

## Asst. Prof. YETKİN TUAÇ

### Personal Information

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### International Researcher IDs

ScholarID: pA9ljWQAAAAJ

ORCID: 0000-0001-6590-3233

Publons / Web Of Science ResearcherID: Q-3451-2016

ScopusID: 57191848445

Yoksis Researcher ID: 108288

### Education Information

Undergraduate, Ankara University, Fen Fakültesi, Astronomi ve Uzay Bilimleri Bölümü, Turkey 2018 - Continues

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, İstatistik (YI) (Tezli), Turkey 2011 - 2014

Undergraduate, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, Turkey 2006 - 2011

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Otoregresif hata terimli regresyon modellerinde robust parametre tahmini ve model seçimi, Ankara University, Fen Bilimleri Enstitüsü, İstatistik (Dr), 2020

Postgraduate, Ar(1) hata terimli regresyon modellerinde çarpık dağılımlara dayalı parametre tahmini, Ankara University, Fen Bilimleri Enstitüsü, İstatistik (YI) (Tezli), 2014

### Research Areas

Statistical Analysis and Applications, Natural Sciences

### Academic Titles / Tasks

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

Research Assistant PhD, Ankara University, Fen Fakültesi, İstatistik Bölümü, 2013 - 2022

### Courses

Zaman Serileri Analizi, Undergraduate, 2013 - 2014  
Regresyon Analizi, Undergraduate, 2013 - 2014  
Deney Tasarımı Analizi, Undergraduate, 2013 - 2014

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

- I. **Histologically Overt Stromal Response and the Risk of Progression after Radical Prostatectomy for Prostate Cancer**  
Sayan M., TUAÇ Y., Kucukcolak S., Rowan M. D., Pratt G. K., Aktan C., Tjio E., Akbulut D., Moningi S., Leeman J. E., et al.  
Cancers, vol.16, no.10, 2024 (SCI-Expanded)
- II. **Prognostic Significance of the Cribriform Pattern in Prostate Cancer: Clinical Outcomes and Genomic Alterations**  
Sayan M., TUAÇ Y., Akgul M., Pratt G. K., Rowan M. D., Akbulut D., Kucukcolak S., Tjio E., Moningi S., Leeman J. E., et al.  
CANCERS, vol.16, no.7, 2024 (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. **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)
- V. **OPTIMAL B-ROBUST ESTIMATION FOR THE PARAMETERS OF THE MARSHALL-OLKIN EXTENDED BURR XII DISTRIBUTION WITH AN APPLICATION TO PHARMACOKINETICS**  
GÜNEY Y., ÖZDEMİR Ş., TUAÇ Y., Arslan O. A.  
REVSTAT-STATISTICAL JOURNAL, vol.19, no.3, pp.421-442, 2021 (SCI-Expanded)
- VI. **Optimal b-robust estimation for the parameters of the marshall-olkin extended burr xii distribution with an application to pharmacokinetics**  
GÜNEY Y., Özdemir Ş., TUAÇ Y., ARSLAN O.  
Revstat Statistical Journal, vol.19, no.3, pp.421-442, 2021 (SCI-Expanded)
- VII. **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)
- VIII. **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)
- IX. **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)
- X. **Validating the Turkish version of the Weinstein noise sensitivity scale: effects of age, sex, and education level**  
KESKİN YILDIZ M., KEMALOĞLU Y. K., TUAÇ Y., Mengu G., KARAMERT R., GÖKDOĞAN Ç.  
TURKISH JOURNAL OF MEDICAL SCIENCES, vol.50, no.4, pp.894-901, 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.

## 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. **Investigation for the Robustness of Significance Level When the Normality Assumption in Hypothesis Tests is Violated**  
YALÇINKAYA A., ÇANKAYA M. N., Altındag O., TUAÇ Y.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.30, no.2, pp.247-259, 2017 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Robust estimation in sparse regression models with autoregressive error terms**  
Tuaç Y., Arslan O.  
International Conference on Robust Statistics (ICORS), Ontario, Canada, 5 - 08 July 2022, pp.81
- II. **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
- III. **Logistic Growth Modeling of the Turkish COVID-19 Data.**  
Özdemir Ş., Güney Y., Tuaç Y., Gökalp Yavuz F., Arslan O.  
III. International Conference on Covid-19 Studies., Ankara, Turkey, 25 - 27 December 2020, pp.1
- IV. **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
- V. **Linear and Nonlinear Regression with Autoregressive Errors: Application to Covid-19 Contagion in Turkey**  
Güney Y., Tuaç Y., Özdemir Ş., Arslan O., Gökalp Yavuz F.  
6th International Medicine & Health Sciences Congress., Ankara, Turkey, 25 - 27 December 2020, pp.1
- VI. **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
- VII. **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
- VIII. **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

- IX. Parameter Estimation of The Autoregressive Models with Skew Distributed Innovations Using EM Algorithm.**  
TUAÇ Y., ARSLAN O.  
4th International Researchers, Statisticians and Young Statisticians Congress, 28 - 30 April 2018
- X. Robust variable selection in restricted linear regression model**  
TOKA O., TUAÇ Y., ÇETİN M., ARSLAN O.  
European Meeting of Statisticians, 24 - 28 July 2017
- XI. 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
- XII. 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
- XIII. 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
- XIV. 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
- XV. 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
- XVI. 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
- XVII. Variable selection in restricted linear models**  
TUAÇ Y., ARSLAN O.  
International conference on information complexity and statistical modelling in high dimensions with applications, 18 May - 21 June 2016
- XVIII. Indicators For Disaster Risk and Risk Management for Turkey**  
ARSLAN O., TUAÇ Y.  
World Hummenitarian Summit, 23 - 24 May 2016
- XIX. Variable Selection in Restricted Linear Regression Models**  
TUAÇ Y., ARSLAN O.  
International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications, 18 - 21 May 2016
- XX. 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
- XXI. Robust Estimation for the Parameters of the Disributed Lag Models Based on Heavy Tailed Skew Distributions**  
ÇANKAYA M. N., TUAÇ Y., ARSLAN O.  
International Conference on Robust Statistics, 10 - 15 August 2014
- XXII. 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
- XXIII. 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
- XXIV. Analysis of Regression Models with AR(1) Error Terms Based on Skew Distributions Parameter Estimation**

TUAÇ Y., ARSLAN O.

International Conference on Robust Statistics, 10 - 14 May 2014

- XXV. **Hipotez Testlerinde Normallik Varsayımı Bozulduğunda 1 Tip Hatanın Dayanıklılığının İncelenmesi**  
YALÇINKAYA A., ÇANKAYA M. N., ALTINDAĞ Ö., TUAÇ Y.  
8. Uluslararası İstatistik Kongresi, 27 - 30 October 2013
- XXVI. **Robust .estimators for the distributed lag model based on t and skew t distributions**  
TUAÇ Y., ARSLAN O., ÇANKAYA M. N.  
Uluslararası 8. İstatistik Kongresi, 27 - 30 October 2013
- XXVII. **Gecikmesi Dağıtılmış Modellerde Parametreler için Dayanıklı Tahmin Ediciler**  
ÇANKAYA M. N., ARSLAN O., TUAÇ Y.  
GIS2013 Genç İstatistikçiler Sempozyumu, Turkey, 10 - 11 September 2013
- XXVIII. **Effects of ARCH(1) Innovations on Cointegration Trace Test**  
FİRUZAN E., ÇOBAN B., TUAÇ Y.  
8 th International Symposium of Statistics, 11 - 13 October 2012

## Supported Projects

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

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

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

## Activities in Scientific Journals

CANCERS, Special Issue Editor, 2024 - Continues

## Metrics

Publication: 45

Citation (WoS): 34

Citation (Scopus): 34

H-Index (WoS): 4

H-Index (Scopus): 3

## Scholarships

2219-Yurt Dışı Doktora Sonrası Araştırma Burs Programı, TÜBİTAK, 2023 - Continues

Erasmus Eğitim Hareketliliği, University, 2019 - 2020