

## ELIF ELCIN GUNAY, Ph.D.

Clinical Assistant Professor  
Daniels School of Business, Purdue University, 403 Mitch Daniels Blvd.  
West Lafayette, IN 47907-2056  
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### EDUCATION

#### **Post-Doctoral Research**

Industrial and Manufacturing Systems Engineering  
**Iowa State University**, Ames, IA, USA, 08/2020

#### **Doctor of Philosophy**

Industrial Engineering  
**Sakarya University**, Sakarya, Türkiye, 09/2016

#### **Master of Science**

Industrial Engineering  
**Sakarya University**, Sakarya, Türkiye, 08/2009

#### **Bachelor**

Industrial Engineering  
**Sakarya University**, Sakarya, Türkiye, 06/2007

### EMPLOYMENT

#### **Visiting Scholar**

School of Engineering, **University of Dayton**, Dayton, OH, USA, 08/2023–07/2025  
Major research area: Operations research, supply chain management, product design, deep learning

#### **Assistant Professor**

Department of Industrial Engineering, **Sakarya University**, Sakarya, Türkiye, 03/2021–07/2025

### AWARDS, HONORS & FELLOWSHIPS

- **Günay, E. E.**, Ramadani, R., Mundiwala, M., Kashef, A., Ma, J., Hu, C., Kremer, P., Kremer, G. E. (2025, August). Design Improvement for Facilitating Transmission Control Unit Remanufacturing. *International Design Engineering Technical Conferences & Computers and Information in Engineering Conference (IDETC-CIE 2025)*, Anaheim, California/USA - **2025 DFMLC Paper of Distinction Award**.
- **Günay, E.**, Dickson, Dickson, D., Jonczyk, R., Van Hell, J., Siddique, Z., & Okudan Kremer, G. E. (2022, June). Investigation of a Professor's Feedback on Student's Divergent Thinking Performance: An Electrodermal Activity Experiment. In *American Society for Engineering Education Annual Conference & Exposition - Best Paper Award in Industrial Engineering Division*.
- Zarindast, A., **Günay, E. E.**, Park K., Okudan-Kremer, G. E. (2018, May). Determination of Bus Station Locations under Emission and Social Cost Constraints. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA - **Best Student Paper Award in Sustainable Development Division**.
- Scientific and Technological Research Council of Türkiye (TÜBİTAK), **M.Sc. Scholarship** Program for National Students (Program Code: 2210) for two years, Sakarya University, Sakarya, Türkiye, 10/2008–10/2010.
- Scientific and Technological Research Council of Türkiye (TÜBİTAK), **Ph.D. Scholarship** Program for National Students (Program Code: 2211) for five years, Sakarya University, Sakarya, Türkiye, 10/2010–10/2015.

- Scientific and Technological Research Council of Türkiye (TÜBİTAK), **International Post-Doctoral Research Fellowship** Program (Program Code: 2219) for one year. Iowa State University, Ames, IA, USA, 07/2017–07/2018.

## SPONSORED RESEARCH EXPERIENCE AS A RESEARCHER OR AN ACADEMIC ADVISOR

**An open product marketplace orchestrator for rapid response across (Rx) health and medical supply and demand chain**, University of Dayton, Dayton, OH, USA, 08/2023–06/2025, *researcher*

Funding Agency: MxD, Digital Manufacturing and Cybersecurity Institute

**Major research area: Operations research, supply chain management**

**Data-Driven Design Decision Support for Remanufacturing of High-Value Components in Industrial and Agricultural Equipment**, University of Dayton, Dayton, OH, USA, 05/2024–07/2025, *researcher*

Funding Agency: REMADE Institute

**Major research area: Economic analysis and product design improvement for remanufacturing**

**Design Iteration Support Tool to Sustain Remanufacturability**, University of Dayton, Dayton, OH, USA, 06/2023–06/2024, *researcher*

Funding Agency: REMADE Institute

**Major research area: Economic analysis**

**Rapid damage identification to reduce remanufacturing costs**, University of Dayton, Dayton, OH, USA, 08/2020–03/2024, *researcher*

Funding Agency: REMADE Institute

**Major research area: Deep learning**

**Neurocognitive experimentation to enhance STEM education: studies on divergent thinking in female and male engineering students**, Iowa State University, Ames, IA, USA, 08/2019–08/2020, *researcher*

Funding Agency: National Science Foundation (NSF)

**Major research area: Engineering Education, Design of Experiment, Creativity, Electrodermal activity**

**Risk assessment for global supply chains**, University of Dayton, Dayton, OH, USA, 05/2024–08/2024

Funding Agency: Summer Undergraduate Research Experience (SURE Projects 2024), University of Dayton, *academic advisor*

**Major research area: Operations research, supply chain management**

**Image processing-based cable assembly quality control system**, Sakarya University, Sakarya, Türkiye, 10/2023–03/2025, *academic advisor*

Funding Agency: Scientific and Technological Research Council of Türkiye (TÜBİTAK)

**Major research area: Deep learning, design of experiment**

**Developing a decision support system to design eco-friendly products**, Iowa State University, Ames, IA, USA, 07/2017–07/2018, *research fellow*

Funding Agency: Scientific and Technological Research Council of Türkiye (TÜBİTAK)

**Major research area: Operations research, supply chain management, data analytics**

**Determination of Buffer Content in Automobile Assembly Lines**, Sakarya University, Sakarya, Türkiye, 12/2014–11/2016, *research fellow*

Funding Agencies: Scientific and Technological Research Council of Türkiye (TÜBİTAK) & Sakarya University

**Major research area: Operations research, supply chain management**

## PUBLICATIONS

### Publications in Refereed Journals

1. Dere, S., **Günay, E. E.**, Kula, U., & Kremer, G. E. (2024). Assessing agrivoltaics potential in Türkiye—A geographical information system (GIS)-based fuzzy multi-criteria decision making (MCDM) approach. *Computers & Industrial Engineering*, 110598. (SCI, Q1, IF:6.7, as per publisher website, October 2024)
2. **Günay, E. E.**, & Dere, S. (2024). Hazardous Solid Waste Landfill Site Selection for İstanbul, Türkiye using Multi-Criteria Decision-Making Methods and GIS Data. *Journal of Advanced Research in Natural and Applied Sciences*, 10(2), 446-463.
3. **Günay, E.** A two-stage stochastic model for picker allocation problem in warehouses considering the rest allowance and picker's weight. *International Journal of Industrial Engineering Computations* 15, no. 3 (2024): 685-704. (SCI, Q2, IF:1.6, as per publisher website, March 2024)
4. **Günay, E.E.**, Okudan Kremer G. E., Zarindast, A. (2021). A multi-objective robust possibilistic programming approach to sustainable public transportation network design, *Fuzzy Sets and Systems*, 422, 106-129. (SCI, Q1, IF:3.9, as per publisher website, March 2024)
5. Al-Araidah, O., Okudan-Kremer, G., **Günay, E. E.**, & Chu, C. Y. (2021). A Monte Carlo simulation to estimate fatigue allowance for female order pickers in high traffic manual picking systems. *International Journal of Production Research*, 59(15), 4711-4722. (SCI, Q1, IF:9.2, as per publisher website, March 2024)
6. Uludag, F., Olabi, Y., **Günay, E. E.**, Kremer, G. E. O. (2019). Mitigating the effects of bottlenecks in wagon manufacturing, *Procedia Manufacturing*, 39, 1010-1019. (Science Direct, as per publisher website, March 2024)
7. Green, J.J., **Günay, E.E.**, & Kremer, G. E. O. (2019). A simulation model of consumer take-back decisions regarding product design, *Procedia Manufacturing*, 33, 671-678. (Science Direct, as per publisher website, March 2024)
8. **Günay, E. E.**, Kula, U. (2018). A two-stage stochastic rule-based model to determine pre-assembly buffer content, *Journal of Industrial Engineering International*, 14, 655-663. (Scopus, as per publisher website, March 2024)
9. **Günay, E. E.**, Kula, U. (2016). Integration of production quantity and control chart design in automotive manufacturing, *Computers & Industrial Engineering*, 102, 374-382. (SCI, Q1, IF:7.9, as per publisher website, March 2024)
10. **Günay, E.E.**, Park, K., Okudan Kremer G. E. (2021). Integration of product architecture and supply chain under currency exchange rate fluctuation, *Research in Engineering Design*, 32, 331-348. (SCI-E, Q2, IF:3.2, as per publisher website, March 2024)
11. **Günay, E.E.**, Kula, U. (2020). A hybrid model for mix-bank buffer content determination in automobile industry, *European Journal of Industrial Engineering*, 14(4), 544-572. (SCI-E, Q4, IF:1.7, as per publisher website, March 2024)
12. Shen, W., Hu, D., **Günay, E. E.**, & Kremer, G. E. O. (2020). Evolution of supply chain management: a sustainability-focused review. *International Journal of Sustainable Manufacturing*, 4(2-4), 319-335. (Compendex, as per publisher website, March 2024)
13. **Günay, E. E.**, Kremer, G. E. O., Park, K. (2019). Effect of supplier selection regulations on new product design, *Procedia Manufacturing*, 39, 1337-1345. (Science Direct, as per publisher website, March 2024)
14. **Günay, E. E.**, Kula, U. (2017). A stochastic programming model for resequencing buffer content optimisation in mixed-model assembly lines, *International Journal of Production Research*, 55(10), 2897-2912. (SCI, Q1, IF:9.2, as per publisher website, March 2024)
15. Mohammadzadeh, M., **Günay, E. E.**, Jackman, J., Kremer, G. E., & Kremer, P. (2025). Utilization of Data Augmentation Techniques in Automated Inspection Systems for Defect Detection in Metals with Limited Data. *Journal of Advanced Manufacturing and Processing*, e70011.

16. Dubey, P., Miller, S., **Günay, E. E.**, Jackman, J., Kremer, G. E., & Kremer, P. A. (2025). You Only Look Once v5 and Multi-Template Matching for Small-Crack Defect Detection on Metal Surfaces. *Automation*, 6(2), 16.
17. Dubey, P., Miller, S., **Günay, E. E.**, Jackman, J., Kremer, G. E., & Kremer, P. A. (2024). Deep learning-powered visual inspection for metal surfaces—Impact of annotations on algorithms based on defect characteristics. *Advanced Engineering Informatics*, 62, 102727. (SCI, Q1, IF:8, as per publisher website, October 2024)
18. Kır, S., & **Günay, E. E.** (2022). Augmented artificial neural network model for the COVID-19 mortality prediction: preliminary analysis of vaccination in Türkiye. *Sakarya University Journal of Computer and Information Sciences*, 5(1), 22-36. (DOAJ, Central & Eastern European Academic Source)
19. Alshraideh, M., Ababneh, S., **Günay, E. E.**, & Al-Araidah, O. (2021). A fuzzy-TOPSIS model for maintenance outsourcing considering the quality of submitted tender documents. *Eksploracja i Niezawodność*, 23(3), 443-453. (SCI-E, Q1, IF:2.5, as per publisher website, March 2024)
20. Yoo, J., **Günay, E.E.**, Park, K., Tahamtan, S., Okudan Kremer G. E. (2021). An intelligent learning framework for Industry 4.0 through automated planning, *Computer Applications in Engineering Education*, 29(3), 624-640. (SCI-E, Q2, IF:2.9, as per publisher website, March 2024)
21. Aydoğan, S., **Günay, E.E.**, Akay, D., Okudan Kremer G. E. (2020). Concept design evaluation by using z-axiomatic design, *Computers in Industry*, 122, 103278. Doi: 10.1016/j.compind.2020. (SCI-E, Q1, IF:10, as per publisher website, March 2024)
22. Mutyala, R. S., Park, K., **Günay, E. E.**, Kim, G., Lau, S., Jackman, J., & Okudan Kremer, G. E. (2022). Effect of FFF process parameters on mechanical strength of CFR-PEEK outputs. *International Journal on Interactive Design and Manufacturing (IJIDeM)*, 16(4), 1385-1396. (Emerging Sources Citation Index, IF: 2.1, as per publisher website, March 2024)
23. Kandukuri, S., **Günay, E. E.**, Al-Araidah, O., & Kremer, G. E. O. (2021). Inventive solutions for remanufacturing using additive manufacturing: ETRIZ. *Journal of Cleaner Production*, 305, 126992. (SCI-E, IF: 11.1, as per publisher website, March 2024)
24. **Günay, E.E.**, Velineni, A., Park, K., Okudan Kremer G. E. (2020). An investigation on process capability analysis for fused filament fabrication, *International Journal of Precision Engineering and Manufacturing*, 21, 759-774. (SCI-E, IF: 1.9, as per publisher website, March 2024)
25. **Günay, E.E.**, Jackson, K. L., Wu, X., Okudan Kremer, G. E., and Guo, X. (2020). An investigation of effects of ambiguity, gender orientation and domain relatedness of design projects on student's performance, *Journal of Mechanical Design*, 142(7): 072003 (10 pages), DOI: 10.1115/1.4045300 (SCI-E, IF: 3.4, as per publisher website, March 2024)

#### Book chapters

1. Mohammadzadeh, M., Dubey, P., **Günay, E.E.**, Jackman, J.K., Okudan Kremer, G., Kremer, P. A. (2024). Deep learning for defect detection in inspection, *Technology Innovation for the Circular Economy: Recycling, Remanufacturing, Design, Systems Analysis and Logistics*, 143-155. Doi:10.1002/9781394214297.ch12, Book chapter, Scrivener Publishing

#### Peer-Reviewed Conference Papers

1. **Günay, E. E.**, Ramadani, R., Stukenborg, J., Layman, P., Kripli, J., Kremer, G. E., Ma, J., Hu, C. (2025, April). Enhancing Remanufacturability Through Triz-Based Approach. In 2025 REMADE Circular Economy Tech Summit & Conference, Washington, DC, USA.
2. Ceylan, A., **Günay, E. E.**, Boran, S., & Kremer, G. E. O. (2025). Enhancing Cable Installation Quality Control with YOLOv8 Segmentation. In International Conference of Production Research—Americas (pp. 629-637). Springer, Cham.
3. **Günay, E.E.**, Günay, A., Chern, W.-C., Elhabashy, A.E., Sim, J., Haapala, K.R., Kim, K.-Y., & Okudan Kremer, G.E. (2024, October). A Framework for Aggregating Timely and Potential Risks to Create Robust Supply Chains. 24th International Symposium for Production Research (ISPR2024), Budva, Montenegro.

4. Elhabashy, A. E., **Günay, E. E.**, Sim, J., Clements, M. W., Benaggoun, H., Kabiri, M., Haapala, K. R., Okudan Kremer, G. E., & Kim, K. -Y. (2024, August). Development of a Rapid Response Online Product Marketplace. International Design Engineering Technical Conferences & Computers and Information in Engineering Conference (IDETC-CIE 2024), Washington, DC.
5. Shen, Y., Sim, J., Elhabashy, A. E., **Günay, E. E.**, Haapala, K. R., Okudan Kremer, G. E., & Kim, K. -Y. (2024, June). Open Knowledge Graph for Manufacturing Process Selection. Flexible Automation and Intelligent Manufacturing (FAIM) Conference, Taichung, Taiwan.
6. Tabassum, M., Ramadani, R., **Günay, E. E.**, Kremer, G. E. (2024). Effects of Material Selection on the Remanufacturability of a Swashplate in an Axial Piston Pump. In 2024 REMADE Circular Economy Tech Summit & Conference, Washington, DC, USA.
7. Dere, S., **Günay, E. E.**, Kula, U., (2023, May). Investigation of the Potentials of the Agrivoltaic Systems in Türkiye. In *International Symposium on Intelligent Manufacturing and Service Systems*, (pp. 534-545), Sakarya, Türkiye, Springer Nature Singapore.
8. Dubey, P., **Günay, E. E.**, Jackman, J., Kremer, G. E., & Kremer, P. (2022, June). Deep Learning-Powered Visual Inspection Using SSD Mobile Net V1 with FPN. In *International conference on Flexible Automation and Intelligent Manufacturing*, (pp. 743-752), Detroit, MI., Cham: Springer International Publishing.
9. **Günay, E. E.**, Dickson, D., Jonczyk, R., Van Hell, J., Siddique, Z., & Okudan Kremer, G. E. (2022, June). Investigation of a Professor's Feedback on Student's Divergent Thinking Performance: An Electrodermal Activity Experiment. In *Proceedings of the 129th Annual Conference of the American Society for Engineering Education*, Minneapolis, MN - **Best Paper Award in Industrial Engineering Division**.
10. Dickson, D., Jonczyk, R., Okudan Kremer, G. E., Siddique, Z., **Günay, E. E.**, & Van Hell, J. G. (2022, June). Utilization of Automatized Creativity Ratings in Linguistically Diverse Populations: Automated Scores Align with Human Ratings. In *Proceedings of the 129th Annual Conference of the American Society for Engineering Education*, Minneapolis, MN.
11. Lechtenberg, T. R., **Günay, E. E.**, Chu, C.-Y., Kremer, G. E., Kremer, P. A. & Jackman, J. K. (2021, May). Development of an Ontology for Defect Classification in Remanufacturing. In *Recent Advances in Intelligent Manufacturing and Service Systems: Select Proceedings of Intelligent Manufacturing and Service Systems*, (pp. 21-33), Sakarya, Türkiye, Springer Singapore.
12. **Günay, E. E.**, Tapia L., Gould T., Raje S., Scallon J., Teberg J., Kremer G., (2020, June). Electrodermal Activity Experiment to Enhance Divergent Thinking in Engineering Students. In *Institute of Industrial and Systems Engineers Annual Conference*, (pp. 1383-1388), New Orleans, Louisiana, USA.
13. **Günay, E. E.**, Chu C.-Y., Tapia L., Elmenoufy O., Yam, An, Raje, S., Jonczyk, R., Dickson, D., Van Hell, J., Siddique Z., Kremer G., (2020, October) The Investigation of The Relationship Between Emotional Engagement and Creativity. In *American Society for Engineering Education North Midwest Conference*, Ames-Iowa/USA.
14. Chu, C.-Y., **Günay, E.E.**, Al-Araidah, O., Kremer, G., (2020, August). Evaluating Supply Chain Resource Limits from News Articles and Earnings Call Transcripts: An Application of Integrated Factor Analysis and Analytical Network Process. In *International Design Engineering Technical Conferences and Computers and Information in Engineering Conference*, (Vol. 83952, p. V006T06A013), Virtual.
15. Aydoğan S., **Günay, E. E.**, Akay, D., Kremer, G. (2019, September). Linguistic Summarization of Supply Network Interactions. In *10<sup>th</sup> International Symposium on Intelligent Manufacturing and Service Systems*, Sakarya, Türkiye.
16. **Günay, E. E.**, Park, K., Kandukuri, S., Kremer, G. E. O. (2019, May). Facility Location Selection for the Humanitarian Needs of Refugees. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA.
17. Aydoğan S., Akay, D., Kremer, G., **Günay, E. E.**, Park, K., Boran, F. E. (2019, May). Decision-making with Z-Axiomatic Design. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA.

18. **Günay, E. E.**, Park, K., Aydogan, S., Kremer, G. E. O. (2019, May). Vaccine Distribution Strategies against Polio: An Analysis of Türkiye Scenario. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA.
19. Khoje, S., **Günay, E.E.**, Kremer, G.E.O, Park, K., Jackson, K., Wu, X. (2018, May). An Evaluation Framework for Engineering Design Projects for Gender Bias, Domain Relatedness, and Ambiguity. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA.
20. **Günay, E. E.**, Lunning, M., Okudan-Kremer, G. E. (2018, May). Integration of Supply Chain Network and Product Architecture Design under Labor Cost Uncertainty. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA.
21. Yoo, J., **Günay, E. E.**, Park K., Tanniru, C., Okudan-Kremer, G. E. (2018, May). An Application of Automated Planning to Improve Readiness for Industry 4.0. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida.
22. Zarindast, A., **Günay, E. E.**, Park K., Okudan-Kremer, G. E. (2018, May). Determination of Bus Station Locations under Emission and Social Cost Constraints. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA - **Best Student Paper Award in Sustainable Development Division**.
23. Velineni, A., **Günay, E. E.**, Park, K., Okudan-Kremer, G.E., Schnieders, T. M., Stone, R. T. (2018, May). An Investigation on Selected Factors that Cause Variability in Additive Manufacturing. In *Institute of Industrial and Systems Engineers Annual Conference*, Orlando-Florida/USA.
24. Kula, U., **Günay, E. E.** (2014, October). Decide on the Production Quantities and Attribute Chart Parameters in Automobile Manufacturing. In *Computers and Industrial Engineering International Conference (CIE'44) and 9th International Symposium on Intelligent Manufacturing and Service Systems, (IMSS'14)*, Istanbul, Türkiye.

#### Oral Presentations

1. Khoje, S., **Günay, E. E.**, Kremer, G. (2017, April). Building a Framework to Assess the Appropriateness of a Design Project for Domain Relatedness, Ambiguity Tolerance, and Genderedness. *5<sup>th</sup> Annual Undergraduate and Graduate Research Symposium*, Iowa State University. (Poster presentation)
2. Manoharan, S., Haapala, K.R., Liu S., Sim J., Kim K., Park, K., **Günay, E. E.** and Kremer, G. E. (2017, August). A Digital Platform for Reuse of Supply Chain and Manufacturing Resource Information for Advanced Manufacturing Services. In *Iowa State University – John Deere Mini Research Symposium on Advanced Manufacturing*. (Poster presentation)
3. **Günay, E. E.**, Park K., Kremer G. E. (2017, October). Effect of Change in Labor Costs to Supply Chain and Design Optimization. In *Institute for Operations Research and the Management Sciences (INFORMS)*, Houston-Texas/USA.
4. Zarindast, A., **Günay, E. E.**, Kremer G. E. (2017, October). Optimal Bus Type and Number of Bus Stops in Public Transportation under Random Demand and Sustainability Adoption Levels within the Community. In *Institute for Operations Research and the Management Sciences (INFORMS)*, Houston-Texas/USA.
5. **Günay, E. E.**, Kula, U. (2016, October). A Heuristic Model for Buffer Content Determination. In *3<sup>rd</sup> International Conference on Computational and Experimental Science and Engineering*, Antalya, Türkiye.
6. **Günay, E. E.**, Kula U. (2015, September). Determination of Spare Vehicle Quantities for Mix-bank Buffer in Automobile Assembly Lines. In *35<sup>th</sup> National Operations Research/Industrial Engineering Conference (YAEM)*, Ankara, Türkiye.
7. **Günay, E. E.**, Kula U., Ocaktan B. (2013, July). Optimal Determination of p-chart Parameters by Controlling Production Quantities in Automobile Manufacturing. In *26<sup>th</sup> European Conference on Operations Research*, Rome, Italy.
8. **Günay, E. E.**, Kula U. (2012, July). A Two-Stage Stochastic Programming Model for p-chart Design, In *25<sup>th</sup> European Conference on Operations Research*, Vilnius, Lithuania.

9. **Günay, E. E.**, Kir S. (2012, September). Early Diagnosis of Heart Disease by Using Neural Network. In *8<sup>th</sup> International Symposium on Intelligent and Manufacturing and Service Systems*, Adrasan/Antalya, Türkiye.
10. **Günay, E. E.**, Kula U. (2011, September). Maximization of Scheduled Sequence Achievement Ratio in Automobile Manufacturing. In *International Conference on Operations Research (OR)* Zurich, Switzerland.
11. **Günay, E. E.**, Kula U. (2011, July). Determining Optimal Spare Vehicles by Using Sample Average Approximation Algorithm in Automobile Assembly Lines. In *31<sup>st</sup> National Operations Research/Industrial Engineering Conference (YAEM)*, Sakarya, Türkiye.
12. **Günay, E. E.**, Kula U. (2010, July). Determination of Resequencing Buffer Content in Automobile Assembly Lines. In *30<sup>th</sup> National Operations Research/Industrial Engineering Conference (YAEM)*, Istanbul, Türkiye.
13. Taşkın H., Bölük A., **Günay E.E.**, Yılmaz A., Ekizoğlu B., Yanıkoğlu F.S. (2010, July). A Multi-Agent Based Architecture for Efficient Hospital Processes in Sakarya Education and Research Hospital in Türkiye: A Model for Neurology Clinic. In *7<sup>th</sup> International Symposium on Intelligent Manufacturing and Service Systems*, Sarajevo, Bosnia.
14. **Kabeloğlu, E. E.**, Kula U. (2009, October). Deciding Spare Vehicle Quantities for Automobile Assembly Lines. In *9<sup>th</sup> National Production Research Symposium (ÜAS)*, Osmangazi University, Eskişehir, Türkiye.

## TEACHING EXPERIENCE

### *Graduate Level*

- Human-Computer Interaction (HCI598)  
**Iowa State University**, Ames, IA, USA, 08/2017–12/2017  
**Online**
- Human-Computer Interaction (HCI598)  
**Iowa State University Ames**, IA, USA, 01/2019–05/2019  
**Online**
- Applied Regression Analysis (ENM519)  
**Sakarya University**, Sakarya, Türkiye, 09/2021–01/2022  
**Classroom**
- Stochastic Processes (ENM605)  
**Sakarya University**, Sakarya, Türkiye, 02/2023–06/2023  
**Online**

### *Undergraduate Level*

- Senior Design Project (ENM498)  
**Sakarya University**, Sakarya, Türkiye, 02/2022–05/2022  
“one-on-one” instruction (applied capstone design project)
- Conducted projects on operations research (vehicle routing problem), and supply chain (simulation, inventory management)
- Senior Design Project (ENM498)  
**Sakarya University**, Sakarya, Türkiye, 02/2023–06/2023  
“one-on-one” instruction (applied capstone design project)
- Conducted projects on data analytics (clustering, text-mining), operations research (vehicle routing problem), and supply chain (simulation, inventory management)
- Applied Engineering Experience (ENM495)  
**Sakarya University**, Sakarya, Türkiye, 02/2022–05/2022  
“one-on-one” instruction (applied capstone design project)  
Conducted projects on supply chain (inventory management), operations research, lean manufacturing
- Applied Engineering Experience (ENM495)  
**Sakarya University**, Sakarya, Türkiye, 09/2021–01/2022

**“one-on-one” instruction** (applied capstone design project)  
*Conducted projects on project management, lean manufacturing*

- Decision Theory and Analysis (ENM319C)  
**Sakarya University**, Sakarya, Türkiye, 10/2022–01/2023  
**Classroom**
- Decision Theory and Analysis (ENM319C)  
**Sakarya University**, Sakarya, Türkiye, 09/2021–01/2022  
**Classroom**
- Engineering Statistics–I (ENM205)  
**Sakarya University**, Sakarya, Türkiye, 09/2021–01/2022  
**Classroom**
- Engineering Statistics–I (ENM205)  
**Sakarya University**, Sakarya, Türkiye, 10/2022–01/2023  
**Classroom**
- Engineering Statistics–II (ENM206)  
**Sakarya University**, Sakarya, Türkiye, 09/2021–01/2022  
**Online**
- Engineering Statistics–II (ENM206)  
**Sakarya University**, Sakarya, Türkiye, 02/2022–05/2022  
**Classroom**
- Engineering Statistics–II (ENM206)  
**Sakarya University**, Sakarya, Türkiye, 02/2023–06/2023  
**Online**
- Management with Strategic Planning and Processes (SAU039)  
**Sakarya University**, Sakarya, Türkiye, 02/2022–05/2022  
**Online**  
Collaborated with professionals in the industry (ARMA Filter, Sakarya, Türkiye)
- Supply Chain Management (ENM 451)  
**Sakarya University**, Sakarya, Türkiye, 02/2009–05/2009  
**Classroom**—as a teaching assistant
- Design of Experiment (KAL506)  
**Sakarya University**, Sakarya, Türkiye, 02/2014–05/2014  
**Classroom**—as a teaching assistant

## STUDENT MENTORING

Supported students coming from diverse backgrounds and cultures in conducting research, experimenting, writing and presenting conference proceedings, and preparing journal manuscripts

### **Undergraduate Level, Iowa State University** **Ames IA, USA**

- Thomas R Lechtenberg, 05/2020–05/2021
- Liyuani Delgado Tapia, 08/2019–05/2020
- Trevor Gould, 08/2019–05/2020
- Shibani Raje, 08/2019–05/2020
- Jonah Scallon, 08/2019–05/2020
- Jenna Teberg, 08/2019–05/2020
- Josiah J Green, 01/2018–05/2018
- Mathew Lunning, 09/2017–12/2017

### **Graduate Level, Iowa State University** **Ames, IA, USA**

- Mohammad Mohammadzadeh, 01/2022–12/2024
- Pallavi Dubey, 01/2021–12/2023
- Srujana Kandukuri, 01/2020–05/2020
- Atousa Zarindast, 08/2018–05/2019
- Rama Srikar Mutyala, 03/2019–06/2019
- Shubham Khoje, 04/2017–01/2018
- Anusha Velineni, 09/2017–01/2018



## INVITED RESEARCH SEMINAR

- Rapid Damage Identification to Reduce Remanufacturing Costs, REMADE webinar series, University of Dayton, Dayton, OH, USA, 03/2024
- Using Two-Stage Stochastic Programming to Determine the Optimal Number of Spare Vehicles in an Automobile Assembly Line, Iowa State University, Ames, IA, USA, 09/2020

## PROFESSIONAL EXPERIENCE

**Stock Management Intern**, Alnal Welding Company, Sakarya, Türkiye, 08/2006–09/2006

**Production Planning Intern**, Eczacibasi Building Products, Bilecik, Türkiye, 07/2005–08/2005

## SERVICE

**Member of Engineering Education Accreditation Committee**, Sakarya University, Sakarya, Türkiye 06/2009–03/2024

- Served on Engineering Education Accreditation Committee for Industrial Engineering Program at Sakarya University, accredited by the Association for Evaluation and Accreditation of Engineering Programs in Türkiye (MUDEK)
- Contributed to writing undergraduate program evaluation self-assessment reports
- Developed a systematic approach to periodically measure and update the program educational objectives
- Prepared surveys and coordinated meetings with alumni, industry partners, and advisory board
- Managed data collection and arrangement
- Assessed and evaluated outcomes to determine achievement levels of the targeted program educational objectives
- Contributed to a tool development for periodic measurement of program outcomes to determine achievement levels
- Assess and evaluate whether program outcomes achieved

**Organizing Committee Member of International Symposium on Intelligent Manufacturing and Service Systems**, Sakarya University, Sakarya, Türkiye, 01/2021–12/2025

- Organizing sessions, program scheduling, and peer reviewing for the conferences in 2021, 2023, and 2025

**Session Chair**, Sakarya University, Sakarya, Türkiye

- Institute for Operations Research and the Management Sciences, INFORMS, 2018
- International Symposium on Intelligent Manufacturing and Service Systems, IMSS, 2023

**Internship Committee**, Sakarya University, Sakarya, Türkiye, 03/2009–03/2011

- Evaluated and assessed students' internship performance

**Editorial Board**, Sakarya University, Sakarya, Türkiye, 07/2021–03/2024

- Academic Platform Journal of Engineering and Smart Systems (APJESS)

**Journal Reviewer**, Sakarya University, Sakarya, Türkiye and Iowa State University, Ames, IA, USA

- Journal of Cleaner Production
- International Journal of Production Research
- Computers & Industrial Engineering
- Journal of Intelligent Manufacturing
- Annals of Operations Research

**Panelist**, Sakarya University, Sakarya, Türkiye

- International Day of the Girl Child, 10/2022

## **PROFESSIONAL ASSOCIATIONS**

- Turkish National Operations Research Society (YAD)
- Reducing EMbodied-energy And Decreasing Emissions (REMADE)