

## **Prof. EBRU SEZER**

### **Personal Information**

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### **International Researcher IDs**

ORCID: 0000-0002-9287-2679  
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### **Education Information**

Doctorate, Hacettepe University, Fen Bilimleri Ens, Bilgisayar Mühendisliği, Turkey 2000 - 2006

### **Foreign Languages**

English, B2 Upper Intermediate

### **Research Areas**

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Fuzzy Sets and Systems, Engineering and Technology

### **Advising Theses**

GÖKÇEÖĞLU C., SEZER E., Granitik kayaların tek eksenli sıkışma dayanımı üzerinde mineralojik ve petrografik özelliklerin etkisinin incelenmesi, Doctorate, N.GÜLTEKİN(Student), 2011

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

- I. **TR-BI-RADS: a novel dataset for BI-RADS based mammography classification**  
Ülgü M. M., ZALLUHOĞLU C., Birinci S., Yarbay Y., SEZER E.  
Neural Computing and Applications, vol.36, no.7, pp.3699-3709, 2024 (SCI-Expanded)
- II. **Enhanced sentence representation for extractive text summarization: Investigating the syntactic and semantic features and their contribution to sentence scoring**  
MUTLU BİLGE B., SEZER E.  
Expert Systems with Applications, vol.227, 2023 (SCI-Expanded)
- III. **Binary background model with geometric mean for author-independent authorship verification**  
Canbay P., SEZER E., Sever H.  
JOURNAL OF INFORMATION SCIENCE, vol.49, no.2, pp.448-464, 2023 (SCI-Expanded)
- IV. **Elevating healthcare through artificial intelligence: analyzing the abdominal emergencies data set (TR\_ABDOMEN\_RAD\_EMERGENCY) at TEKNOFEST-2022**  
Koç U., SEZER E., Özkaya Y. A., Yarbay Y., Beşler M. S., Taydaş O., YALÇIN A., Evrimler Ş., Kızılıoğlu H. A., Kesimal U., et

- al.  
European Radiology, 2023 (SCI-Expanded)
- V. An Auto-Approval Approach for Laboratory Test Assessment  
MUTLU BİLGE B., Kazezoglu C., Soylu S., Uzunal E., Akyurek A. O., SEZER E.  
IEEE ACCESS, vol.9, pp.138323-138344, 2021 (SCI-Expanded)
- VI. Candidate sentence selection for extractive text summarization  
MUTLU B., SEZER E., AKCAYOL M. A.  
INFORMATION PROCESSING & MANAGEMENT, vol.57, no.6, 2020 (SCI-Expanded)
- VII. Sentiment aware word embeddings using refinement and senti-contextualized learning approach  
Naderalvojoud B., SEZER E.  
NEUROCOMPUTING, vol.405, pp.149-160, 2020 (SCI-Expanded)
- VIII. Term evaluation metrics in imbalanced text categorization  
Naderalvojoud B., SEZER E.  
NATURAL LANGUAGE ENGINEERING, vol.26, no.1, pp.31-47, 2020 (SCI-Expanded)
- IX. On the use of hierarchical fuzzy inference systems (HFIS) in expert-based landslide susceptibility mapping: the central part of the Rif Mountains (Morocco)  
Ozer B. C., Mutlu B., NEFESLİOĞLU H. A., SEZER E., Rouai M., Dekayir A., GÖKÇEÖĞLU C.  
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, vol.79, no.1, pp.551-568, 2020 (SCI-Expanded)
- X. An Experimental Research on the Use of Recurrent Neural Networks in Landslide Susceptibility Mapping  
MUTLU B., NEFESLİOĞLU H. A., SEZER E., AKCAYOL M. A., GÖKÇEÖĞLU C.  
ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION, vol.8, no.12, 2019 (SCI-Expanded)
- XI. Multi-document extractive text summarization: A comparative assessment on features  
MUTLU B., SEZER E., AKCAYOL M. A.  
KNOWLEDGE-BASED SYSTEMS, vol.183, 2019 (SCI-Expanded)
- XII. A time-based global path planning strategy for crowd navigation  
ÖZCAN C. Y., SEZER E., HACİÖMEROĞLU M.  
COMPUTER ANIMATION AND VIRTUAL WORLDS, vol.30, no.2, 2019 (SCI-Expanded)
- XIII. Combining GPU-generated linear trajectory segments to create collision-free paths for real-time ambient crowds  
BARUT Ö., HACİÖMEROĞLU M., SEZER E.  
GRAPHICAL MODELS, vol.99, pp.31-45, 2018 (SCI-Expanded)
- XIV. Perceptual evaluation of maneuvering motion illusion for virtual pedestrians  
BARUT Ö., HACİÖMEROĞLU M., SEZER E.  
VISUAL COMPUTER, vol.34, pp.1119-1128, 2018 (SCI-Expanded)
- XV. A defuzzification-free hierarchical fuzzy system (DF-HFS): Rock mass rating prediction  
Mutlu B., SEZER E., Nefeslioglu H. A.  
FUZZY SETS AND SYSTEMS, vol.307, pp.50-66, 2017 (SCI-Expanded)
- XVI. An expert-based landslide susceptibility mapping (LSM) module developed for Netcad Architect Software  
SEZER E., Nefeslioglu H. A., Osna T.  
COMPUTERS & GEOSCIENCES, vol.98, pp.26-37, 2017 (SCI-Expanded)
- XVII. Iterative software fault prediction with a hybrid approach  
Erturk E., SEZER E.  
APPLIED SOFT COMPUTING, vol.49, pp.1020-1033, 2016 (SCI-Expanded)
- XVIII. A comparison of some soft computing methods for software fault prediction  
ERTURK E., Sezer E. A.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.42, no.4, pp.1872-1879, 2015 (SCI-Expanded)
- XIX. An assessment on producing synthetic samples by fuzzy C-means for limited number of data in prediction models  
SEZER E., NEFESLİOĞLU H. A., GÖKÇEÖĞLU C.

- APPLIED SOFT COMPUTING, vol.24, pp.126-134, 2014 (SCI-Expanded)
- XX. **GeoFIS: An integrated tool for the assessment of landslide susceptibility**  
Osna T., SEZER E., AKGÜN A.  
COMPUTERS & GEOSCIENCES, vol.66, pp.20-30, 2014 (SCI-Expanded)
- XXI. **A modified analytical hierarchy process (M-AHP) approach for decision support systems in natural hazard assessments**  
Nefeslioglu H. A., SEZER E., GÖKÇEÖĞLU C., AYAŞ Z.  
COMPUTERS & GEOSCIENCES, vol.59, pp.1-8, 2013 (SCI-Expanded)
- XXII. **Prediction of uniaxial compressive strength of granitic rocks by various nonlinear tools and comparison of their performances**  
Yesiloglu-Gultekin N., GÖKÇEÖĞLU C., SEZER E.  
INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.62, pp.113-122, 2013 (SCI-Expanded)
- XXIII. **A computer program (TSecSoft) to determine mineral percentages using photographs obtained from thin sections**  
YESILOGLU-GULTEKIN N., KEÇELİ A. S., SEZER E., CAN A. B., GÖKÇEÖĞLU C., BAYHAN H.  
COMPUTERS & GEOSCIENCES, vol.46, pp.310-316, 2012 (SCI-Expanded)
- XXIV. **Daily streamflow prediction by ANFIS modeling: Application to Lower Zamanti Karst Basin, Turkey**  
ÖZYURT N. N., SEZER E.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.23, no.6, pp.305-311, 2012 (SCI-Expanded)
- XXV. **An easy-to-use MATLAB program (MamLand) for the assessment of landslide susceptibility using a Mamdani fuzzy algorithm**  
Akgun A., SEZER E., Nefeslioglu H. A., GÖKÇEÖĞLU C., Pradhan B.  
COMPUTERS & GEOSCIENCES, vol.38, no.1, pp.23-34, 2012 (SCI-Expanded)
- XXVI. **Manifestation of an adaptive neuro-fuzzy model on landslide susceptibility mapping: Klang valley, Malaysia**  
SEZER E., Pradhan B., GÖKÇEÖĞLU C.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.7, pp.8208-8219, 2011 (SCI-Expanded)
- XXVII. **Modeling of the uniaxial compressive strength of some clay-bearing rocks using neural network**  
ÇEVİK A., SEZER E., ÇABALAR A. F., GÖKÇEÖĞLU C.  
APPLIED SOFT COMPUTING, vol.11, no.2, pp.2587-2594, 2011 (SCI-Expanded)
- XXVIII. **Landslide Susceptibility Mapping by Neuro-Fuzzy Approach in a Landslide-Prone Area (Cameron Highlands, Malaysia)**  
Pradhan B., SEZER E., GÖKÇEÖĞLU C., Buchroithner M. F.  
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.48, no.12, pp.4164-4177, 2010 (SCI-Expanded)
- XXIX. **An assessment on the use of infrascanner for the diagnosis of the brain hemotoma by using support vector machine**  
Coskun F., SEZER E., Karamercan M. A., Akinci E., Vural K.  
SCIENTIFIC RESEARCH AND ESSAYS, vol.5, no.14, pp.1911-1915, 2010 (SCI-Expanded)
- XXX. **A computer program for fractal dimension (FRACEK) with application on type of mass movement characterization**  
Sezer E.  
COMPUTERS & GEOSCIENCES, vol.36, no.3, pp.391-396, 2010 (SCI-Expanded)
- XXXI. **Assessment of Landslide Susceptibility by Decision Trees in the Metropolitan Area of Istanbul, Turkey**  
Nefeslioglu H. A., SEZER E., GÖKÇEÖĞLU C., BOZKIR A. S., Duman T. Y.  
MATHEMATICAL PROBLEMS IN ENGINEERING, 2010 (SCI-Expanded)
- XXXII. **A statistical assessment on international landslide literature (1945-2008)**  
GÖKÇEÖĞLU C., SEZER E.  
LANDSLIDES, vol.6, no.4, pp.345-351, 2009 (SCI-Expanded)
- XXXIII. **International earth science literature from Turkey - 1970-2005: Trends and possible causes**

- GÖKÇEÖĞLU C., Okay A., SEZER E.  
SCIENTOMETRICS, vol.74, no.3, pp.409-423, 2008 (SCI-Expanded)
- XXXIV. Semantic information retrieval on the web  
Sezer E., Yazici A., Yarimagan U.  
ADVANCES IN INFORMATION SYSTEMS, PROCEEDINGS, vol.4243, pp.158-167, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. Artificial Intelligence in Healthcare Competition (TEKNOFEST-2021): Stroke Data Set  
Koç U., SEZER E., Özkaya Y. A., Yarbay Y., Taydaş O., AYYILDIZ V. A., Kızılıoğlu H. A., Kesimal U., Çankaya İ., Beşler M. S., et al.  
Eurasian Journal of Medicine, vol.54, no.3, pp.248-258, 2022 (ESCI)
- II. Dijital Çine-Tepecik Projesi Kapsamında Seramik Buluntuları Üzerindeki Uygulamalar ve Değerlendirme  
SEZER E., ZALLUHOĞLU C., KIYAK T. K.  
Arkeoloji ve Sanat, no.168, pp.27-38, 2021 (Peer-Reviewed Journal)
- III. Dijital Çine-Tepecik Projesi Kapsamında Seramik Buluntuları Üzerindeki Uygulamalar ve Değerlendirme  
Sezer E., Zalluhoğlu C., Kiyak T. K.  
Arkeoloji ve Sanat, no.168, 2021 (Peer-Reviewed Journal)
- IV. A new web based data mining exploration and reporting tool for decision makers  
BOZKIR A. S., SEZER E.  
Artificial Intelligence Research, vol.2, pp.70-89, 2013 (Peer-Reviewed Journal)
- V. An Ontology Based Infrastructure To Support CMMI-Based Software Process Assessment  
Gazel S., SEZER E., KOLUKISA TARHAN A.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.25, no.1, pp.155-164, 2012 (ESCI)

## Books & Book Chapters

- I. Identification of User Patterns in Social Networks by Data Mining Techniques: Facebook Case  
BOZKIR A. S., MAZMAN S. G., SEZER E.  
in: Technological Convergence and Social Networks in Information Management, Kurbanoğlu Serap, Al Umut, Editor, Springer Berlin Heidelberg, Berlin, pp.145-153, 2010

## Refereed Congress / Symposium Publications in Proceedings

- I. A New Approach for Human Body Orientation Detection Using Camera Footage  
Kartal A., Shahbazi N., SEZER E., GÜZEL M. S.  
8th International Conference on Computer Science and Engineering, UBMK 2023, Burdur, Turkey, 13 - 15 September 2023, pp.46-50
- II. Wildfire Classification Using Infrared Unmanned Aerial Vehicle Data with Convolutional Neural Networks  
Aral R. A., ZALLUHOĞLU C., SEZER E.  
2023 International Conference on Smart Applications, Communications and Networking, SmartNets 2023, İstanbul, Turkey, 25 - 27 July 2023
- III. Small and Unbalanced Data Set Problem in Classification  
PAR Ö. E., SEZER E., Sever H.  
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019

- IV. MULTILEVEL SENTIMENT ANALYSIS IN ARABIC**  
Nassar A., SEZER E.  
7th IEEE Palestinian International Conference on Electrical and Computer Engineering (PICECE), Gaza, Palestine,  
26 - 27 March 2019
- V. HUMIR at IEST-2018: Lexicon-Sensitive and Left-Right Context-Sensitive BiLSTM for Implicit Emotion Recognition**  
NADERALVOJoud B., UÇAN A., SEZER E.  
9th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis, Brussels,  
Belgium, 31 October - 01 November 2018, pp.182-188
- VI. Expert-based landslide susceptibility modelling by using hierarchical fuzzy systems (HFS): an investigation from central part of Rif Mountains (Morocco)**  
ÖZER B. C., MUTLU B., NEFESLİOĞLU H. A., SEZER E., ROUAI M., Dekayir A., GÖKÇEOĞLU C.  
European Geosciences Union General Assembly, Viyana, Austria, 4 - 13 April 2018
- VII. End-to-End Hierarchical Fuzzy Inference Solution**  
MUTLU B., SEZER E., AKCAYOL M. A.  
IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), Rio de Janeiro, Brazil, 8 - 13 July 2018
- VIII. Differentiations in Hierarchical Fuzzy Systems**  
MUTLU B., SEZER E.  
6th World Conference on Soft Computing, California, United States Of America, 22 - 25 May 2016, vol.361, pp.361-379
- IX. Determining of Discriminative Blog Size for Authorship Attribution on the Turkish Texts**  
CANBAY P., SEVER H., SEZER E.  
6th International Symposium on Digital Forensic and Security (ISDFS), Antalya, Turkey, 22 - 25 March 2018,  
pp.319-323
- X. Automatic Rule Generation of Fuzzy Systems: A Comparative Assessment on Software Defect Prediction**  
MUTLU B., SEZER E., AKCAYOL M. A.  
3rd International Conference on Computer Science and Engineering (UBMK), Sarajevo, Bosnia And Herzegovina,  
20 - 23 September 2018, pp.209-214
- XI. Use of Fuzzy Approaches to Make Predictions on Small Sized Data**  
ÖMERCİOĞLU A., SEZER E., YILMAZ Y., NEFESLİOĞLU H. A.  
The 4th International Fuzzy Systems Symposium, 5 - 06 November 2015, pp.36-40
- XII. Effect of Rule Evaluation in Hierarchical Systems A Benchmark on XOR Gate**  
MUTLU B., SEZER E., NEFESLİOĞLU H. A.  
The 4th International Fuzzy Systems Symposium, 5 - 06 November 2015, pp.58-62
- XIII. A comprehensive approach for medium scale landslide risk assessment**  
KEÇELİ A. S., NEFESLİOĞLU H. A., SEZER E., GÖKÇEOĞLU C.  
The 17th Annual Conference of the International Association for Mathematical Geosciences, 5 - 13 October 2015
- XIV. Consequences of Structural Differences Between Hierarchical Systems While Fuzzy Inference**  
Mutlu B., SEZER E., NEFESLİOĞLU H. A.  
13th International Work-Conference on Artificial Neural Networks (IWANN), Palma de Mallorca, Spain, 10 - 12 June 2015, vol.9094, pp.549-560
- XV. INVESTIGATION OF TERM WEIGHTING SCHEMES IN CLASSIFICATION OF IMBALANCED TEXTS**  
Naderalvojoud B., BOZKIR A. S., SEZER E.  
MACHINE LEARNING AND DATA MINING IN PATTERN RECOGNITION, MLDM 2014, Lisbon, 15 - 17 July 2014,  
pp.39-46
- XVI. Assessment of feature selection metrics for sentiment analyses Turkish movie reviews**  
UÇAN A., SEZER E., SEVER H.  
International Conference on Data Mining, Lisbon, Portugal, 14 - 17 July 2014
- XVII. EPESUS A DEVELOPING WEB BASED ENERGY MATERIAL FLOW ANALYSIS TOOL FOR ECO INDUSTRIAL PARKS**

- BOZKIR A. S., SEZER E., Yöntem E., Salihçavuşoğlu G.  
IADIS Internet Applications Research 2012, Lizbon, Portugal, 17 - 23 July 2013
- XVIII. **ADEM An Online Decision Tree Based Menu Demand Prediction Tool for Food Courts**  
BOZKIR A. S., SEZER E.  
4th International Conference on Food Engineering and Biotechnology, Kopenhag, Denmark, 17 January 2013,  
vol.43
- XIX. **ANFIS modeling for estimation of uniaxial compressive strength of some granitic rocks from their mineral content**  
GÜLTEKİN N., SEZER E., GÖKÇEOĞLU C., BAYHAN H.  
FUZZYSS'2011: 2nd International Fuzzy Systems Symposium, Ankara, Turkey, 17 - 18 November 2011
- XX. **MOBILE MIND A FULLY MOBILE PLATFORM BASED MACHINE LEARNING APPLICATION**  
BOZKIR A. S., SEZER E.  
IADIS Data Mining Conference, Roma, Italy, 19 - 23 July 2011
- XXI. **Use of nonlinear prediction tool to estimate uniaxial compressive strength and modulus of elasticity of some granitic rocks**  
GÜLTEKİN N., SEZER E., GÖKÇEOĞLU C.  
EGU General Assembly 2010, Viyana, Austria, 2 - 07 May 2010
- XXII. **An Experimental Study on the Min-Image Production for Determination of Mineral Percentages**  
GÖKÇEOĞLU C., GÜLTEKİN N., KEÇELİ A. S., SEZER E., CAN A. B., BAYHAN H.  
EGU General Assembly 2012, Viyana, Austria, 22 - 27 April 2012

## Supported Projects

SEZER E., TUBITAK Project, Novel Approach to Rule Based Turkish Sentiment Analysis Using Sentiment Lexicon, 2015 - Continues  
SEZER E., Project Supported by Other Private Institutions, HBYS sistemi için bilirkişi değerlendirme raporlarının incelenmesi, 2016 - 2016  
SEZER E., Project Supported by Other Private Institutions, Net InRisk projesi için arge değerlendirmesi, 2016 - 2016  
SEZER E., Project Supported by Other Private Institutions, Netcad çözümlerinde akıllı yöntemlerin kullanımı, 2016 - 2016  
SEZER E., Project Supported by Other Private Institutions, Tabiat Varlıklarını Koruma Hususunda Karar Destek Sisteminin Geliştirilmesi, 2015 - 2015

## Metrics

Publication: 64  
Citation (WoS): 1223  
Citation (Scopus): 789  
H-Index (WoS): 15  
H-Index (Scopus): 10