

## Asst. Prof. YEŐİM GÜNEY

### Personal Information

**Email:** ydone@ankara.edu.tr

**Web:** <https://avesis.ankara.edu.tr/ydone>

**Address:** Ankara Üniversitesi Fen Fakültesi İstatistik Bölümü 06100 Beşevler / ANKARA

### International Researcher IDs

ORCID: 0000-0003-2316-8888

Publons / Web Of Science ResearcherID: AAF-7547-2020

ScopusID: 57191836912

Yoksis Researcher ID: 114181

### Education Information

Doctorate, Ankara University, Fen Fakültesi, İstatistik Bölümü, Turkey 2012 - 2018

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2009 - 2011

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 2004 - 2009

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Vocational Training, Online Öğretici Sertifikası, Ankara University, 2020

### Dissertations

Doctorate, Simetrik ve çarpık dağılımlar için bilgi karmaşıklık (ICOMP) kriteri kullanılarak robust model seçimi, Ankara University, Fen Fakültesi, İstatistik Bölümü, 2018

Postgraduate, Bernstein-Stancu polinomlarıyla yaklaşım, Ankara University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2011

### Research Areas

Statistics

### Academic Titles / Tasks

Assistant Professor, Ankara University, Fen Fakültesi, İstatistik Bölümü, 2022 - Continues

Research Assistant, Ankara University, Fen Fakültesi, İstatistik Bölümü, 2012 - 2022

## Academic and Administrative Experience

Member of Department FEDEK Commission, Ankara University, Fen Fakültesi, İstatistik Bölümü, 2021 - Continues

## Courses

RESEARCH METHODS, Undergraduate, 2023 - 2024, 2022 - 2023

SOFTWARE - ASSISTED ADVANCED STATISTICAL ANALYSIS, Undergraduate, 2023 - 2024

Probability and Statistics, Undergraduate, 2023 - 2024, 2022 - 2023

Özel Konu, Undergraduate, 2023 - 2024

Statistical Data Visualization, Postgraduate, 2023 - 2024

Special Topic, Undergraduate, 2023 - 2024

Veri Görselleştirme, Undergraduate, 2023 - 2024

Probability and Statistics, Undergraduate, 2023 - 2024

## Jury Memberships

Doctoral Examination, Doctoral Examination, Ankara Üniversitesi, May, 2024

Post Graduate, Post Graduate, Ankara Üniversitesi, February, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, July, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, June, 2023

Doctoral Examination, Doctoral Examination, Ankara Üniversitesi, May, 2023

Post Graduate, Post Graduate, Ankara Üniversitesi, January, 2023

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

- I. **Joint Robust Variable Selection of Mean and Covariance Model via Shrinkage Methods**  
Güney Y., Gökalg Yavuz F., Arslan O.  
INTERNATIONAL STATISTICAL REVIEW, 2024 (SCI-Expanded)
- II. **Estimation of loss on ignition values of the magnesite minerals using robust multiple regression**  
AKISKA S., AKISKA E., GÜNEY Y.  
EARTH SCIENCE INFORMATICS, vol.16, no.4, pp.4243-4255, 2023 (SCI-Expanded)
- III. **Nonparametric tests in linear model with autoregressive errors**  
Jureckova J., Arslan O., Güney Y., Picek J., Schindler M., Tuac Y.  
METRIKA, vol.86, no.4, pp.443-453, 2023 (SCI-Expanded)
- IV. **Robust estimation in multivariate heteroscedastic regression models with autoregressive covariance structures using EM algorithm**  
Güney Y., Arslan O., Gökalg Yavuz F.  
JOURNAL OF MULTIVARIATE ANALYSIS, vol.191, 2022 (SCI-Expanded)
- V. **Empirical likelihood estimation for linear regression models with AR(p) error terms with numerical examples**  
Özdemir Ş., Güney Y., Tuac Y., Arslan O.  
JOURNAL OF APPLIED STATISTICS, vol.49, no.9, pp.2271-2286, 2022 (SCI-Expanded)
- VI. **Robust model selection in linear regression models using information complexity**  
GÜNEY Y., Bozdogan H., ARSLAN O.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.398, 2021 (SCI-Expanded)
- VII. **Optimal b-robust estimation for the parameters of the marshall-olkin extended burr xii distribution with an application to pharmacokinetics**  
GÜNEY Y., Özdemir Ş., TUAC Y., ARSLAN O.  
Revstat Statistical Journal, vol.19, no.3, pp.421-442, 2021 (SCI-Expanded)

- VIII. **Robust estimation and variable selection in heteroscedastic regression model using least favorable distribution**  
 GÜNEY Y., TUAÇ Y., ÖZDEMİR Ş., ARSLAN O.  
 COMPUTATIONAL STATISTICS, vol.36, no.2, pp.805-827, 2021 (SCI-Expanded)
- IX. **Conditional maximum Lq-likelihood estimation for regression model with autoregressive error terms**  
 GÜNEY Y., Tuac Y., Ozdemir S., ARSLAN O.  
 Metrika, vol.84, no.1, pp.47-74, 2021 (SCI-Expanded)
- X. **Parameter estimation of regression model with AR(p) error terms based on skew distributions with EM algorithm**  
 Tuac Y., GÜNEY Y., ARSLAN O.  
 Soft Computing, vol.24, no.5, pp.3309-3330, 2020 (SCI-Expanded)
- XI. **Robust parameter estimation of regression model with AR(p) error terms**  
 Tuac Y., GÜNEY Y., ŞENOĞLU B., ARSLAN O.  
 Communications in Statistics: Simulation and Computation, vol.47, no.8, pp.2343-2359, 2018 (SCI-Expanded)
- XII. **Marshall-Olkin distribution: parameter estimation and application to cancer data**  
 GÜNEY Y., TUAÇ Y., ARSLAN O.  
 JOURNAL OF APPLIED STATISTICS, vol.44, no.12, pp.2238-2250, 2017 (SCI-Expanded)

### Articles Published in Other Journals

- I. **An analysis to identify the structural breaks of Covid-19 in Turkey**  
 GÜNEY Y., TUAÇ Y., ÖZDEMİR Ş., GÖKALP YAVUZ F., ARSLAN O.  
 JOURNAL OF STATISTICS AND MANAGEMENT SYSTEMS, vol.25, no.8, pp.1971-1989, 2022 (ESCI)
- II. **The Clustering Structure of the COVID-19 Outbreak in Global Scale**  
 GÖKALP YAVUZ F., GÜNEY Y., ÖZDEMİR Ş., TUAÇ Y., ARSLAN O.  
 ADVANCES IN DATA SCIENCE AND ADAPTIVE ANALYSIS, vol.14, no.01N02, 2022 (ESCI)
- III. **MAXIMUM LQ-LIKELIHOOD ESTIMATION FOR THE PARAMETERS OF MARSHALL-OLKIN EXTENDED BURR XII DISTRIBUTION**  
 ÖZDEMİR Ş., GÜNEY Y., TUAÇ Y., ARSLAN O.  
 COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.1, pp.17-34, 2019 (ESCI)
- IV. **ROBUST PARAMETER ESTIMATION FOR THE MARSHALL-OLKIN EXTENDED BURR XII DISTRIBUTION**  
 GÜNEY Y., ARSLAN O.  
 COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.66, no.2, pp.141-161, 2017 (ESCI)
- V. **Approximation Properties of Schurer-Stancu Type Polynomials**  
 SUCU S., GÜNEY Y., İBİKLİ E.  
 Mathematica Balkanica, vol.26, pp.45-56, 2012 (Peer-Reviewed Journal)

### Books & Book Chapters

- I. **A Comparison of Robust Model Choice Criteria Within a Metalearning Study**  
 Vidnerova P., Kalina J., GÜNEY Y.  
 in: Analytical Methods in Statistics, Maciak Matúš, Pešta Michal, Schindler Martin, Editor, Springer, pp.125-141, 2020
- II. **Averaged Autoregression Quantiles in Autoregressive Model**  
 GÜNEY Y., Jureckova J., ARSLAN O.  
 in: Analytical Methods in Statistics, Maciak Matúš, Pešta Michal, Schindler Martin, Editor, Springer, pp.1-15, 2020

- III. **Variable Selection in Heteroscedastic Regression Models Under General Skew-t Distributional Models Using Information Complexity**  
GÜNEY Y., ARSLAN O., Bozdogan H.  
in: Computational and Methodological Statistics and Biostatistics, Bekker Andriette, Chen (Din) Ding-Geng, T. Ferreira Johannes, Editor, Springer, pp.73-98, 2020

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Robust parameter estimation and variable selection in regression models when heteroscedasticity and skewness are present**  
Güney Y., Arslan O.  
CMStatistics, Berlin, Germany, 15 - 18 December 2023, pp.1-2
- II. **Variable selection in robust heteroscedastic models with autoregressive covariance structures using EM-type algorithm**  
Güney Y., Gökalp Yavuz F., Arslan O.  
15th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics (CMStatistics 2022), London, England, 17 - 19 December 2022, pp.100
- III. **Joint modelling of location, scatter matrix and skewness of multivariate skew normal distribution**  
Güney Y.  
15th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics (CMStatistics 2022), London, England, 17 - 19 December 2022, pp.100
- IV. **Joint modeling of mean and scale covariance using empirical likelihood**  
Özdemir Ş., Güney Y., Arslan O.  
15th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics (CMStatistics 2022), London, England, 17 - 19 December 2022, pp.100
- V. **Clustering Countries with COVID19 Dataset**  
GÖKALP YAVUZ F., GÜNEY Y., ÖZDEMİR Ş., TUAÇ Y., ARSLAN O.  
6th International Medicine Health Sciences Congress (IMedHSC) 2020, 27 - 29 December 2020
- VI. **Modeling Turkish COVID-19 Data Using ARIMA Model**  
Dalkılıç H., Köprü A. A., GÜNEY Y., TUAÇ Y., ÖZDEMİR Ş., GÖKALP YAVUZ F., ARSLAN O.  
III. INTERNATIONAL CONFERENCE ON COVID-19 STUDIES, Ankara, Turkey, 25 - 27 December 2020, vol.1
- VII. **Logistic Growth Modeling of the Turkish COVID-19 Data.**  
Özdemir Ş., Güney Y., Tuac Y., Gökalp Yavuz F., Arslan O.  
III. International Conference on Covid-19 Studies., Ankara, Turkey, 25 - 27 December 2020, pp.1
- VIII. **Linear and Nonlinear Regression with Autoregressive Errors: Application to Covid-19 Contagion in Turkey**  
Güney Y., Tuac Y., Özdemir Ş., Arslan O., Gökalp Yavuz F.  
6th International Medicine & Health Sciences Congress., Ankara, Turkey, 25 - 27 December 2020, pp.1
- IX. **Averaged Autoregression Quantiles in Autoregressive Model**  
GÜNEY Y., Jurečková J., ARSLAN O.  
3rd Workshop on Analytical Methods in Statistics, AMISTAT 2019, Liberec, Czech Republic, 16 - 19 September 2019, vol.329, pp.1-15
- X. **A Comparison of Robust Model Choice Criteria Within a Metalearning Study**  
Vidnerová P., Kalina J., GÜNEY Y.  
3rd Workshop on Analytical Methods in Statistics, AMISTAT 2019, Liberec, Czech Republic, 16 - 19 September 2019, vol.329, pp.125-141
- XI. **Robust Model Selection in Regression Model Using Information Complexity**

GÜNEY Y., Bozdogan H., ARSLAN O.

Analytical Methods in Statistics (AMISTAT) 2019, Liberec, Czech Republic, 16 - 19 September 2019

- XII. **Robust estimation and variable selection in joint location and scale model using least favorable distribution.**  
GÜNEY Y., TUAÇ Y., ÖZDEMİR Ş., ARSLAN O.  
23rd International Conference on Computational Statistics (COMPSTAT 2018), 28 - 31 August 2018
- XIII. **Vector autoregressive models with multivariate skew innovations**  
TUAÇ Y., GÜNEY Y., ÖZDEMİR Ş., ARSLAN O.  
23rd International Conference on Computational Statistics (COMPSTAT 2018), 28 - 31 August 2018
- XIV. **Robust estimation and variable selection for regression models using empirical likelihood and LASSO methods**  
ÖZDEMİR Ş., GÜNEY Y., TUAÇ Y., ARSLAN O.  
23rd International Conference on Computational Statistics (COMPSTAT 2018), 28 - 31 August 2018
- XV. **Model Selection in Joint Location Scale and Skewness Models of Skew-t Distribution Using Information Complexity**  
GÜNEY Y., ARSLAN O., Bozdogan H.  
4th International Researchers, Statisticians and Young Statisticians Congress, İzmir, Turkey, 28 - 30 April 2018
- XVI. **Model Selection in Joint Location Scale and Skewness Models Using Information Complexity**  
GÜNEY Y.  
EYİ 2017XVIII. Uluslararası Ekonometri YöneylemAraştırması ve İstatistik Sempozyumu, Trabzon, Turkey, 5 - 07 October 2017
- XVII. **Maximum Lq-likelihood estimation for autoregressive error term regression model**  
GÜNEY Y., TUAÇ Y., ÖZDEMİR Ş., ARSLAN O.  
31st EMS (The European Meeting of Statisticians), Helsinki, Finland, 24 - 28 July 2017
- XVIII. **Empirical likelihood estimation for linear regression models with AR(p) error terms**  
ÖZDEMİR Ş., GÜNEY Y., TUAÇ Y., ARSLAN O.  
31st EMS (The European Meeting of Statisticians), Helsinki, Finland, 24 - 28 July 2017
- XIX. **Robust variable selection in an autoregressive error term regression model**  
TUAÇ Y., GÜNEY Y., ÖZDEMİR Ş., ARSLAN O.  
31st EMS (The European Meeting of Statisticians), Helsinki, Finland, 24 - 28 July 2017
- XX. **Maximum Lq-Likelihood Estimation for the Marshall-Olkin Extended Burr XII Distribution**  
ÖZDEMİR Ş., TUAÇ Y., GÜNEY Y., ARSLAN O.  
3RD International Researchers, Statisticians and Young Statisticians Congress, Konya, Turkey, 24 - 26 May 2017
- XXI. **Optimal B-robust estimators for the parameters of the MOEBXII distribution**  
GÜNEY Y., ÖZDEMİR Ş., TUAÇ Y., ARSLAN O.  
3RD International Researchers, Statisticians and Young Statisticians Congress, Konya, Turkey, 24 - 26 May 2017
- XXII. **Parameter estimation for skew normal distribution via the maximum Lq-likelihood estimation**  
TUAÇ Y., GÜNEY Y., ÖZDEMİR Ş., ARSLAN O.  
3RD International Researchers, Statisticians and Young Statisticians Congress, Konya, Turkey, 24 - 26 May 2017
- XXIII. **Variable selection in Empirical likelihood based regression with information complexity**  
ÖZDEMİR Ş., GÜNEY Y., ARSLAN O.  
International conference on information complexity and statistical modelling in high dimensions with applications, 18 - 21 May 2016
- XXIV. **VARIABLE SELECTION IN SINGLE INDEX MODELS USING INFORMATION COMPLEXITY ICOMP CRITERION**  
GÜNEY Y., Bozdogan H., ARSLAN O.  
International Conference on InformationComplexity and Statistical Modeling in High Dimensions with Applications (IC-SMHD-2016), 18 - 20 May 2016
- XXV. **Variable selection in single index models using information complexity criterion**  
GÜNEY Y., ARSLAN O.  
International conference on information complexity and statistical modelling in high dimensions with applications,

18 - 21 May 2016

**XXVI. VARIABLE SELECTION IN EMPIRICAL LIKELIHOOD BASED REGRESSION WITH INFORMATION COMPLEXITY ICOMP**

ÖZDEMİR Ş., GÜNEY Y., ARSLAN O.

International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications (IC-SMHD-2016), 18 - 20 May 2016

**XXVII. Model Selection in Linear Regression Models with Skew Normal Distributed Errors Using ICOMP**

GÜNEY Y., ARSLAN O., BOZDOĞAN H.

European Meeting of Statisticians (EMS 2015), Amsterdam, Netherlands, 6 - 10 July 2015

**XXVIII. Variable Selection in Regression Models with AR p Error Terms Based on Skew Distributions**

TUAÇ Y., GÜNEY Y., ARSLAN O.

European Meeting of Statisticians (EMS 2015), Amsterdam, Netherlands, 6 - 10 July 2015

**XXIX. Robust Estimation for the Parameter of the Zipfian Distribution Properties and Applications**

GÜNEY Y., TUAÇ Y., ARSLAN O.

International Conference on Robust Statistics ICORS, Halle/Saale, Germany, 10 - 15 August 2014

**XXX. Marshall Olkin Distribution Parameter Estimation and Applications**

GÜNEY Y., TUAÇ Y., ARSLAN O.

9th International Statistics Day Symposium ISDS' 2014, Antalya, Turkey, 10 - 14 May 2014

## Supported Projects

Arslan O., Güney Y., Gökalp Yavuz F., Tuuç Y., Project Supported by Other Official Institutions, Afetlerin Ekonomik Etkilerinin (Endeks Bazlı) Modellenmesi (AFAD), 2020 - 2022

Arslan O., Güney Y., Tuuç Y., Gökalp Yavuz F., Özdemir Ş., TÜBİTAK Project, COVID 19 Türkiye Verilerinin İstatistiksel Modellemesi ve Olası Risk İndeksinin Geliştirilmesi, 2020 - 2020

Arslan O., Güney Y., Tuuç Y., Gökalp Yavuz F., Özdemir Ş., Project Supported by Higher Education Institutions, Statistical Modeling of Turkey COVID-19 Data, 2020 - 2020

## Activities in Scientific Journals

Universal Journal of Mathematics and Applications, Editor, 2023 - Continues

## Scientific Refereeing

CHINESE ANNALS OF MATHEMATICS, SERIES B, Journal Indexed in SCI-E, December 2023

JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, Journal Indexed in SCI-E, August 2023

PAKISTAN JOURNAL OF STATISTICS, National Scientific Refreed Journal, June 2023

JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, Journal Indexed in SCI-E, January 2023

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, Journal Indexed in ESCI, December 2022

COMPUTATIONAL STATISTICS & DATA ANALYSIS, Journal Indexed in SCI-E, December 2022

Sosyal Siyaset Konferansları Dergisi, National Scientific Refreed Journal, December 2022

COMMUNICATIONS IN STATISTICS -THEORY AND METHODS, Journal Indexed in SCI-E, May 2022

GAZI UNIVERSITY JOURNAL OF SCIENCE, Journal Indexed in ESCI, March 2022

GAZI UNIVERSITY JOURNAL OF SCIENCE, Journal Indexed in ESCI, December 2021

JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, SCI Journal, May 2021

COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, SCI Journal, April 2021

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, SCI Journal, January 2021

JOURNAL OF APPLIED STATISTICS, SCI Journal, March 2020

JOURNAL OF APPLIED STATISTICS, SCI Journal, December 2019

GAZİ UNIVERSITY JOURNAL OF SCIENCE, National Scientific Refreed Journal, December 2018

## **Metrics**

Publication: 50

Citation (WoS): 43

Citation (Scopus): 47

H-Index (WoS): 4

H-Index (Scopus): 4

## **Congress and Symposium Activities**

WhyR? Turkey 2021, Invited Speaker, Ankara, Turkey, 2021

## **Scholarships**

2211/A National PhD Scholarship Program, TUBITAK, 2012 - 2017

2210-National Scholarship Programme for MSc Students, TUBITAK, 2009 - 2011