

## Assoc. Prof. AYTEN YİĞİTER

### Personal Information

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### Education Information

Doctorate, Hacettepe University, Fen Fakültesi, İstatistik, Turkey 2000 - 2006

### Foreign Languages

English, B2 Upper Intermediate

### Research Areas

Statistics, Statistical Analysis and Applications, Natural Sciences

### Academic Titles / Tasks

Lecturer PhD, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2010 - Continues

### Advising Theses

YİĞİTER A., Poisson regresyon ve bir uygulama, Postgraduate, G.AÇIKYÜREK(Student), 2016

YİĞİTER A., Bilgi içeren durdurma varlığında yinelemeli olay süreci, Doctorate, H.ÜNLÜ(Student), 2013

YİĞİTER A., Tarama istatistikleri ve Türkiye deprem verilerine uygulaması, Postgraduate, R.BURCU(Student), 2012

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

- I. **A mixture model with Poisson and zero-truncated Poisson components to analyze road traffic accidents in Turkey**  
KONŞUK ÜNLÜ H., Young D. S., YİĞİTER A., Hilal Ozcebe L. H.  
Journal of Applied Statistics, vol.49, no.4, pp.1003-1017, 2022 (SCI-Expanded)
- II. **onlineBcp: An R package for online change point detection using a Bayesian approach**  
Xu H., YİĞİTER A., Chen J.  
SOFTWAREX, vol.17, 2022 (SCI-Expanded)
- III. **Modelling claim number using a new mixture model: negative binomial gamma distribution**  
GENÇTÜRK Y., YİĞİTER A.  
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.86, no.10, pp.1829-1839, 2016 (SCI-Expanded)
- IV. **An online copy number variant detection method for short sequencing reads**

YİĞİTER A., CHEN J., An L., Danacioglu N.

JOURNAL OF APPLIED STATISTICS, vol.42, no.7, pp.1556-1571, 2015 (SCI-Expanded)

**V. Change Point Analysis in Earthquake Data**

YİĞİTER A.

EARTHQUAKE RESEARCH AND ANALYSIS - STATISTICAL STUDIES, OBSERVATIONS AND PLANNING, pp.25-40, 2012 (SCI-Expanded)

**VI. A Bayesian approach to inference about a change point model with application to DNA copy number experimental data**

Chen J., YİĞİTER A., Chang K.

JOURNAL OF APPLIED STATISTICS, vol.38, no.9, pp.1899-1913, 2011 (SCI-Expanded)

**VII. Estimation of change point and compound Poisson process parameters for the earthquake data in Turkey**

Aktas S., Konsuk H., Yigiter A.

ENVIRONMETRICS, vol.20, no.4, pp.416-427, 2009 (SCI-Expanded)

## Articles Published in Other Journals

**I. Group acceptance sampling plans based on time truncated life tests for compound Weibull-exponential distribution**

YİĞİTER A., Hamurkaroglu C., Danacioglu N.

INTERNATIONAL JOURNAL OF QUALITY & RELIABILITY MANAGEMENT, vol.40, no.1, pp.304-315, 2023 (ESCI)

**II. A NEW MODEL FOR DATA WITH STRUCTURAL CHANGE AT THRESHOLD: COMPOSITE EXPONENTIAL-LOGNORMAL MODEL**

GENÇTÜRK Y., YİĞİTER A., HAMURKAROĞLU C.

ADVANCES AND APPLICATIONS IN STATISTICS, vol.53, no.4, pp.441-456, 2018 (ESCI)

**III. A Comparison Study of Newton-Raphson and Genetic Algorithms for Change Point Problem in Non-Homogeneous Poisson Process (Bu yayın <https://beallist.net/standalone-journals/> adresindeki listeye göre predatory dergilerden birinde yayınlanmıştır. Çalışmanın bu dergiye gönderildiği tarihte bu dergi predatory dergiler arasında bulunmamaktadır. Bu derginin web adresine de ulaşılabilir. Bu sebeple bu çalışma, puanlamaya dahil edilmemiştir.)**

YİĞİTER A., ÜNLÜ H.

International Journal of Advanced Research in Computer Science and Software Engineering, vol.6, no.3, pp.47-55, 2016 (Peer-Reviewed Journal)

**IV. A Comparison Study of Newton Raphson and Genetic Algorithms for Change Point Problem in Non Homogeneous Poisson Process**

YİĞİTER A., ÜNLÜ H.

International Journal of Advanced Research in Computer Science and Software Engineering, 2016 (Peer-Reviewed Journal)

**V. A New Modelling for Recurrent Event Data Under Informative Censoring**

ÜNLÜ H., YİĞİTER A.

Turkiye Klinikleri Journal of Biostatistics, vol.8, pp.125-132, 2016 (Peer-Reviewed Journal)

**VI. Investigation of the Change Point in Mean of Normal Sequence Having an Outlier**

YİĞİTER A., ÇETİN M.

GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.26, no.4, pp.543-555, 2013 (ESCI)

**VII. A Bayesian Analysis for Identifying DNA Copy Number Variations Using a Compound Poisson Process**

Chen J., YİĞİTER A., Wang Y., Deng H.

EURASIP JOURNAL ON BIOINFORMATICS AND SYSTEMS BIOLOGY, no.1, 2010 (ESCI)

**VIII. TEST FOR A CHANGE POINT IN POISSON PROCESS WITH APPLICATIONS TO THE BRITISH COAL MINING DISASTERS AND THE AIR TRAFFIC FLOW DATA SET**

YİĞİTER A., Inal C.

ADVANCES AND APPLICATIONS IN STATISTICS, vol.14, no.2, pp.145-155, 2010 (ESCI)

## Books & Book Chapters

### I. Olasılık ve Olasılık Dağılımları I

HAMURKAROĞLU C., YİĞİTER A., AKKUŞ Ö., GENÇTÜRK Y.

Nobel yayınevi, 2017

## Refereed Congress / Symposium Publications in Proceedings

### I. The Estimation of Regression Coefficients in Composite Regression Models Using Heuristic Optimization Algorithms

KONŞUK ÜNLÜ H., YİĞİTER A., GENÇTÜRK Y.

2nd International Conference on Data Science and Applications (ICONDATA'19), Balıkesir, Turkey, 3 - 06 October 2019, pp.37

### II. Comparison of the Spliced Regression Models

KONŞUK ÜNLÜ H., YİĞİTER A., GENÇTÜRK Y.

International Conference on Data Science, Machine Learning and Statistics - 2019 (DMS-2019), Van, Turkey, 26 - 29 June 2019, pp.52

### III. Regression Mixture Model with Two Components for Count Data: An Application to Traffic Accidents

KONŞUK ÜNLÜ H., YİĞİTER A., ÖZCEBE H., KÜÇÜK BİÇER B.

11. International Statistics Days Conference (ISDC)- (11. Uluslararası İstatistik Günleri Konferansı), Muğla, Turkey, 3 - 07 October 2018, pp.258

### IV. Bayesian Conditional Auto Regressive Model for Mapping Respiratory Disease Mortality in Turkey

CAN C. E., BAKACAK L., AKTAŞ ALTUNAY S., YİĞİTER A.

İSTKON2017, 6 - 08 December 2017

### V. Discretization of Composite Models

GENÇTÜRK Y., YİĞİTER A.

14th Applied Statistics, Ribno(Bled), Slovenia, 24 - 27 September 2017

### VI. Some Composite Models and Their Application to Motor Insurance Data

YİĞİTER A., GENÇTÜRK Y., HAMURKAROĞLU C.

10. Uluslararası İstatistik Kongresi, Giresun, Turkey, 7 - 09 October 2016

### VII. Modelling Recurrent Event Data Using Nonhomogeneous Poisson Process

ÜNLÜ H., YİĞİTER A.

15. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu, 22 - 25 May 2014

### VIII. Non Homogenous Poisson Process and Change Point Problem

YİĞİTER A., ÜNLÜ H.

16. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu, 7 - 12 May 2015

### IX. Bağımlı durdurma varsayımı altında yinelemeli olayların homojen Poisson süreci ile modellenmesi (Modelling recurrent event data with homogeneous Poisson process under dependent censoring)

KONŞUK H., YİĞİTER A.

8. Uluslararası İstatistik Kongresi, Antalya, Turkey, 27 - 30 October 2013, pp.215-216

## Supported Projects

YİĞİTER A., Project Supported by Higher Education Institutions, Online Değişme Noktası Algoritması ile Kontrol Kart Analiz Tekniklerinin Karşılaştırılması, 2017 - 2017

YİĞİTER A., Project Supported by Higher Education Institutions, Bazı Birleşik Dağılımlar ve Türk Kasko Verisine Uygulanması, 2016 - 2016

YİĞİTER A., Project Supported by Higher Education Institutions, Deney Tasarımları Yöntem ve Uygulamalardaki Son Yenilikler, 2015 - 2016

## **Metrics**

Publication: 25

Citation (WoS): 19

Citation (Scopus): 12

H-Index (WoS): 2

H-Index (Scopus): 2

## **Non Academic Experience**

Hacettepe Üniversitesi