

MUHAMMET FATIH CENGLI

Ph.D. Candidate

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EDUCATION

University of Arkansas, Fayetteville, AR, USA

Ph.D. in Industrial Engineering, August 2020 - Ongoing, CGPA: 4.00

Ozyegin University, Istanbul, TURKEY

Master of Science in Industrial Engineering, January 2018, CGPA: 4.00

Thesis Study: "Heuristic approaches for assembly line balancing and competent worker assignment problem (ALWABP)", <https://eresearch.ozyegin.edu.tr/handle/10679/5901>

Middle East Technical University, Ankara, TURKEY

Bachelor of Science in Industrial Engineering, June 2014, CGPA: 3.56

PUBLICATION AND PRESENTATIONS

Peer-Reviewed Papers

- **Cengil, F.**, Nagarajan, H., Bent, R., Eksioglu, S., Eksioglu, B. (2022). "Learning to accelerate globally optimal solutions to the ac optimal power flow problem.", *Electric Power Systems Research*, 212, 108275. <https://doi.org/10.1016/j.epsr.2022.108275>

Invited Presentations

- 2023 Grid Science Winter School and Conference organized by the Los Alamos National Laboratory, Poster Presenter
- Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting, 2022, Presenter
- Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting, 2022, Poster Presenter
- Institute of Industrial and Systems Engineers (IISE) Annual Conference & Expo, 2022, Presenter
- The Power Systems Computation Conference (PSCC), Porto/Portugal, 2022, Presenter
- 20th International Working Seminar on Production Economics, Innsbruck/Austria, 2018, Presenter
- 28th European Conference on Operational Research (EURO), Poznan/Poland, 2016, Presenter

ACADEMIC EXPERIENCE

Research Experience

Research Assistant, University of Arkansas (August 2020 - Ongoing)

- Machine learning applications in power systems

Research Assistant, Los Alamos National Laboratory (June 2021 - May 2022)

- Research Topic: Accelerating global optimal solutions to the Alternating Current Optimal Power Flow (ACOPF) problem using machine learning

Teaching Experience

Instructor, Engineering Economic Analysis, University of Arkansas, Summer 2023.

(Course evaluation score: 4.92/5.0 with 93% participation)

Teaching Assistant, Engineering Economic Analysis, University of Arkansas, Spring 2023.

Teaching Assistant, Engineering Economic Analysis, University of Arkansas, Fall 2022.

Student Assistant, Production and Service Information Systems, Middle East Technical University, Spring 2013.

Student Assistant, Stochastic Models in Operations Research, Middle East Technical University, Fall 2012.

INDUSTRY EXPERIENCE

Process Leader, Philip Morris International Turkey (November 2018 - July 2020)

- Executing and leading the processes for eliminating losses by effective problem solving and process control tools
- Focusing on finished goods costs reduction opportunities by efficiency and improvement of production equipment efficiency
- Providing guidance, leadership and coaching to the line staff in order to build their capability
- Controlling production process parameters and taking actions in case of their in compliance with Philip Morris standards
- Fully apply the integrated manufacturing system IMS and PMI standards and policies

Production Specialist, Vestel Electronics Company Turkey (July 2014 - October 2018)

- Managing a team of 75 blue-collar technicians
- Improving the assembly line efficiency, i.e., using operations research techniques, designing new line layout.
- Managing the repair process of defective products with the aim of reducing the rate of defective products
- Detecting problems for defective products, making root cause analysis and using kaizen methodology to solve the problems
- Reducing the scrap material rate

HONORS AND AWARDS

University of Arkansas - Outstanding Teaching Assistant, 2022 - 2023

University of Arkansas - Doctoral Academy Fellowship, 2020 - 2024

University of Arkansas - Reginald R. 'Barney' & Jameson A. Baxter Graduate Fellowship, 2023 - 2024

University of Arkansas - Department of Industrial Engineering, 2023 - 2024

University of Arkansas - AAIE G. Kent Burnett Scholarship, 2023 - 2024

University of Arkansas - AAIE Kim and William Needy Scholarship, 2023 - 2024

University of Arkansas - Eric Malstrom Endowed Memorial Scholarship, 2023 - 2024

University of Arkansas - AAIE Larry Stephens Family Scholarship, 2022 - 2023

University of Arkansas - Eric Malstrom Endowed Memorial Scholarship, 2022 - 2023

University of Arkansas - Porter Stone Scholarship Award, 2022

University of Arkansas - Academic Excellence Award, 2021

INFORMS - Winner of the INFORMS 2022 Student Chapter Annual Award as an Honorable Mention

INFORMS - Winner of the INFORMS 2021 Student Chapter Annual Award as a Cum Laude Chapter

Middle East Technical University - High Honor Student, 2014

Selection Exam for Academic Personnel and Graduate Studies: Ranked 6th out of 410,000 participants, Spring 2014

PROFESSIONAL AFFILIATION

President, INFORMS Student Chapter, University of Arkansas, 2023-2024

Treasurer, INFORMS Student Chapter, University of Arkansas, 2022-2023

Member, Institute of Electrical and Electronics Engineers (IEEE)

Member, Institute for Operations Research and the Management Sciences (INFORMS)

Member, Institute of Industrial and Systems Engineers (IISE)

Member, Alpha Pi Mu – Industrial Engineering Honor Society

Member, The Society for Collegiate Leadership & Achievement – Honor Society

COMPUTER SKILLS

Programming Languages: Python, Julia, R, C#

Optimization Tools: CPLEX, Gurobi, GAMS, AMPL