

## Assoc. Prof. FATMA GÜL AKGÜL

### Personal Information

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Address: Karadeniz Teknik Üniversitesi, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri Bölümü, Trabzon, Türkiye.

### International Researcher IDs

ScholarID: TvxPeOoAAAAJ

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Yoksis Researcher ID: 104985

### Education Information

Post Doctorate, Brunel University, College of Engineering, Design and Physical Sciences, Department of Mathematical Sciences, England 2017 - 2018

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2011 - 2015

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İstatistik ve Bilgisayar Bilimleri, Turkey 2009 - 2011

Undergraduate, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, Turkey 2005 - 2009

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Stres-dayanıklılık modelinde sıralı küme örnekleme yöntemi kullanılarak sistem güvenilirliğinin dayanıklı tahmini, Ankara University, Fen Bilimleri Enstitüsü, 2015

Postgraduate, Zaman serilerinde kointegrasyon ve yapısal kırılma analizleri üzerine bazı uygulamalar, Karadeniz Technical University, Fen Bilimleri Enstitüsü, 2011

### Research Areas

Statistics

### Academic Titles / Tasks

Associate Professor, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2023 - Continues

Associate Professor, Artvin Coruh University, Faculty Of Engineering, Temel Bilimler Bölümü, 2021 - 2023

Assistant Professor, Artvin Coruh University, Faculty Of Engineering, Department Of Computer Engineering, 2016 - 2021

Research Assistant, Ankara University, Fen Fakültesi, İstatistik Bölümü, 2012 - 2016

Research Assistant, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2011 - 2012

Research Assistant, Artvin Coruh University, Faculty Of Arts And Sciences, Department Of Statistics, 2010 - 2011

## Academic and Administrative Experience

Head of Department, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2023 - Continues

Head of Department, Artvin Coruh University, 2021 - 2022

Head of Department, Artvin Coruh University, Faculty Of Engineering, Department Of Computer Engineering, 2020 - 2021

Head of Department, Artvin Coruh University, Faculty Of Engineering, Department Of Computer Engineering, 2016 - 2021

Farabi Program Institutional Coordinator, Artvin Coruh University, 2016 - 2018

## Courses

Stokastik Süreçler, Undergraduate, 2023 - 2024

Matematiksel İstatistik, Undergraduate, 2022 - 2023

Olasılık Teorisi, Undergraduate, 2023 - 2024

## Advising Theses

Akgül F. G., Doğru F. Z., Unit power lindley dağılımı, Postgraduate, H.KARAKUŞ(Student), 2023

Akgül F. G., Şenoğlu B., Rüzgâr hızının istatistiksel modellenmesi, Postgraduate, T.NİKSARLI(Student), 2019

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

- I. **Comparison of wind speed distributions: a case study for Aegean coast of Turkey**  
Akgul F. G., ŞENOĞLU B.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.45, no.1, pp.2453-2470, 2023 (SCI-Expanded)
- II. **Estimation of multicomponent stress-strength reliability based on unit Burr XII distribution: an application to dam occupancy rate of Istanbul, Turkey**  
AKGÜL F. G.  
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.93, no.18, pp.3217-3234, 2023 (SCI-Expanded)
- III. **Inferences for stress-strength reliability of Burr Type X distributions based on ranked set sampling**  
Akgul F. G., ŞENOĞLU B.  
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, vol.51, no.6, pp.3324-3340, 2022 (SCI-Expanded)
- IV. **Classical and Bayesian estimation of multicomponent stress-strength reliability for exponentiated Pareto distribution**  
Akgul F. G.  
SOFT COMPUTING, vol.25, no.14, pp.9185-9197, 2021 (SCI-Expanded)
- V. **Estimation of the system reliability for generalized inverse Lindley distribution based on different sampling designs**  
Akgul F. G., Yu K., ŞENOĞLU B.  
COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.50, no.7, pp.1532-1546, 2021 (SCI-Expanded)
- VI. **Classical and Bayesian Inferences in Step-Stress Partially Accelerated Life Tests for Inverse Weibull Distribution Under Type-I Censoring**  
Akgul F. G., Yu K., ŞENOĞLU B.

- STRENGTH OF MATERIALS, vol.52, no.3, pp.480-496, 2020 (SCI-Expanded)
- VII. **Reliability estimation in multicomponent stress-strength model for Topp-Leone distribution**  
Akgul F. G.  
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.89, no.15, pp.2914-2929, 2019 (SCI-Expanded)
- VIII. **Inferences on stress-strength reliability based on ranked set sampling data in case of Lindley distribution**  
Akgul F. G., Acitas S., ŞENOĞLU B.  
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.88, no.15, pp.3018-3032, 2018 (SCI-Expanded)
- IX. **Interval estimation of the system reliability for Weibull distribution based on ranked set sampling data**  
Akgul F. G., ŞENOĞLU B., Acitas S.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.47, no.5, pp.1404-1416, 2018 (SCI-Expanded)
- X. **Estimation of  $P(X < Y)$  using ranked set sampling for the Weibull distribution**  
Akgul F. G., ŞENOĞLU B.  
QUALITY TECHNOLOGY AND QUANTITATIVE MANAGEMENT, vol.14, no.3, pp.296-309, 2017 (SCI-Expanded)
- XI. **An alternative distribution to Weibull for modeling the wind speed data: Inverse Weibull distribution**  
Akgul F. G., ŞENOĞLU B., Arslan T.  
ENERGY CONVERSION AND MANAGEMENT, vol.114, pp.234-240, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **ESTIMATION OF THE LOCATION AND THE SCALE PARAMETERS OF BURR TYPE XII DISTRIBUTION**  
AKGÜL F. G., ACITAŞ Ş., ŞENOĞLU B.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.1, pp.1030-1044, 2019 (ESCI)
- II. **Comparison of the estimation methods for the parameters of Exponentiated Reduced Kies Distribution**  
AKGÜL F. G.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.22, no.3, pp.1209-1216, 2018 (Peer-Reviewed Journal)
- III. **Estimation of Stress-Strength Reliability for Weibull Distribution based on Type-II Right Censored Ranked Set Sampling Data**  
AKGÜL F. G., ŞENOĞLU B.  
PAKISTAN JOURNAL OF STATISTICS AND OPERATION RESEARCH, vol.14, no.4, pp.781-806, 2018 (ESCI)
- IV. **Robust estimation of the location and the scale parameters of shifted Gompertz distribution**  
AYDIN D., AKGÜL F. G., ŞENOĞLU B.  
ELECTRONIC JOURNAL OF APPLIED STATISTICAL ANALYSIS, vol.11, no.1, pp.92-107, 2018 (ESCI)
- V. **Estimation of  $P(XY)$  using Some Modifications of Ranked Set Sampling for Weibull Distribution**  
AKGÜL F. G., ŞENOĞLU B.  
PAKISTAN JOURNAL OF STATISTICS AND OPERATION RESEARCH, vol.13, no.4, pp.931-958, 2017 (Scopus)
- VI. **Inference for the Jones and Faddy's Skewed t-Distribution based on Progressively Type-II Censored Samples**  
AKGÜL F. G., ŞENOĞLU B.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.30, no.3, pp.1-17, 2017 (Scopus)
- VII. **Bankaların 2008 2012 Yılları Arasında Aktif Büyüklüklerini Etkileyen Kriterler Bakımından Hiyerarşik Kümeleme ve PAM Algoritması ile Sınıflandırılması**  
AKGÜL F. G., BAŞKIR M. B., ATALAR M. M.  
BSAD Bankacılık ve Sigortacılık Araştırmaları Dergisi, vol.1, no.5-6, pp.48-63, 2013 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Classical methods for estimation of constant stress accelerated life test under exponentiated Pareto distribution**  
Akgül F. G.  
7th International Researchers, Statisticians and Young Statisticians Congress, 2 - 05 November 2023, pp.39
- II. **Estimation of multicomponent stress-strength reliability for unit Burr-XII distribution**  
AKGÜL F. G.  
Applied Statistics 2021, Slovenia, 22 September 2021
- III. **Determination of Wind Speed Characteristics using Mixture Distributions**  
AKGÜL F. G., YALÇINKAYA A., ŞENOĞLU B.  
20th International Symposium on Econometrics, Operations Research and Statistics (EYI 2020), Ankara, Turkey, 12 - 14 February 2020
- IV. **Inference in Step-Stress Partially Accelerated Life Testing for Inverse Weibull Distribution under Type I Censoring**  
AKGÜL F. G., YU K., ŞENOĞLU B.  
Data Science, Machine Learning and Statistics 2019, 26 - 29 June 2019
- V. **Estimation methods for three-parameter Burr type XII distribution: Hydrological Application**  
AKGÜL F. G., ŞENOĞLU B.  
Data Science, Machine Learning and Statistics 2019, 26 - 29 June 2019
- VI. **Estimation of the system reliability for generalized inverse Lindley distribution under different sampling schemes**  
AKGÜL F. G., YU K., ŞENOĞLU B.  
11. International Statistics Days Conference, 3 - 07 October 2018
- VII. **Estimation of The Shape Parameter of Burr Type X Distribution Using Ranked Set Sampling with an Application**  
AKGÜL F. G., ŞENOĞLU B.  
18. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu, 5 - 07 October 2017
- VIII. **Inferences for stress-strength reliability of Burr Type X distributions based on ranked set sampling**  
AKGÜL F. G., ŞENOĞLU B.  
Applied Statistics 2017, 24 - 27 September 2017
- IX. **Alternative distributions to Weibull for modeling the wind speed data in wind energy analysis**  
AKGÜL F. G., ŞENOĞLU B.  
Data Science, Statistics and Visualisation, 12 - 14 July 2017
- X. **Inference for the Scaled Half-Logistic Distribution based on Ranked Set Sampling**  
AKGÜL F. G., ŞENOĞLU B.  
3rd International Researchers, Statisticians and Young Statisticians Congress, 24 - 26 May 2017
- XI. **Different Estimation Methods for the Parameters of Inverse Weibull Distribution: An Application to Fatigue Lifetime Data**  
AKGÜL F. G., ŞENOĞLU B.  
3rd International Researchers, Statisticians and Young Statisticians Congress, 24 - 26 May 2017
- XII. **Inferences on stress strength reliability from Lindley distribution based on ranked set sampling data**  
AKGÜL F. G., ACITAŞ Ş., ŞENOĞLU B.  
Xth International Statistics Days Conference, 7 - 09 October 2016
- XIII. **The Generalized Inverse Weibull Distribution Properties and Different Estimation Methods**  
AKGÜL F. G., ŞENOĞLU B.  
International Conference on Trends and Perspectives in Linear Statistical Inference, 22 - 25 August 2016
- XIV. **Interval estimation of the system reliability for Weibull distribution based on ranked set sampling data**  
AKGÜL F. G., ŞENOĞLU B., ACITAŞ Ş.  
9th International Conference on Modelling in Industrial Maintenance and Reliability, 12 - 14 July 2016

- XV. **Estimation of the location and the scale parameters of Jones and Faddy s skewed t distriution based on progressively type II censored data**  
AKGÜL F. G., ŞENOĞLU B.  
The 2rd Researchers, Statisticans and Young Statisticans Congress, 4 - 08 May 2016
- XVI. **Estimating the Parameters in One Way ANOVA based on Ranked Set Sampling**  
AKGÜL F. G., ŞENOĞLU B.  
The 8th Conference of Eastern Mediterranean Region of the International Biometric Society, 11 - 15 May 2015
- XVII. **Robust Estimation of the Parameters of the Shifted Gompertz Distribution**  
AYDIN D., ŞENOĞLU B., AKGÜL F. G.  
The 8th Conference of Eastern Mediterranean Region of the International Biometric Society, 11 - 15 May 2015
- XVIII. **Estimation of the System Reliability under Type II Right Censored Ranked Set Sampling Data**  
AKGÜL F. G., ŞENOĞLU B.  
International Conference on Mathematics and Mechanics, 27 - 28 April 2015
- XIX. **Estimation of the reliability in the stress strength models under the modifications of the ranked set sampling Weibull distribution**  
AKGÜL F. G., ŞENOĞLU B.  
11th International Conference on Ordered Statistical Data, Poznan/Bedlewo, Poland, 2 - 06 June 2014, pp.22-23
- XX. **Estimation of System Reliability using Ranked Set Sampling for Weibull Distribution**  
AKGÜL F. G., ŞENOĞLU B.  
15th International Symposium on Econometrics, Operations Research and Statistics, Isparta, Turkey, 22 - 25 May 2014, pp.93
- XXI. **Burr XII dağılımının Konum ve Ölçek parametrelerinin Tahmini Monte Carlo Simülasyon Çalışması**  
AKGÜL F. G., ŞENOĞLU B.  
8. Uluslararası İstatistik Kongresi, Antalya, Turkey, 27 - 30 October 2013, pp.228-229
- XXII. **GAO Dağılımının Parametrelerinin Dayanıklı Tahmini**  
AKGÜL F. G., ŞENOĞLU B.  
1. Genç İstatistikçiler Sempozyumu, Turkey, 10 - 11 September 2013
- XXIII. **Bankaların Aktif Büyüklüklerini Etkileyen Kriterler Bakımından Sınıflandırılması ve Bu Sınıfların Lojistik Regresyon Yöntemi ile İncelenmesi**  
AKGÜL F. G., ŞENOĞLU B.  
XIVth International Symposium on Econometrics, Operations Research and Statistics, Saray Bosna, Bosnia And Herzegovina, 24 - 28 May 2013, pp.303

## Supported Projects

Akgül F. G., Şenoğlu B., Project Supported by Higher Education Institutions, The Comparisons of the Parameter Estimation Methods for Burr XII Distribution: Hydrological Applications, 2017 - 2018

Akgül F. G., Şenoğlu B., Project Supported by Higher Education Institutions, Using Alternative Distributions for Modeling Wind Speed, 2016 - 2017

## Scholarships

2219- Yurtdışı Doktora Sonrası Araştırma Burs Programı, TÜBİTAK, 2017 - 2018

2211-Genel Yurtiçi Doktora Burs Programı, TÜBİTAK, 2013 - 2015