

## Asst. Prof. SENA AYDOĞAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABA-4726-2021

ScopusID: 57201616522

Yoksis Researcher ID: 207972

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (Dr), Turkey 2016 - 2021

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (YI) (Tezli), Turkey 2013 - 2015

Undergraduate, Gazi University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 2008 - 2012

### Dissertations

Doctorate, Heterojen bilgi ağlarında dilsel özetleme, Gazi University, Fen Bilimleri Enstitüsü, 2021

Postgraduate, Bulanık dilsel özetlemenin olasılıklı belirsizliği dikkate alan bir genişlemesi, Gazi University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (YI) (Tezli), 2015

### Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Fuzzy Sets and Systems, Industrial Engineering

### Academic Titles / Tasks

Assistant Professor, Gazi University, Mühendislik Fakültesi, Endüstri Mühendisliği, 2023 - Continues

Research Assistant, Gazi University, Mühendislik Fakültesi, Endüstri Mühendisliği, 2014 - 2023

Researcher, Iowa State University, College of Engineering, Department of Industrial and Manufacturing Systems Engineering, 2019 - 2019

### Academic and Administrative Experience

Program Accreditation-Self-Assessment Committee Member, Gazi University, Mühendislik Fakültesi, Endüstri Mühendisliği, 2024 - Continues

Bölüm Stratejik Plan Komisyonu Üyesi, Gazi University, Mühendislik Fakültesi, Endüstri Mühendisliği, 2022 - Continues

## Courses

Endüstri Mühendisliğinde Tasarım I, Undergraduate, 2024 - 2025  
Bilimsel Araştırma Teknikleri , Undergraduate, 2024 - 2025, 2023 - 2024  
Uygulamalı Makine Öğrenmesi , Undergraduate, 2023 - 2024  
Applied Machine Learning, Undergraduate, 2023 - 2024  
Endüstri Mühendisliğinde Tasarım II, Undergraduate, 2023 - 2024  
Performance Evaluation and Management, Undergraduate, 2024 - 2025, 2023 - 2024  
Fuzzy Set Theory, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023  
Endüstri Mühendisliğinde Tasarım I, Undergraduate, 2024 - 2025, 2023 - 2024  
Bilimsel Araştırma Teknikleri, Undergraduate, 2023 - 2024, 2022 - 2023  
Bulanık Küme Teorisi , Undergraduate, 2022 - 2023

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigating the carbon border adjustment mechanism transition process with linguistic summarization method: A situational analysis of exporting countries**  
ŞENER FİDAN F., AYDOĞAN S., AKAY D.  
Advanced Engineering Informatics, vol.61, 2024 (SCI-Expanded)
- II. **Linguistic summarization of visual attention and developmental functioning of young children with autism spectrum disorder**  
Ozturk D., AYDOĞAN S., KÖK İ., Akin Bulbul I., ÖZDEMİR S., ÖZDEMİR S., AKAY D.  
HEALTH INFORMATION SCIENCE AND SYSTEMS, no.1, 2024 (SCI-Expanded)
- III. **Precision in decision-making: a novel Z-number DEA approach for European country rankings**  
Eligüzel N., AYDOĞAN S.  
Kybernetes, 2024 (SCI-Expanded)
- IV. **Interval type-2 fuzzy linguistic summarization using restriction levels**  
AYDOĞAN S.  
Neural Computing and Applications, vol.35, no.35, pp.24947-24957, 2023 (SCI-Expanded)
- V. **Linguistic summarization to support supply network decisions**  
Aydoğan S., Okudan Kremer G. E., Akay D.  
JOURNAL OF INTELLIGENT MANUFACTURING, vol.32, no.6, pp.1573-1586, 2021 (SCI-Expanded)
- VI. **Concept design evaluation by using Z-axiomatic design**  
Aydoğan S., Gunay E. E., Akay D., Kremer G. E. O.  
COMPUTERS IN INDUSTRY, vol.122, 2020 (SCI-Expanded)
- VII. **An Extension of Fuzzy Linguistic Summarization Considering Probabilistic Uncertainty**  
Aydoğan S., Akay D., Boran F. E., Yager R. R.  
INTERNATIONAL JOURNAL OF UNCERTAINTY FUZZINESS AND KNOWLEDGE-BASED SYSTEMS, vol.26, no.2, pp.195-215, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Collaborative Planning with Biclustering**  
Demiray A., Ates F., AYDOĞAN S., AKAY D.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, 2024 (ESCI)
- II. **Urban Mobility Patterns with Linguistic Summarization: Insights from Bicycle Data**  
ŞENER FİDAN F., AYDOĞAN S., AKAY D.  
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.39, no.3, pp.538-547, 2023 (Peer-Reviewed Journal)
- III. **Clustering Application and Evaluation of the Countries' Word Risk and Climate Risk Indices**

Eligüzel N., Aydoğan S., Eligüzel İ. M.

INTERNATIONAL JOURNAL OF APPLIED MATHEMATICS ELECTRONICS AND COMPUTERS, vol.11, no.1, pp.13-19, 2023 (Peer-Reviewed Journal)

IV. **Avrupa Ülkelerinin Çevre ve Enerji Performansına Yönelik Etkinlik Değerlendirmesi: Veri Zarflama Analizi Uygulaması**

AYDOĞAN S., ŞAHİN M., SÖYLEMEZ İ.

The International New Issues in Social Sciences, vol.5, no.5, pp.267-282, 2017 (Peer-Reviewed Journal)

V. **Linguistic Summarization of Structured Patent Data**

Esen Yıldız İ., Aydoğan S., Boran F. E., Akay D.

INTERNATIONAL JOURNAL OF COMPUTER AND INFORMATION TECHNOLOGY, vol.11, no.9, pp.1024-1027, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Linguistic Summarization for Higher Education Institutions in the Context of Sustainable Development Goals: Analysis of THE Impact Ranking Results**  
ŞENER FİDAN F., AYDOĞAN S.  
8th International Scientific Conference "Telecommunications, Informatics, Energy and Management" – TIEM 2023, 1 - 03 December 2023
- II. **Linguistic Comparison of Children with and without ASD through Eye-Tracking Data**  
öztürk d., AYDOĞAN S., KÖK İ., AKIN BÜLBÜL İ., ÖZDEMİR S., ÖZDEMİR S., AKAY D.  
ICCTA 2023: 2023 9th International Conference on Computer Technology Applications, Vienna, Austria, 10 - 12 May 2023, pp.241-246
- III. **Generating Linguistic Advice for the Carbon Limit Adjustment Mechanism**  
ŞENER FİDAN F., AYDOĞAN S., AKAY D.  
12th International Symposium on Intelligent Manufacturing and Service Systems, Sakarya, Turkey, 26 - 28 May 2023
- IV. **EVALUATION OF WORLD RISK AND CLIMATE RISK INDEXES OF THE COUNTRIES: A CLUSTERING ANALYSIS**  
ELİGÜZEL N., AYDOĞAN S., ELİGÜZEL İ. M.  
10th International Conference on Advanced Technologies (ICAT'22), Van, Turkey, 25 November 2022
- V. **Türkiye'de Endüstri Mühendisliği'nin Bibliyometrik Analizi**  
AYDOĞAN S., ELİGÜZEL N.  
41. Yöneyem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Denizli, Turkey, 26 October 2022
- VI. **An Application of Multi-Objective Scheduling with Fuzzy Measure**  
Durmaz E. D., Aydoğan S., Şahin R.  
International Conference on Applied Mathematics in Engineering (ICAME'21), Balıkesir, Turkey, 1 - 03 September 2021, pp.134
- VII. **Linguistic Summarization of Supply Network Interactions**  
AYDOĞAN S., GÜNAY E. E., AKAY D., Kremer G.  
10th International Symposium on Intelligent Manufacturing and Service Systems, Sakarya, Turkey, 9 - 11 September 2019
- VIII. **Decision-making with Z-Axiomatic Design**  
Aydoğan S., Akay D., Kremer G., Günay E. E., Park K., Boran F. E.  
2019 IISE Annual Conference, Florida, United States Of America, 19 - 21 May 2019
- IX. **Vaccine Distribution Strategies against Polio: An Analysis of Turkey Scenario**  
Günay E. E., Park K., Aydoğan S., Kremer G.  
2019 IISE Annual Conference, Florida, United States Of America, 19 - 21 May 2019
- X. **Variable Neighborhood – Simulated Annealing Algorithm for Single Machine Total Weighted Tardiness Problem**

AYDOĞAN S.

10th International Statistics Congress, 6 - 08 December 2017

- XI. **VERİ ZARFLAMA ANALİZİ İLE AVRUPA ÜLKELERİNİN ÇEVRE VE ENERJİPERFORMANSLARININ ÖLÇÜLMESİ**  
AYDOĞAN S., ŞAHİN M., SÖYLEMEZ İ.  
III. ULUSLARARASI KAFKASYA ORTA ASYA DIŞ TİCARET VE LOJİSTİK KONGRESİ, Kastamonu, Turkey, 19 - 21 October 2017, pp.23
- XII. **Yapılandırılmış Patent Verilerinin Dilsel Özetlemesi**  
İĞDE E. Y., AYDOĞAN S., BORAN F. E., AKAY D.  
37. Yöneyem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 5 - 07 July 2017
- XIII. **OPERASYONEL VE FİNANSAL SAĞLIK VERİSİ İÇİN BULANIK DİLSEL ÖZETLERİN GENETİK ALGORİTMA İLE ÇIKARIMI**  
ALTINTOP T., AYDOĞAN S., AKAY D., BORAN F. E., ÜNAL M.  
Yöneyem Araştırması ve Endüstri Mühendisliği 36. Ulusal Kongresi, Turkey, 13 - 15 July 2016
- XIV. **Classification of patients at risk for CO poisoning in an emergency department with CHAID decision tree**  
KELEŞ A., DEMİRCAN A., BİLDİK F., AYDOĞAN S., DÜZCE T., AKAY D.  
15. Üretim Araştırmaları Sempozyumu, İzmir, Turkey, 14 - 16 October 2015, pp.1109-1113

## Metrics

Publication: 26

Citation (WoS): 49

Citation (Scopus): 58

H-Index (WoS): 3

H-Index (Scopus): 3

## Scholarships

YUDAB, YOK, 2019 - 2019

Doktora Burs Programı, TUBITAK, 2016 - 2019

## Non Academic Experience

Iowa State University