

Assoc. Prof. DUYGU İÇEN

Personal Information

Office Phone: [+90 312 297 7900](tel:+903122977900) Extension: 118

Office Phone: [+90 312 780 7793](tel:+903127807793)

Email: duyguicn@hacettepe.edu.tr

Other Email: duyguicen@gmail.com

Web: <https://avesis.hacettepe.edu.tr/duyguicn>

Address: Hacettepe Üniversitesi İstatistik Bölümü Beytepe / ANKARA

International Researcher IDs

ORCID: 0000-0002-7940-5064

Yoksis Researcher ID: 169793

Education Information

Doctorate, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, Turkey 2010 - 2015

Postgraduate, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, Turkey 2007 - 2010

Undergraduate, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, Turkey 2002 - 2007

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Bulanık regresyon analizinde Monte Carlo yöntemi ve uzman sistemler, Hacettepe Üniversitesi, Fen Fakültesi, İstatistik Bölümü, 2015

Postgraduate, Bulanık doğrusal regresyon analizi, Hacettepe Üniversitesi, Fen Fakültesi, İstatistik Bölümü, 2010

Research Areas

Statistics, Statistical Analysis and Applications, Natural Sciences

Academic Titles / Tasks

Associate Professor, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2018 - Continues

Research Assistant, Hacettepe University, Fen Fakültesi, İstatistik Bölümü, 2007 - 2018

Courses

Veri Madenciliği, Undergraduate, 2017 - 2018

İstatistiksel Veri Madenciliği, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Binary classification with fuzzy logistic regression under class imbalance and complete separation in clinical studies**
Charizanos G., Demirhan H., İÇEN D.
BMC MEDICAL RESEARCH METHODOLOGY, no.1, 2024 (SCI-Expanded)
- II. **An online fuzzy fraud detection framework for credit card transactions**
Charizanos G., Demirhan H., İÇEN D.
EXPERT SYSTEMS WITH APPLICATIONS, vol.252, no.124127, pp.1-15, 2024 (SCI-Expanded)
- III. **A Monte Carlo fuzzy logistic regression framework against imbalance and separation**
Charizanos G., Demirhan H., İÇEN D.
Information Sciences, vol.655, 2024 (SCI-Expanded)
- IV. **Thoughts on women entrepreneurship: an application of market basket analysis with google trends data**
Boz Semerci A., Abbasoğlu Özgören A., İÇEN D.
SOFT COMPUTING, vol.26, no.19, pp.10035-10047, 2022 (SCI-Expanded)
- V. **A new approach for probability calculation of fuzzy events in Bayesian Networks**
İÇEN D., ERSEL D.
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING, vol.108, pp.76-88, 2019 (SCI-Expanded)
- VI. **Design and implementation of the fuzzy expert system in Monte Carlo methods for fuzzy linear regression**
İÇEN D., GÜNAY S.
APPLIED SOFT COMPUTING, vol.77, pp.399-411, 2019 (SCI-Expanded)
- VII. **Triple test with tumor markers CYFRA 21.1, HE4, and ProGRP might contribute to diagnosis and subtyping of lung cancer**
Korkmaz E. T., KÖKSAL D., Aksu F., DİKMEN Z. G., İÇEN D., Maden E., Onder S., Akbiyik F., Emri S.
CLINICAL BIOCHEMISTRY, vol.58, pp.15-19, 2018 (SCI-Expanded)
- VIII. **Identification of some spanish olive cultivars using image processing techniques**
BEYAZ A., ÖZKAYA M. T., İÇEN D.
SCIENTIA HORTICULTURAE, vol.225, pp.286-292, 2017 (SCI-Expanded)
- IX. **Different distance measures for fuzzy linear regression with Monte Carlo methods**
İÇEN D., Cattaneo M. E. G. V.
SOFT COMPUTING, vol.21, no.22, pp.6687-6697, 2017 (SCI-Expanded)
- X. **Error measures for fuzzy linear regression: Monte Carlo simulation approach**
İÇEN D., Demirhan H.
APPLIED SOFT COMPUTING, vol.46, pp.104-114, 2016 (SCI-Expanded)
- XI. **Use of fibrin glue in preventing pseudorecurrence after laparoscopic total extraperitoneal repair of large indirect inguinal hernia**
Surgit O., ÇAVUŞOĞLU N. T., Kilic M. O., ÜNAL Y., KOŞAR P. N., İÇEN D.
ANNALS OF SURGICAL TREATMENT AND RESEARCH, vol.91, no.3, pp.127-132, 2016 (SCI-Expanded)
- XII. **Fuzzy probability calculation with confidence intervals in Bayesian networks**
ERSEL D., İÇEN D.
SOFT COMPUTING, vol.20, no.2, pp.819-829, 2016 (SCI-Expanded)
- XIII. **EVALUATION OF TWENTY-SEVEN PATIENTS WITH TUBERCULOUS PERITONITIS**
Kilic M. O., Saglam C., Caner S. S., Kilic Y., İÇEN D.
ACTA MEDICA MEDITERRANEA, vol.32, no.1, pp.11-16, 2016 (SCI-Expanded)
- XIV. **Can mastalgia be another somatic symptom in fibromyalgia syndrome?**
Sen M., Kilic M. O., Cemeroglu O., İÇEN D.
CLINICS, vol.70, no.11, pp.733-737, 2015 (SCI-Expanded)
- XV. **Hypothesis testing for the mean of inverse Gaussian distribution using alpha-cuts**
İÇEN D., BACANLI S.

SOFT COMPUTING, vol.19, no.1, pp.113-119, 2015 (SCI-Expanded)

XVI. **Fuzzy approach of group sequential test for binomial case**

BACANLI S., İÇEN D., Emri S.

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.43, no.6, pp.1017-1034, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **THE USE OF SENTIMENT AND EMOTION ANALYSIS WITH CORRESPONDENCE ANALYSIS: EXAMINATION OF OPINIONS TOWARDS MOTHERHOOD IN TÜRKİYE**
İçen D., Abbasoğlu Özgören A., Boz Semerci A.
Nicel Bilimler Dergisi, vol.5, no.2, pp.117-134, 2023 (Peer-Reviewed Journal)
- II. **Karar Ağaçları ve Bayes Ağları ile OECD Ülkelerindeki İntiharların Değerlendirilmesi**
DEMİRCİ Ş., İÇEN D.
İstanbul Gelişim Üniversitesi Sosyal Bilimler Dergisi, vol.10, no.1, pp.128-143, 2023 (Peer-Reviewed Journal)
- III. **AN INVESTIGATION OF WOMEN'S ATTITUDES TOWARDS WORK-FAMILY ROLES IN TURKEY AND GERMANY USING DECISION TREES**
Abbasoğlu Özgören A., İçen D., Boz Semerci A.
Anadolu Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, vol.23, no.3, pp.43-80, 2022 (Peer-Reviewed Journal)
- IV. **Application of Random Forest Algorithm for the Prediction of Online Food Delivery Service Delay**
Şahin H., İÇEN D.
Turkish Journal of Forecasting, 2021 (Peer-Reviewed Journal)
- V. **Application of Natural Language Processing with Supervised Machine Learning Techniques to Predict the Overall Drugs Performance**
MARTHIN P., İÇEN D.
AJIT-e: Bilişim Teknolojileri Online Dergisi, vol.11, no.40, pp.8-23, 2020 (Peer-Reviewed Journal)
- VI. **The Clinicopathological Factors Associated with Multicentricity in Papillary Thyroid Cancer**
Kilic M. O., Bilgic C. I., Dener C., İÇEN D.
JOURNAL OF CLINICAL AND ANALYTICAL MEDICINE, vol.7, no.4, pp.479-482, 2016 (ESCI)
- VII. **Türkiye deki İşsizlik Oranının Bulanık Doğrusal Regresyon Analiziyle Tahmini**
İÇEN D., GÜNAY S.
Journal of Statisticians: Statistics and Actuarial Sciences, vol.8, pp.10-26, 2015 (Peer-Reviewed Journal)
- VIII. **Fuzzy Approach for Group Sequential Test**
İÇEN D., BACANLI S., GÜNAY S.
Advances in Fuzzy Systems, pp.1-9, 2014 (Scopus)
- IX. **Fuzzy Approach for Group Sequential Test Advances in Fuzzy Systems**
İÇEN D., BACANLI S.
Advances in fuzzy systems, pp.1-9, 2014 (Scopus)
- X. **Uzman Sistemler ve İstatistik**
İÇEN D., GÜNAY S.
Journal of Statisticians: Statistics and Actuarial Sciences, vol.7, pp.37-45, 2014 (Peer-Reviewed Journal)
- XI. **Sequential Probability Ratio Test of Correlation Coefficient Using Fuzzy Hypothesis Testing**
BACANLI S., İÇEN D.
Open Journal of Statistics, pp.195-199, 2013 (Peer-Reviewed Journal)
- XII. **Sigorta Sektörünün Çok Boyutlu İlişki Analizi Yöntemleri İle İncelenmesi**
TATLIDİL H. H., İÇEN D.
Bankacılar Dergisi, pp.21-36, 2013 (Peer-Reviewed Journal)
- XIII. **Fuzzy pricing of high excess loss layer when modeling the tail with generalized Pareto distribution**
GENÇTÜRK Y., İÇEN D., GÜNAY S., TUNÇ t.
Journal of Statisticians: Statistics and Actuarial Sciences, vol.4, pp.16-30, 2011 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Handling Missing Values in Random Forests: An Application to Demographic Survey Data**
İçen D., Abbasoğlu Özgören A., Boz Semerci A.
6th International Conference on Advances in Statistics (ICAS'20), 16 - 18 October 2020, pp.16-22
- II. **Popular with what? Market basket analysis of Google trend topics related to female employment**
Boz Semerci A., Abbasoğlu Özgören A., İçen D.
2nd BigSurv Conference (BigSurv20), 6 November - 04 December 2020
- III. **Application of data mining methods using demographic survey data: Analyses of attitudes towards gender roles and domestic violence in Turkey**
Abbasoğlu Özgören A., Boz Semerci A., İçen D.
2nd BigSurv Conference (BigSurv20), 6 November - 04 December 2020
- IV. **Assessing Opinions towards Women's Employment and Entrepreneurship with Market Basket Analysis**
BOZ SEMERCİ A., ABBASOĞLU ÖZGÖREN A., İÇEN D.
29th Euroasia Business and Economics Society Conference, Lizbon, Portugal, 10 - 12 October 2019
- V. **Türkiye'de Ebeveynliğe dair Tutumlar ve Hisler: Twitter Verileri Üzerine Analizler**
ABBASOĞLU ÖZGÖREN A., BOZ SEMERCİ A., İÇEN D.
9. Sosyoloji Kongresi, Ankara, Turkey, 19 - 21 September 2019
- VI. **Big Data Concept for Statisticians**
İÇEN D.
International Web Conference Series on Forecasting, Turkey, 15 - 17 October 2018
- VII. **The diagnostic value of serum tumor markers in newly diagnosed lung cancer patients**
KORKMAZ T. E., KÖKSAL D., AKSU F., DİKMEN Z. G., İÇEN D., Maden E., ÖNDER S. Ç., Akbıyık F., EMRİ K. A. S.
27th International Congress of the European Respiratory Society, Milan, Italy, 9 - 13 September 2017
- VIII. **Yeni Tanı Alan Akciğer Kanseri Hastalarda Serum Tümör Belirteçlerinin Tanısal Değeri**
KORKMAZ T. E., KÖKSAL D., AKSU F., DİKMEN Z. G., İÇEN D., Maden E., ÖNDER S. Ç., Akbıyık F., EMRİ K. A. S.
II. Türkiye in vitro Diyagnostik-BİYOBELİRTEÇLER Sempozyumu, Turkey, 10 - 12 May 2017
- IX. **Testing fuzzy hypotheses based on sequential test statistic an application to medical dataset**
İÇEN D., BACANLI S.
Second International Researchers Statisticians and Young Statisticians Congress, 4 - 08 May 2016
- X. **Pankreas Adenokarsinomunda Adamts1 8 9 ve 18 in İmmunohistokimyasal Analizi**
KILIÇ M. Ö., AYNEKİN B., BOZER M., KARA A., HALTAŞ H., İÇEN D., DEMİRCAN K.
8. Cerrahi Araştırma Kongresi, Konya, Turkey, 12 - 14 November 2015
- XI. **Bulanık Bayesci ağlar ve Bir Uygulama**
İÇEN D., ERSEL D.
9. Uluslararası İstatistik Kongresi, Antalya, Turkey, 28 October - 01 November 2015
- XII. **The Comparison of Evening Primrose Oil Fructus Agni Casti and Reassurance in The Treatment of Mastalgia**
ŞEN M., KILIÇ M. Ö., ALDEMİR S. Ö., İÇEN D.
13. Ulusal meme Hastalıkları Kongresi, Antalya, Turkey, 21 - 25 October 2015
- XIII. **Fuzzy Bayesian networks and an application**
İÇEN D., ERSEL D.
9th International Statistics Congress, Antalya, Turkey, 28 October - 01 November 2015
- XIV. **Granulomatous mastitis A diagnostic and therapeutic challenge for physicans**
ŞEN M., KILIÇ M. Ö., İNAN A., DENER N. C., İÇEN D.
13. Ulusal Meme Hastalıkları Kongresi, Antalya, Turkey, 21 - 25 October 2015
- XV. **The relationship between mastalgia and fibromyalgia Can mastalgia be another somatic symptom in fibromyalgia syndrome**
ŞEN M., KILIÇ M. Ö., CEMEROĞLU Ö., İÇEN D.
13. Ulusal Meme Hastalıkları Kongresi, Antalya, Turkey, 21 - 25 October 2015

- XVI. **Use of fuzzy expert systems in fuzzy linear regression analysis**
İÇEN D., GÜNAY S.
9th International Statistics Congress, Antalya, Turkey, 28 October - 01 November 2015
- XVII. **Veri Madenciliği Sınıflandırma Yöntemlerinin Karavan Sigorta Verisine Uygulanması**
MUHSİN ÖZGÜR D., ERSEL D., İÇEN D.
2. Ulusal Sigorta ve Aktüerya Kongresi, Ankara, Turkey, 17 - 18 September 2015
- XVIII. **Türk Sigorta Şirketlerine Ait Bazı Önemli Göstergelere Göre 1991 2012 Yıllarının Veri Madenciliği Yöntemleriyle Kümelenmesi**
İÇEN D.
2. Ulusal Sigorta ve Aktüerya Kongresi, Ankara, Turkey, 17 - 18 September 2015
- XIX. **Fuzzy knowledge representation in Bayesian networks**
İÇEN D., ERSEL D.
12th International Conference Applied Statistics, Bled, Slovenia, 20 - 23 September 2015
- XX. **Araç Sigortasında Risk Faktörlerin Belirlenmesinde Sınıflandırma Yöntemlerinin Kullanılması**
ERSEL D., İÇEN D.
2. Ulusal Sigorta ve Aktüerya Kongresi, Ankara, Turkey, 17 - 18 September 2015
- XXI. **On using different distance measures for fuzzy numbers in fuzzy linear regression models**
İÇEN D., CATTANEO M. E.
11th German Probability and Statistics Days, Ulm, Germany, 4 - 07 March 2014
- XXII. **2010 FIBA Dünya Şampiyonasına Katılan Ülkelerin Veri Zarflama Analizi ile İncelenmesi**
İÇEN D., TATLIDİL H. H.
1. Genç İstatistikçiler Sempozyumu, Ankara, Turkey, 10 - 11 September 2013
- XXIII. **Fuzzy Approach for Inverse Gaussian Distribution**
İÇEN D., BACANLI S.
4th International Conference on Mathematical and Computational Applications, Manisa, Turkey, 11 - 13 June 2013
- XXIV. **Çok Boyutlu İlişki Analizi Yöntemleri ile 1987 2010 Yılları Arası Türk Sigorta Sektörüne Genel Bir Bakış**
İÇEN D., TATLIDİL H. H.
1. Ulusal Sigorta ve Aktüerya Kongresi, Ankara, Turkey, 6 - 07 June 2013
- XXV. **Fuzzy Bayesian Networks with Buckley s Approach**
ERSEL D., İÇEN D.
German-Polish Joint Conference on Probability and Mathematical Statistics, Torun, Poland, 6 - 09 June 2013
- XXVI. **The Regional Assessment of The Total İvesment Credits Given To Small and Medium Sized Enterprises Panel Data Analysis**
İÇEN D., TATLIDİL H. H.
12th International Symposium on Econometrics Operations Research and Statistics, Denizli, Turkey, 26 - 29 May 2011
- XXVII. **Group Sequential Test for Fuzzy Hypothesis Testing**
İÇEN D., BACANLI S., GÜNAY S.
Prague Stochastics, Prag, Czech Republic, 30 August - 03 September 2010
- XXVIII. **Measuring the Citation of Statistic Journals with Structural Equation Modelling Analysis**
DOĞAN G., İÇEN D., GÜNAY S.
International Conference of Applied Statistics, Ribno, Slovenia, 20 - 23 September 2009
- XXIX. **Fuzzy Hypothesis Testing in Linear Regresssion**
İÇEN D., GÜNAY S.
International Conference of Applied Statistics, Ribno, Slovenia, 20 - 23 September 2009
- XXX. **Fuzzy Inference to Generalized Distribution Used in Modelling the Tail of Loss Severity Distiribution**
TUNÇ t., İÇEN D., GENÇTÜRK Y., GÜNAY S.
XIIIth International Congress on Insurance: Mathematics and Economics, İstanbul, Turkey, 27 - 29 May 2009
- XXXI. **An Application of Enhanced Fuzzy Switching Regression Models When Subsets Have Different Regression Models**

İÇEN D., GÜNAY S.

6th Statistical Congress, Antalya, Turkey, 29 April - 03 May 2009

XXXII. Implementation of Principal Component Analysis Factor Analysis Multidimensional Scaling and Clustering Analysis to Variables Accounting for the Fundamental Macro Economic Magnitude

İÇEN D., GÜNAY S.

International Conference On Multivariate Statistical Modeling and High Dimensional Data Mining, Kayseri, Turkey, 19 - 23 June 2008

Supported Projects

ABBASOĞLU ÖZGÖREN A., BOZ SEMERCİ A., İÇEN D., Project Supported by Higher Education Institutions, Türkiye'de ve Dünyada Kadına Atfedilen Roller: Veri Madenciliği Yöntemleri ile Tutum ve Politika Analizleri, 2020 - 2023

İÇEN D., Project Supported by Higher Education Institutions, Bulanık regresyonda hata ölçüleri kullanımının incelenmesi, 2017 - 2017

İÇEN D., Project Supported by Higher Education Institutions, Alfa-kesim ile bulanık hipotez testleri, 2016 - 2017

ERSEL D., İÇEN D., Project Supported by Higher Education Institutions, Bayesci Ağlara Bulanık Yaklaşımlar, 2015 - 2016

Metrics

Publication: 62

Citation (WoS): 73

Citation (Scopus): 58

H-Index (WoS): 5

H-Index (Scopus): 4

Non Academic Experience

Ludwig Maximilians University