

Prof. BÜLENT TÜTMEZ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABG-8630-2020

Yoksis Researcher ID: 10400

Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, Turkey 2002 - 2005

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, Turkey 1995 - 1999

Undergraduate, Cukurova University, Mühendislik Fakültesi, Maden Mühendisliği, Turkey 1991 - 1995

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Reserve Estimation via Fuzzy Set Approach, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2005

Research Areas

Geographic Information Systems, Artificial Intelligence, Computer Learning and Pattern Recognition, Ore Bed Modeling, Mining Methods and Mining System Analysis, Computer Science, Statistical Analysis and Applications

Academic Titles / Tasks

Professor, Inonu University, Mühendislik Fakültesi, Maden Mühendisliği, 2013 - Continues

Academic and Administrative Experience

Inonu University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2014 - Continues

Courses

Maden İşletme Yöntemleri II, Undergraduate, 2019-2020

İstatistik, Undergraduate, 2019-2020
Mühendislikte Çok Değişkenli İstatistiksel Yöntemler, Undergraduate Double Major, 2019-2020
Maden Yataklarının Değerlendirilmesi, Undergraduate, 2018-2019
Maden İşletme Yöntemleri II, Undergraduate, 2018-2019
İstatistik, Undergraduate, 2018-2019
Mühendislikte Çok Değişkenli İstatistiksel Yöntemler, Undergraduate Double Major, 2018-2019
Risk Değerlendirmesi ve Yönetimi, Undergraduate Double Major, 2018-2019
Yer bilimlerinde Bilgisayar Destekli Veri Analizi, Undergraduate Double Major, 2018-2019
İş ve Maden Hukuku, Undergraduate, 2018-2019
Maden Mühendisliğinde Araştırma Yöntemleri, Undergraduate Double Major, 2017-2018
İş ve Maden Hukuku, Undergraduate, 2017-2018
Maden İşletme Yöntemleri II, Undergraduate, 2017-2018
İş Güvenliği ve Mühendislik Etiği, Undergraduate, 2017-2018
Maden Yataklarının Değerlendirilmesi, Undergraduate, 2017-2018
Yer bilimlerinde Bilgisayar Destekli Veri Analizi, Undergraduate Double Major, 2017-2018
İstatistik, Undergraduate, 2017-2018
İstatistik - Gıda Mühendisliği, Undergraduate, 2017-2018
Maden Mühendisliğinde Araştırma Yöntemleri, Undergraduate Double Major, 2017-2018
Mühendislikte Çok Değişkenli İstatistiksel Yöntemler, Undergraduate Double Major, 2017-2018
Maden Mühendisliğinde Araştırma Yöntemleri, Undergraduate Double Major, 2016-2017
İş ve Maden Hukuku, Undergraduate, 2016-2017
Yer bilimlerinde Bilgisayar Destekli Veri Analizi, Undergraduate Double Major, 2016-2017
Maden Yataklarının Değerlendirilmesi, Undergraduate, 2016-2017
İstatistik - Gıda Mühendisliği, Undergraduate, 2016-2017
İstatistik, Undergraduate, 2016-2017
Mühendislikte Çok Değişkenli İstatistiksel Yöntemler, Undergraduate Double Major, 2016-2017
Maden İşletme Yöntemleri II, Undergraduate, 2016-2017
Maden Yataklarının Değerlendirilmesi, Undergraduate, 2016-2017
Yer bilimlerinde Bilgisayar Destekli Veri Analizi, Undergraduate Double Major, 2015-2016
Mühendislikte Çok Değişkenli İstatistiksel Yöntemler, Undergraduate Double Major, 2015-2016
İstatistik - Gıda Mühendisliği, Undergraduate, 2015-2016
Proje Hazırlama ve Değerlendirme, Undergraduate, 2015-2016
İstatistik, Undergraduate, 2015-2016
Maden Yataklarının Değerlendirilmesi, Undergraduate, 2015-2016
Maden İşletme Yöntemleri II, Undergraduate, 2015-2016
Maden Yataklarının Değerlendirilmesi, Undergraduate, 2014-2015
İstatistik - Gıda Mühendisliği, Undergraduate, 2014-2015
İstatistik, Undergraduate, 2014-2015
Yer bilimlerinde Bilgisayar Destekli Veri Analizi, Undergraduate Double Major, 2014-2015
Yer bilimlerinde Bilgi Sistemleri, Undergraduate, 2014-2015
Mühendislikte Çok Değişkenli İstatistiksel Yöntemler, Undergraduate Double Major, 2014-2015
Maden İşletme Yöntemleri II, Undergraduate, 2014-2015

Advising Theses

Tütmez B., Yer bilimlerinde karara yönelik haritalama için jeoistatistiksel öğrenme, Postgraduate, İ.DUMAN(Student), 2020
Tütmez B., Linyit kalite değişkenlerinin coğrafi ağırlıklandırma ile analizi, Postgraduate, C.YAYLAGÜL(Student), 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Statistical learning algorithm for concurrency of tensile strength tests**
TÜTMEZ B.
ENGINEERING WITH COMPUTERS, vol.37, no.3, pp.1781-1789, 2021 (SCI-Expanded)
- II. **A topological index-based new smoother for spatial interpolation**
Duman I., TÜTMEZ B.
EARTH SCIENCE INFORMATICS, vol.13, no.2, pp.555-564, 2020 (SCI-Expanded)
- III. **Quantifying uncertainty in railway noise measurement**
TÜTMEZ B., Baranovskii A.
MEASUREMENT, vol.137, pp.1-6, 2019 (SCI-Expanded)
- IV. **Lithological classification of cement quarry using discriminant algorithms**
TÜTMEZ B.
JOURNAL OF CENTRAL SOUTH UNIVERSITY, vol.26, no.3, pp.719-727, 2019 (SCI-Expanded)
- V. **Bauxite quality classification by shrinkage methods**
TÜTMEZ B.
JOURNAL OF GEOCHEMICAL EXPLORATION, vol.191, pp.22-27, 2018 (SCI-Expanded)
- VI. **Mapping forest fires by nonparametric clustering analysis**
TÜTMEZ B., Ozdogan M. G., Boran A.
JOURNAL OF FORESTRY RESEARCH, vol.29, no.1, pp.177-185, 2018 (SCI-Expanded)
- VII. **Comparison of measurement uncertainty calculation methods on example of indirect tensile strength measurement**
TÜTMEZ B.
GEOMECHANICS AND ENGINEERING, vol.12, no.6, pp.871-882, 2017 (SCI-Expanded)
- VIII. **Uncertainty-Based Analysis for Agreement of Tensile-Strength Measurement Procedures**
Tutmez B., Unver B.
GEOTECHNICAL TESTING JOURNAL, vol.40, no.3, 2017 (SCI-Expanded)
- IX. **Measurement uncertainty analysis for compressive loading-based ultrasonic wave propagation**
TÜTMEZ B.
NONDESTRUCTIVE TESTING AND EVALUATION, vol.32, no.3, pp.269-285, 2017 (SCI-Expanded)
- X. **A data-driven study for evaluating fineness of cement by various predictors**
Tutmez B.
INTERNATIONAL JOURNAL OF MACHINE LEARNING AND CYBERNETICS, vol.6, no.3, pp.501-510, 2015 (SCI-Expanded)
- XI. **Use of partial least squares analysis in concrete technology**
Tutmez B.
COMPUTERS AND CONCRETE, vol.13, no.2, pp.173-185, 2014 (SCI-Expanded)
- XII. **Analyzing non-stationarity in cement stone pit by median polish interpolation: a case study**
Tutmez B.
JOURNAL OF APPLIED STATISTICS, vol.41, no.2, pp.454-466, 2014 (SCI-Expanded)
- XIII. **Regression Kriging Analysis for Longitudinal Dispersion Coefficient**
TÜTMEZ B., Yuceer M.
WATER RESOURCES MANAGEMENT, vol.27, no.9, pp.3307-3318, 2013 (SCI-Expanded)
- XIV. **Use of uncertain numbers for appraising tensile strength of concrete**
TÜTMEZ B., Cengiz A. K., EREN SARICI D.
STRUCTURAL ENGINEERING AND MECHANICS, vol.46, no.4, pp.447-458, 2013 (SCI-Expanded)
- XV. **Mapping water chemical variables with spatially correlated errors**
TÜTMEZ B., DAĞ A.
ENVIRONMENTAL AND ECOLOGICAL STATISTICS, vol.20, no.1, pp.19-35, 2013 (SCI-Expanded)
- XVI. **Regression-based algorithms for exploring the relationships in a cement raw material quarry**
TÜTMEZ B., DAĞ A.
COMPUTERS AND CONCRETE, vol.10, no.5, pp.457-467, 2012 (SCI-Expanded)

- XVII. **Local spatial regression models: a comparative analysis on soil contamination**
TÜTMEZ B., Kaymak U., Tercan A. E.
STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.26, no.7, pp.1013-1023, 2012 (SCI-Expanded)
- XVIII. **Evaluating geo-environmental variables using a clustering based areal model**
TÜTMEZ B., Kaymak U., Tercan A. E., Lloyd C. D.
COMPUTERS & GEOSCIENCES, vol.43, pp.34-41, 2012 (SCI-Expanded)
- XIX. **Spatial dependence-based fuzzy regression clustering**
Tutmez B.
APPLIED SOFT COMPUTING, vol.12, no.1, pp.1-13, 2012 (SCI-Expanded)
- XX. **Comparing two data driven interpolation methods for modeling nitrate distribution in aquifer**
TÜTMEZ B., HATİPOĞLU BAĞCI Z.
ECOLOGICAL INFORMATICS, vol.5, no.4, pp.311-315, 2010 (SCI-Expanded)
- XXI. **Assessment of porosity using spatial correlation-based radial basis function and neuro-fuzzy inference system**
Tutmez B.
NEURAL COMPUTING & APPLICATIONS, vol.19, no.3, pp.499-505, 2010 (SCI-Expanded)
- XXII. **Measuring Dependence between Calorific Values of Lignite and Spatial Positions by Rank Correlation Method: A Case Study**
Tutmez B., DAĞ A., Cengiz A. K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.32, no.1, pp.45-53, 2010 (SCI-Expanded)
- XXIII. **Use of hybrid intelligent computing in mineral resources evaluation**
Tutmez B.
APPLIED SOFT COMPUTING, vol.9, no.3, pp.1023-1028, 2009 (SCI-Expanded)
- XXIV. **Evaluation of Mn concentration provided by soil in citrus-growing regions**
Tutmez B., DAĞ A., Erdem H., Torun B.
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.67, pp.27-34, 2009 (SCI-Expanded)
- XXV. **Clustering-based identification for the prediction of splitting tensile strength of concrete**
Tutmez B.
COMPUTERS AND CONCRETE, vol.6, no.2, pp.155-165, 2009 (SCI-Expanded)
- XXVI. **Assessing uncertainty of nitrate variability in groundwater**
Tutmez B.
ECOLOGICAL INFORMATICS, vol.4, no.1, pp.42-47, 2009 (SCI-Expanded)
- XXVII. **A linguistic model for evaluating cement strength**
Tutmez B., DAĞ A.
MATERIALS AND STRUCTURES, vol.42, no.1, pp.103-111, 2009 (SCI-Expanded)
- XXVIII. **Fuzzy optimization of slab production from mechanical stone properties**
TÜTMEZ B., Kaymak U.
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.37, no.1, pp.71-76, 2008 (SCI-Expanded)
- XXIX. **An algorithm for quantifying regionalized ore grades**
Tutmez B., Tercan A. E., Kaymak U.
JOURNAL OF THE SOUTH AFRICAN INSTITUTE OF MINING AND METALLURGY, vol.108, no.2, pp.83-90, 2008 (SCI-Expanded)
- XXX. **Multifactorial fuzzy approach to the sawability classification of building stones**
Tutmez B., Kahraman S., Gunaydin O.
CONSTRUCTION AND BUILDING MATERIALS, vol.21, no.8, pp.1672-1679, 2007 (SCI-Expanded)
- XXXI. **Spatial estimation model of porosity**
Tutmez B., Hatipoglu Z.
COMPUTERS & GEOSCIENCES, vol.33, no.4, pp.465-475, 2007 (SCI-Expanded)
- XXXII. **Appraising lignite quality parameters by linguistic fuzzy identification**

- Tutmez B.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.29, no.4, pp.389-399, 2007 (SCI-Expanded)
- XXXIII. **An uncertainty oriented fuzzy methodology for grade estimation**
Tutmez B.
COMPUTERS & GEOSCIENCES, vol.33, no.2, pp.280-288, 2007 (SCI-Expanded)
- XXXIV. **Use of fuzzy logic in lignite inventory estimation**
Tutmez B., DAĞ A.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, vol.2, no.1, pp.93-103, 2007 (SCI-Expanded)
- XXXV. **Fuzzy modeling for reserve estimation based on spatial variability**
Tutmez B., Tercan A. E., Kaymak U.
MATHEMATICAL GEOLOGY, vol.39, no.1, pp.87-111, 2007 (SCI-Expanded)
- XXXVI. **Spatial estimation of some mechanical properties of rocks by fuzzy modelling**
Tutmez B., Tercan A. E.
COMPUTERS AND GEOTECHNICS, vol.34, no.1, pp.10-18, 2007 (SCI-Expanded)
- XXXVII. **Modelling electrical conductivity of groundwater using an adaptive neuro-fuzzy inference system**
Tutmez B., Hatipoglu Z., Kaymak U.
COMPUTERS & GEOSCIENCES, vol.32, no.4, pp.421-433, 2006 (SCI-Expanded)
- XXXVIII. **Fuzzy and multiple regression modelling for evaluation of intact rock strength based on point load, Schmidt hammer and sonic velocity**
Karakus M., Tutmez B.
ROCK MECHANICS AND ROCK ENGINEERING, vol.39, no.1, pp.45-57, 2006 (SCI-Expanded)
- XXXIX. **Trend analysis for the projection of energy-related carbon dioxide emissions**
Tutmez B.
ENERGY EXPLORATION & EXPLOITATION, vol.24, pp.139-149, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Learning distance effect on lignite quality variables at global and local scales**
Yaylagul C., TÜTMEZ B.
INTERNATIONAL JOURNAL OF COAL SCIENCE & TECHNOLOGY, vol.8, no.5, pp.856-868, 2021 (ESCI)
- II. **Controlling systematic errors in rock testing by measurement uncertainty analysis**
TÜTMEZ B.
Journal of Engineering Management and Competitiveness, 2018 (Peer-Reviewed Journal)
- III. **ASSESSMENT OF ACCIDENTS INVOLVING FATALITIES AT COLLIERIES USING COUNT REGRESSION**
TÜTMEZ B., OZDOĞAN M. G.
Safety Engineering, vol.7, no.1, pp.1-8, 2017 (Peer-Reviewed Journal)
- IV. **An overview of Turkish lignite qualities by logistic analysis**
TÜTMEZ B., Hozatlı B., CENGİZ A. B.
Journal of Coal Science and Engineering, vol.19, no.2, pp.113-118, 2013 (Scopus)
- V. **Use of fuzzy modeling approach in grade estimation Bulanik modelleme yaklaşımının tenör kestiriminde kullanılması**
TÜTMEZ B., TERCAN A. E.
Madencilik, vol.45, no.2, pp.39-47, 2006 (Scopus)

Books & Book Chapters

- I. **Measure of Uncertainty in Regional Grade Variability**
TÜTMEZ B., Kaymak U.

Refereed Congress / Symposium Publications in Proceedings

- I. **Evaluating point load resilience of rocks based on weighted averaging**
Yeşim E., TÜTMEZ B.
IDRC2019, Eskişehir, 26 - 28 June 2019
- II. **Evaluating soil pollution arising from mine accident using GA model**
TÜTMEZ B., Yaylagul C.
3. UNIDOKAP Sempozyumu, Tokat, 21 - 23 June 2019
- III. **Mapping particle pollution distrib. by geographically weighted analysis**
Yaylagul C., TÜTMEZ B.
3. UNIDOKAP Sempozyumu, Tokat, 21 - 23 June 2019
- IV. **Probabilistic Risk Assessment for Firedamp Explosion**
TÜTMEZ B.
2. Mersin Sempozyumu, Mersin, 23 - 25 May 2019
- V. **Multivariate Statistical Control of Air Quality**
TÜTMEZ B.
2. Mersin Sempozyumu, Mersin, 23 - 25 May 2019
- VI. **Handling work force participation in Serbia by new perspective**
TÜTMEZ B., Terek E., Nikolic M., Jankovic B.
EMC2019, Zrenjanin, Serbia, 21 - 22 June 2019
- VII. **Estimating Compressive Strength of Rock Using Geographically Weighted Regression**
Yaylagul C., TÜTMEZ B.
ITESDES 2018, 27 - 29 June 2018
- VIII. **Use of multivariate control charts in ecological management**
TÜTMEZ B.
EMC2018, 22 - 23 June 2018
- IX. **Appraising Generalized Additive Models (GAMs) in GIS Framework**
TÜTMEZ B.
TMMOB-UCTEA International Geographical Information Systems Congress 2017, 15 - 18 November 2017
- X. **DETECTION OF MAIN EFFECTS ON BURNED AREAS ARISING FROM FOREST FIRES**
TÜTMEZ B.
ISME 2017 - INTERNATIONAL SYMPOSIUM ON MINING AND ENVIRONMENT, 27 - 29 September 2017
- XI. **Residual-based evaluation for spatially-varying processes**
TÜTMEZ B.
25th International Mining Congress of Turkey: New Trends in Mining, IMCET 2017, Antalya, Turkey, 11 - 14 April 2017, pp.236-241
- XII. **Reliability Assessment for Concrete Strength Measurements**
TÜTMEZ B.
IMSEC2016-1st International Mediterranean Science and Engineering Congress, 26 - 28 October 2016
- XIII. **Forest Fire Classification via Nearest Neighbour Algorithm**
TÜTMEZ B., DAĞ A., Ozdogan M. G.
IMSEC2016- 1st International Mediterranean Science and Engineering Congress, 26 - 28 October 2016
- XIV. **Measurement uncertainty evaluation for railroad noise measurement**
TÜTMEZ B.
ISERSE2016- 3rd Int. Symposium on Railway Systems Engineering, 13 - 15 October 2016
- XV. **Clustering based assessment for primary energy consumption allied to carbon dioxide emission and economic growth**

TÜTMEZ B., Hashas B., Hozatli B.

SBE16-Smart Metropolises, 13 - 15 October 2016

- XVI. **Uzaklığa Bağlı İlişkiyi Kullanan Regresyona Dayalı Bir Algoritmayla Mineral Kaynaklarının Değerlendirilmesi**
Çoban S., TÜTMEZ B.
Türkiye 24. Uluslararası Madencilik Kongresi ve Sergisi, 14 - 17 April 2015, pp.222-228
- XVII. **Regional Spatial Analysis Combining Fuzzy Clustering and Non-parametric Correlation**
TÜTMEZ B., Kaymak U.
6th International Conference on Soft Methods in Probability and Statistics, Konstanz, Germany, 4 - 06 October 2012, vol.190, pp.219-221
- XVIII. **Assessing deformability of siltstone under compressive loading by ultrasonic wave propagation**
Karakus M., TÜTMEZ B.
35th International Symposium of Application of Computers and Operations Research in the Minerals Industry, APCOM, Wollongong, Australia, 24 - 30 September 2011, pp.625-633
- XIX. **Local models for the analysis of spatially varying relationships lignite deposit**
TÜTMEZ B., TERCAN A. E., Kaymak U., LLOYD C.
IFSA/EUSFLAT 2009 World Congress, 20 - 24 July 2009, vol.1
- XX. **Local models for the analysis of spatially varying relationships in a lignite deposit**
TÜTMEZ B., Tercan A. E., Kaymak U., Lloyd C. D.
Joint World Congress of International-Fuzzy-Systems-Association (IFSA)/European Conference of European-Society-for-Fuzzy-Logic-and-Technology (EUSFLAT), Lisbon, Portugal, 20 - 24 July 2009, pp.351-356
- XXI. **Ultrasonic evaluation of igneous and metamorphic rocks under compressive loading**
Karakus M., TÜTMEZ B., KALECİ D.
21st International Mining Congress and Exhibition of Turkey, IMCET 2009, Antalya, Turkey, 6 - 08 May 2009, pp.155-163
- XXII. **Lignite thickness estimation via adaptive fuzzy-neural network**
Tuetmez B., DAĞ A., Tercan A. E., Kaymak U.
20th International Mining Congress and Exhibition of Turkey (IMCET 2007), Ankara, Turkey, 6 - 08 June 2007, pp.151-153
- XXIII. **Measure of uncertainty in regional grade variability**
Tutmez B., Kaymak U.
IFSA 2007 World Congress, Cancun, Mexico, 18 - 21 June 2007, vol.41, pp.511-512
- XXIV. **Estimation of Trona grade by fuzzy modelling**
Tutmez B., Tercan A. E.
ICSC Congress on Computational Intelligence Methods and Applications, İstanbul, Turkey, 15 - 17 December 2005, pp.11-14

Metrics

Publication: 70

Citation (WoS): 321

Citation (Scopus): 389

H-Index (WoS): 8

H-Index (Scopus): 9

Non Academic Experience

Tekfen/Azfen İnşaat Tesisat AŞ