175 portion);
   - Additional $14,880 (09/19-08/20), *REU Supplement: Optimizing trauma care network design*.
   - Transferred to UofL (#2100979): $194,889 (08/20-08/21), *Collaborative Research: Optimizing trauma care network design*. Lead PI: P. J. Parikh.
5. $84,862 (07/18-06/20), *Allocation of trauma resources in the State of Ohio: A data driven approach for current performance assessment and benchmarking*. Ohio Department of Public Safety. Role: Co-PI, PI: Priti Parikh (Surgery); other Co-PIs: Lynne Smith, and Brendan Deere (both at Miami Valley Hospital).
6. $75,000 (07/17-06/18), *Refining the definitions of under- and over-triage: A data analysis and consensus based approach*. EMS Division, Ohio Department of Public Safety. PI: P. J. Parikh, Co-PIs: P. Ekeh and Priti Parikh.
7. $299,969 (09/15-08/18), *EAGER/Collaborative Research: A new science of visual experience*, National Science Foundation (#1548394/#1548404). Lead PI: P. J. Parikh, Co-PIs: T. Wischgoll and J. Flach; Univ of Louisville PI: K. Gue (WSU: $195,845).
8. $400,000 (09/14-08/18), *GOALI/Collaborative Research: Optimal inpatient discharge planning under uncertainty*, National Science Foundation (#1405357/#1405265). PI: P. J. Parikh, Co-PIs: N. Pook and J. Peck; Purdue PI: N. Kong, Co-PI: M. Lawley (WSU: $177,187).
9. $59,200 (08/14-04/16), *Predicting-at-admission the discharge disposition of veterans from VISN 1 medical centers*, Veterans Engineering Resource Center (New England). PI: P. J. Parikh.
10. $75,790 (08/15-05/17), *Impact of inter-facility transfers and secondary triage on trauma care in the state of Ohio*, Ohio Department of Public Safety. Role: Co-PI, PI: Priti Parikh (Surgery).
11. $56,136 (08/14-12/15), *Spectrum of Trauma Care in the State of Ohio: Assessment and Improvement of Quality of Care*, Ohio Department of Public Safety. Role: Co-PI, PI: Priti Parikh (Surgery).
12. $345,000 (09/12-08/16), *GOALI/Collaborative Research: Warehouse integration in enterprise-wide supply chain planning under uncertainty*, National Science Foundation (#1235061/#1235283). Lead PI: P. J. Parikh, Co-PIs: X. Zhang and C. Eifert; Purdue PI: N. Kong (WSU: $165,000).
13. $108,225 (06/13-04/14), *Systems and Human Factors Engineering analysis of the e-consult program innovation Phases I and II*, Veterans Health Administration - Dayton VA Medical Center, Dayton, OH. PI: P. J. Parikh.

INDUSTRY (>$430k in total)

1. $34,042 (11/22-4/23), *Safety Project – PPD Innovation Center*, PACCAR Parts, Louisville, KY. PI: P. J. Parikh, Co-I: Aqlan and Saleem.
2. $75,000 (11/21-10/22), *Greenfield design of Tube Manufacturing*, Vogt Ice, Louisville, KY. PI: P. J. Parikh, Co-I: Aqlan.
3. $75,000 (10/20-08/21), *Modeling and analysis of the Cryogenic manufacturing facility*, L3Harris Corp., Cincinnati, OH. PI: P. J. Parikh.
4. $49,976 (10/19-08/20), *Modeling and analysis of the semiconductor manufacturing facility*, L3Harris Corp., Cincinnati, OH. PI: P. J. Parikh.
5. $22,680 (08/17-07/19), *Models for product location and reslotting at a warehouse,* OpSimplex LLC, OH. PI: P. J. Parikh.
6. $45,570 (07/13-12/14), *Developing a landed cost calculator*, WinWholesale, Inc., OH. PI: P. J. Parikh, Co-PI: J. Hamister.
7. $60,625 (01/12-08/16), *Designing a procedure to determine optimal pricing*, Kalvin - A DMI Company, OH. PI: P. J. Parikh.
8. $32,200 (05/11-12/12), *Pricing optimization*, WinWholesale, Inc., OH. PI: P. J. Parikh, Co-PI: J. Hamister.
9. $15,000 (06/11-08/12), *Effect of the Behavior-Based Ergonomics approach on cognitive decline,* St. Leonard, OH. PI: G. Bharwani, Co-PI: P. J. Parikh.
10. $51,720 (02/11-12/13), *Use of exploratory data-mining techniques to study associations between bone mineral density and relevant clinical parameters*, Genzyme Corporation, MA. PI: Y. Liu, Co-PI: P. J. Parikh.
11. $2,875 (06/10-08/10), *Integrated SC planning and optimization*, OpSimplex LLC, OH. PI: P. J. Parikh.

INTERNAL (at Wright State University)

1. $15,000 (04/13-06/14), *Intervention strategies to manage interruptions in healthcare*, Research Initiation Grant (with an additional $5,000 cost share from CECS). PI: P. Parikh and Co-PI: M. McCarthy.
2. $23,250 (04/11-03/12), *Predictive modeling of patient readmissions*, Research Incentive Grant. PI: P. Parikh.
3. $9,650 (07/09-06/10), *Analyzing the effect of aisle-width on space and throughput when designing distribution centers for supply chains*, Research Initiation Grant Fund. PI: P. Parikh.
4. $25,000 (03/09-02/11), *New Investigator Award*, Research Challenge Grant. PI: P. Parikh.

STUDENT ADVISING

Ph.D. Dissertation

At University of Louisville

1. *Parvez Mahmud (exp Fall 2024)*
   Dissertation: Optimization approaches for scheduling in manufacturing
2. *Lin Lin (exp Fall 2024)*
   Dissertation: Subsidized trauma center location problem
3. *Carsten Ziegler (Spring 2024)*
   Dissertation: A Design Science and Implementation Research Framework for Studying Interruptions
   Current: Co-owner, Dental Clinic (German military veteran)
4. *Uttam Karki (Summer 2023)*
   Dissertation: Visibility-based hospital layout
   Current: Data Scientist
5. *Sagar Hirpara (Fall 2022)*
   Dissertation: Models and Algorithms for Trauma Network Design
   Current: Operations Research/Data Scientist, Westrock

At Wright State University

6. *Lijian Xiao (Spring 2021) – co-advised with Dr. Xinhui Zhang*
   Dissertation: The course scheduling problem with room considerations
   Current: Operations Research Analyst, Nielsen, Chicago, IL
7. *Hakan Gecili (Summer 2020)*
   Dissertation: Joint optimization of shelf design and shelf space allocation for retailers
   Current: Consultant, Data Science and Analytics, TransUnion, Houston, TX
8. *Bradley Guthrie (Fall 2018)*
   Dissertation: Models for analyzing and optimizing 3D rack layouts in a retail facility
   Current: Senior Data Scientist, Patra Corporation, Dayton, OH
9. *Nicholas Ballester (Fall 2017)*
   Dissertation: Engineering inpatient discharges: Disposition prediction and day-of-discharge planning
   Current: Development Leader – Business Analytics, IU Health, Indianapolis, IN
10. *Robert Myers (Fall 2016)*
    Dissertation: Engineering healthcare delivery: A systems engr approach to improving trauma center nursing efficacy
    Current: Adjunct Teaching Faculty, Wright State University, Dayton, OH
11. *Corinne Mowrey (Summer 2016)*
    Dissertation: Retail facility design considering product exposure
    Current: Tenure-Track Assistant Professor in Department of EMST, Univ of Dayton
12. *Bhanuteja Sainathuni (Fall 2013)*
    Dissertation: The warehouse-inventory-transportation problem for supply chains
    Current: IT and Digital Technology Fellow, WestRock, Atlanta, GA

M.S. Thesis

At Wright State University

1. *Swetha Kondapalli (Summer 2020)*
   Thesis: An approach to cluster and benchmark Emergency Medical Service agencies
2. *Uttam Karki (Fall 2019)*
   Thesis: Joint optimization of rack orientation and product placement in a retail store
3. *Sagar Hirpara (Fall 2019)*
   Thesis: Retail store layout considering shopper path and impulse revenue
4. *Monit Vaishnav (Spring 2019)*
   Thesis: Optimizing the network of major trauma centers

5. *Bradley Guthrie (Fall 2015)*
   Thesis: Evaluating warehouse strategies for two-product class distribution planning
6. *Kylie Bertsch (Summer 2014)*
   Thesis: Day-of-discharge planning at an acute care hospital
7. *Brian Zoll (Spring 2013)*
   Thesis: Impact of e-consult process on care delivery at an outpatient clinic
8. *Elizabeth Crawford (Fall 2012)*
   Thesis: An evaluation of discharge policies at a generic acute care hospital
9. *Corinne Mowrey (Fall 2011)*
   Thesis: An exploratory study of mixed-width aisles for order picking in distribution centers
10. *Sheena Wallace-Finney (Summer 2011)*
    Thesis: Determining the optimal aisle-width for order picking in distribution centers
11. *Ramanan Veeraragavan (Spring 2011)*
    Thesis: On a joint warehousing, inventory, and transportation problem for a promotional products supply chain
12. *Bharathwaj Vijayakumar (Spring 2011)*
    Thesis: Scheduling surgeries in a constrained environment

M.S. Non-Thesis

At Wright State University

1. *IHE (funded):* I. Hampton (F17), S. Nanduri (F13)
2. *CS (funded)*: D. Katragadda (F19-Su20), A. Yenneti (S18-S19), S. Duggempudi (S17-F17), S. Gogineni (S16-F16), C. Hariharan (S14-F15)
3. *IHE:* ~30 students annually in my role as the Graduate Program Co-Director

Graduate Independent Study

At Wright State University

1. Jiawei Han (1 hr; F19), "Advanced demand forecasting methods"
2. Monit Vaishnav (3 hr; F17), "Metaheuristics for healthcare facility location"
3. Srikrithi Kadambari (1 hr; F17), "Interaction between layout and visual scanning patterns"
4. Abhinay Reddy Boddu (1 hr; Su17), "Quantifying network-induced UT and OT rates"
5. Khalid Almesnad (1 hr; F16), "Bilevel optimization models in facility location"
6. Venu Gopal Valeti (3 hr; Su16), "Discrete event simulation for trauma system design"
7. Saikarthik Barla (1 hr; Su16), "Regional trauma redesign"
8. Kannan Govindasamy (1 hr; Su16), "Literature on optimization of healthcare facilities"
9. Deepak Kumar Kumanan (1 hr; Su16), "Review of literature on trauma facility location"
10. Mohit Gidwani (4 hr; Su15), "Healthcare analytics"
11. Sainath Daakuri (4 hr; Su15), "Healthcare systems engineering"
12. Namrata Dave (3 hr; Su14), "Applications of data analytics in healthcare"
13. Bradley Guthrie (3 hr; Su14), "Modeling and evaluating real-world distribution strategies"
14. Ali Badi Mohammad (3 hr; F13), "Advanced topics in supply chain"
15. Shanshan Ma (3 hr; Su13), "Advanced statistical models for healthcare applications"
16. Brian Zoll (4 hr; Su12), "Simulation for telehealth"
17. Robert Myers (2 hr; Su11), "Use of simulation modeling to explore Trauma staffing alternatives"
18. Corinne Mowrey (4 hr; Su10), "Locating redistribution facilities considering backhauls"
19. Kashyap Mehta (1 hr; W10), "Simulation practice in healthcare"
20. Krishna Desai (1 hr; W10), "Designing a healthcare system"
21. Sheena Finney (5 hr; S09), "Identifying the optimal aisle-width for order picking"

Undergraduate Students

1. *RAs*: *(at UofL)* - J. George, C. Holtshouser, A. Kinnard; *(at WSU)* - S. Sebastian, K. Combs, Y. Nguyen, K. Ellison, L. Mamer, J. Pestana, J. Eid, S. Martens, G. Boothe, B. Zoll
2. *Department Honors*: S. Martens, B. Zoll, T. Jackson, E. Crawford, L. Nguyen
3. *Independent Study*: K. Ellison, F. Bastos (exchange student from Brazil)
4. *College CARS and High School*: K. Saum, M. Young, F. Patel (HS Sophomore)

Student Accomplishments

Undergraduate

1. *Kara Combs:* IISE UPS Scholarship (2020), Tau Beta Pi's Undergraduate Scholarship (2019)
2. *Susan Sebastian*: IISE Society of Health Systems Scholarship (2020)

3. *Kaitlyn Ellison*: Vinod and Gail Sahney Scholarship from IISE (2019)
4. *Logan Mamer*: Marvin Mundel Scholarship from IISE (2017-18)
5. *Stephanie Martens*: Outstanding Graduating ISE Senior (2015), Harold and Inge Marcus Scholarship from IIE (2014-15), BIE Dept Chair's Choice Award (2013-14), Honors Trustees Scholarship (2011-15), Choose Ohio First Scholarship (2011-15), and Wright State Scholar Scholarship (2011-15)
6. *Nicholas Ballester*: Outstanding Graduating ISE Senior (2013)
7. *Elizabeth Crawford*: SMART Scholarship (2011-13), Outstanding Graduating ISE Senior (2010)

Graduate

1. *Sagar Hirpara*: Department Outstanding Doctoral Student (2023), Department Outstanding Research Award (2022), Best Track Paper (IISE-FDP Track, 2020), Best Student Paper (IISE-LSC Track, 2019), Lisa Zaken Award of Excellence (IISE, 2019)
2. *Lin Lin*: Department Outstanding Research Award (2023), Department Research Competition (2023)
3. *Bradley Guthrie*: Graduate (PhD) Student Excellence Award (2018-19), Best Track Paper (Facilities Design and Planning, IISE Annual, 2018), Best Student Paper (2nd place, LSC Division-IISE, 2017), Graduate (MS) Student Excellence Award (2015-16), Univ Ph.D. Assistantship (2015-16), BIE Dept Grad Assistantship (2013-14)
4. *Corinne Mowrey*: Best Track Paper (Facilities Design and Planning, IISE Annual, 2017), Outstanding BIE Graduate (2015), Gilbreth Memorial Fellowship from IIE (2014-15), Integrated Systems & Controls Council Honor Scholarship from MHEFI (2014-15), Graduate Student Excellence Award (2011-12)
5. *Nicholas Ballester*: Best Track Paper (Healthcare Systems Track, IISE Annual, 2017), Gilbreth Memorial Fellowship from IIE (2015-16), University Ph.D. Assistantship (2013-14)
6. *Nicole Cracker* (4th year medical student): Tied for the Best Translational/Basic Science Award at the Medical Student Research Symposium held by School of Medicine at WSU (2014-15)
7. *Brian Zoll*: WSU nominee for Midwest Association of Graduate Schools Distinguished Master's Thesis Awards (2015), University Ph.D. Assistantship (2014-15), Graduate Student Excellence Award (2013-14)
8. *Bob Myers*: 1st place-Daniel Elliott Resident Research Symposium (2014)
9. *Elizabeth Crawford*: Graduate Student Excellence Award (2012-13)
10. *Bharathwaj V.*: Graduate Student Excellence Award (2010-11), Raj Malhotra Scholarship (F09)
11. *Bhanuteja Sainathuni*: Ph.D. Assistantship (2012-13), Univ Assistantship (2011-12), Raj Malhotra Scholarship (S09)
12. *Ramanan Veeraragavan*: Raj Malhotra Scholarship (S09)

Senior Design Projects

At Wright State University

1. Collin Weidner, Halle Spahr, Yen Nguyen, Annalise Donavan, and Melissa Wahl (2019): Sponsor - Hartzell Air Movement, Piqua, OH
2. Adam Tokarsky, Khalid Alassaf, Ali Zaman, and Abdullah Aljazzaf (2016): Sponsor - DMAX Diesel Engines, Moraine, OH; **First place** in College-Wide Senior Design Showcase
3. Tin Le, Abdulaziz Alhumaid, Ahmad Aljuraisi, Shouq Alnajdy, Moh. Alotaibi, Ahmed Alowaidi (2016): Sponsor - BIE Dept, WSU, Dayton, OH
4. Stephanie Martens, Grace Booth, and Walaa Almutawa (2015): Sponsor - UC Physicians, West Chester, OH
5. William Terrell, Carlos de los Santos, and Amin Rababah (2015): Sponsor - TradeGlobal, Cincinnati, OH
6. Evan Baker and Christina Donegia (2014): Sponsor - Avenue Stores, Troy, OH
7. Nicholas Ballester, Bradley Guthrie, and Jeffery Warden (2013): Sponsor - UTC Aerospace, Troy, OH
8. Toni Jackson, Brian Stambaugh, and Zachary Hess (2012): Sponsor - Netrada, West Chester, OH
9. Matt Geis, Jeff Kucera, and Aric Melton (2011): Sponsor - Wright-Patt Airforce Base, Dayton, OH
10. Elizabeth Crawford and Beth Pohlabel (2011): Sponsor - University Pointe Surgical Hospital, West Chester, OH

Committee Member

Ph.D. Dissertation Committee Member

At University of Louisville

1. *Azzam Radman (current)* – Advisor: Dr. Faisal Aqlan
2. *Huan Liu (Spring 2021)* – Advisor: Dr. Hui Zhang (Computer Science)

At Wright State University

3. *Christopher Calhoun (2018)* - Advisor: Dr. Jennie Gallimore
4. *Shuai Wang (2018)* - Advisor: Dr. Xinhui Zhang
5. *Lebin Lin (Sep 2016)* - Advisor: Dr. Xinhui Zhang
6. *Chang-Geun Oh (Jan 2016)* - Advisor: Dr. Jennie Gallimore
7. *Gamze Kilincli Taskiran (Aug 2015)* - Advisor: Dr. Xinhui Zhang

8. *Albert Lowas (Mar 2015)* - Advisor: Dr. Frank Ciarallo
9. *Yan Li (Jun 2014)* - Advisor: Dr. Nan Kong (Purdue University)
10. *Jeremy Knopp (Jan 2014)* - Advisors: Drs. Ramana Grandhi and Frank Ciarallo
11. *Lei Zheng (Dec 2012)* - Advisors: Drs. Yan Liu and Xinhui Zhang
12. *Gregory Noble (Dec 2012)* - Advisor: Dr. Frank Ciarallo
13. *Jennifer Cloud-Buckner (Sep 2012)* - Advisor: Dr. Jennie Gallimore

M.S. Thesis Committee Member
At University of Louisville
1. *Rachel Crenshaw (Spring 2021)* – Advisor: Dr. Jason Saleem

At Wright State University
2. *Madison Glines (Apr 2018)* – Advisor: Dr. Thomas Wischgoll (Computer Science)
3. *Kerry Ward (Apr 2017)* - Advisor: Dr. Frank Ciarallo
4. *Donald Church (Aug 2015)* - Advisor: Dr. Mary Fendley
5. *Tingting Fu (Aug 2012)* - Advisor: Dr. Yan Liu
6. *Vinayak Ponangi (Apr 2011)* - Advisor: Dr. S. Narayanan
7. *Krishna Desai (Apr 2010)* - Advisor: Dr. Tarun Goswami
8. *Gamze Kilincli Taskiran (Mar 2010)* - Advisor: Dr. Xinhui Zhang
9. *Shea-Tinn (Sheila) Yeh (Sep 2009)* - Advisor: Dr. Yan Liu
10. *Gregory Noble (May 2009)* - Advisor: Dr. Frank Ciarallo

SERVICE

PROFESSION
1. 2024-26: CIEADH leadership (Chair-elect, Chair, and Past Chair)
2. 2022-current: Chair (2022-23), Co-Chair (2023-24), Visibility Taskforce, Council of Industrial Engineering Academic Department Heads (CIEADH)
3. 2021-current: Chair/Member, IISE Innovation Cup
4. 2020-24: Associate Editor, IISE Transactions
5. 2021-23: Member, IISE Doctoral Colloquium Committee
6. 2021-23: Technical Vice President (appointed), Technical Operations Board, IISE
7. 2016-21: President (2019-20) and Director of Newsletter (2016-18), Logistics & Supply Chain Division, IISE
8. 2015-19: Chair (2017-19) and Vice Chair (2015-17), Facility Logistics SIG (INFORMS/TSL)
9. 2016-20: President (2 years) and Board Member, IISE Day-Cin Professional Chapter (Gold: 2016 and 2017)
10. 2018: Judge, Student Paper Competition, LSC Division, IISE
11. 2011, 2018-20: Co-Chair, Facility Planning and Design Track, IISE (Reno ’11, Orlando ’19, New Orleans ‘20)
12. 2012-present: Faculty Advisor, WSU-IISE Student Chapter (Gold Award: 2013-19)
13. 2015-18: Co-Chair, Facility Logistics Track, INFORMS (Philadelphia ’15, Nashville ’16, Houston ’17, Phoenix ‘18)
14. 2017: Evaluator, Systems Engineering Graduate Program at Air Force Institute of Technology
15. 2016: Co-Chair, Healthcare Systems Track, ISERC, Anaheim, CA
16. 2009-present: Session Chair, INFORMS Annual Meeting (numerous occasions)
17. 2009-present: Session Chair, IISE Annual Meeting (numerous occasions)
18. 2011: Session Co-Chair, Healthcare Scheduling Track, INFORMS Midwest Reg. Conference, Columbus, OH
19. 2010: Session Chair, Dayton Engineering Science Symposium, Dayton, OH
20. 2004-present: Ad-hoc reviewer for *IISE Transactions*, *Transportation Science*, *Service Science*, *EJOR, IJPR, IJPE, NRL, C&IE*, *C&OR*, *ORIJ*, *IJAMT, IJOPM, Simulation: TSMSI*, *JAMIA*, *MDM, BMJ Quality and Safety*, *Hospital Practice*

EXTERNAL EVALUATOR
1. 2019-current: Promotion and/or Tenure Evaluator (within and outside of the U.S.)
2. 2019: Industrial Engineering (UG and Graduate programs), Ohio University, Athens, OH
3. 2017: Systems Engineering Graduate Program, Air Force Institute of Technology, Dayton, OH
4. 2014: Ph.D. Dissertation, Indian Institute of Technology, Bombay (Mumbai), India

UNIVERSITY AND COLLEGE
At University of Louisville
1. 2022-2023: University International Recruiting Committee
2. 2022: Speed School Industry Engagement Committee
3. 2022: University Search Committee, Assistant VP of International Center

4. 2022: University Committee, Academic Programs and Quality (Demographic 25)

At Wright State University
1. 2018-20: International Student Services Subcommittee for the International Education Oversight Committee
2. 2019-21, 2016-18: College Faculty Development Committee (P&T)
3. 2019: External Observer, PhD in Electrical Engineering program
4. 2019-20: Program Affairs Committee, PhD in Engineering program
5. 2017-18, 2014-15: Website Redesign Committee
6. 2014-18: Chair, College Graduate Studies Committee
7. 2014-15: Ad hoc University Committee (Faculty Handbook and Existing Policies)
8. 2013-18: Dean's Faculty Recruitment Fellow (visited over 20 area high schools, interacted with 400+ students)
9. 2013-2017: UCIE International Student Orientation – Graduate program representative
10. 2014-15: Brandeberry Career Development Center Events - Graduate program Representative
11. 2012-19: Raider Open House - UG program representative
12. 2011-19: Direct Admit Welcome - UG program representative
13. 2010-14: College Petitions Committee (Chair for 2013-14)
14. 2010-12: Ph.D. Program Student Affairs Committee

DEPARTMENT

At Wright State University
1. 2019-20: Chair, Dept Faculty Development Committee (P&T)
2. 2018-20: Chair, IHE Curriculum Evaluation Committee
3. 2016-present: Co-Director - Graduate Program
4. 2016-present: Co-Director - ISE Undergraduate Recruiting and Retention
5. 2013-16: Senior Design Coordinator for ISE
6. 2013-15: Faculty Peer Teaching Evaluation Committee
7. 2012: BIE Department Adjunct Faculty Search Committee
8. 2011: BIE Department Chair Search Committee
9. 2009-10: BIE Department Committees (ISE Marketing and ISE ABET Accreditation)

COURSES TAUGHT

Supply Chain *(multiple offerings at UG and Graduate level)*
- Integrated Systems for Manufacturing
- Supply Chain Analysis and Design
- Engineering Supply Chain Systems

Other
- Senior Design
- Masters Project
- PhD Dissertation

Operations Research *(multiple offerings at UG and Graduate level)*
- Probability for Engineers
- Deterministic Methods in OR
- Probabilistic Methods in OR
- Stochastic OR