

Assoc. Prof. AYŞE BERNA ALTINEL GİRGIN

Personal Information

Office Phone: [+90 216 777 4000](tel:+902167774000)

Email: berna.altinel@marmara.edu.tr

Web: <https://avesis.marmara.edu.tr/berna.altinel>

Address: Marmara Üniversitesi RTE Külliyesi Teknoloji Fakültesi Bilgisayar Mühendisliği Bölümü, Maltepe, İstanbul.



International Researcher IDs

ScholarID: rL5zrY8AAAAJ

ORCID: 0000-0001-5544-0925

Publons / Web Of Science ResearcherID: AAG-7928-2019

ScopusID: 24491516000

Yoksis Researcher ID: 193315

Education Information

Doctorate, Yıldız Technical University, Bilgisayar Bilimleri Mühendisliği Pr., Turkey 2011 - 2016

Postgraduate, Istanbul Technical University, Bilgisayar Ve Bilişim Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2004 - 2007

Undergraduate, Yeditepe University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 2000 - 2004

Biography

Dr. Altinel received her B.S. in Computer Engineering from Yeditepe University in 2004 and M.S. in Computer Engineering from İstanbul Technical University in 2007 respectively. Following this she attained a Ph.D. degree in Computer Engineering from Yıldız Technical University in January 2016. She worked as a Software and Test Engineer at Turkey İş Bank between 2006 and 2009 and Software Analyst & Researcher at TÜBİTAK BİLGEM between 2009 and 2012. She joined Marmara University Computer Engineering Department as a Teaching & Research Assistant in Spring 2013. Dr. Altinel's research interests include Textual Data Mining, Natural Language Processing, Social Network Analysis, Machine Learning, Deep Learning and Bioinformatics.

Dissertations

Doctorate, CORPUS-BASED SEMANTIC KERNELS FOR SUPERVISED AND SEMI-SUPERVISED TEXT CLASSIFICATION, Yıldız Teknik Üniversitesi, Mühendislik Fakültesi, Bilgisayar Bilimleri Mühendisliği Pr., 2015

Postgraduate, A HYBRID MUSIC RECOMMENDATION SYSTEM BASED ON DIFFERENT FEATURES OF THE MUSIC AND USERS, İstanbul Teknik Üniversitesi, Bilgisayar Ve Bilişim Fakültesi, Bilgisayar Mühendisliği Bölümü, 2007

Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Knowledge Engineering, Computer Learning, Natural Language Processing, Text/Document Processing, Neural Networks, Software Engineering

Academic Titles / Tasks

Associate Professor, Marmara University, Faculty Of Technology, Computer Engineering, 2023 - Continues
Assistant Professor, Marmara University, Faculty Of Technology, Computer Engineering, 2022 - 2023
Research Assistant PhD, Marmara University, Faculty of Technology, Computer Engineering, 2020 - 2021
Research Assistant, Marmara University, Faculty of Engineering, Computer Engineering, 2013 - 2020

Academic and Administrative Experience

Deputy Head of Department, Marmara University, Faculty Of Technology, Computer Engineering, 2023 - Continues
Adaptation/Exemption Committee Member, Marmara University, Faculty Of Technology, Computer Engineering, 2023 - Continues
Rektörlük Akademik Teşvik Değerlendirme Komisyonu Üyesi, Marmara University, Faculty Of Technology, Computer Engineering, 2023 - Continues
Bölüm Tanıtım ve Mezunlarla İlişkiler Komisyonu Üyesi, Marmara University, Faculty Of Technology, Computer Engineering, 2022 - Continues

Courses

Computer Database Utilization, Undergraduate, 2023 - 2024, 2022 - 2023
Veri Madenciliği Uygulamaları, Postgraduate, 2021 - 2022
Sosyal Ağlarda Uygulamalı Metin Analizi, Doctorate, 2022 - 2023
Bilgisayar Programlama, Undergraduate, 2021 - 2022
Calculus-2, Undergraduate, 2020 - 2021
Veri İşleme ve Programlama, Undergraduate, 2021 - 2022
Bilgisayar Programlama-2, Undergraduate, 2020 - 2021
Veri Madenciliği, Undergraduate, 2020 - 2021
Bilgisayar Programlama-1, Undergraduate, 2020 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **So-haTRed: A novel hybrid system for Turkish Hate Speech Detection in Social Media with Ensemble Deep Learning improved by BERT and clustered-Graph Networks**
Altinel A. B., Sahin S., Gurbuz M. Z., KARATAŞ BAYDOĞMUŞ G.
IEEE Access, vol.12, pp.86252-86270, 2024 (SCI-Expanded)
- II. **Enhancing the Performance of WSD Task Using Regularized GNNs With Semantic Diffusion**
Şipal Sert B., Elma E., Altinel Girgin A. B.
IEEE ACCESS, vol.11, no.1, pp.40565-40578, 2023 (SCI-Expanded)
- III. **Social media analysis by innovative hybrid algorithms with label propagation**
ALTINEL GİRGİN A. B.
EXPERT SYSTEMS WITH APPLICATIONS, vol.210, 2022 (SCI-Expanded)
- IV. **Ranking influencers of social networks by semantic kernels and sentiment information**
Girgin B. A.

EXPERT SYSTEMS WITH APPLICATIONS, vol.171, 2021 (SCI-Expanded)

- V. **Overview of the BioCreative VI Precision Medicine Track: mining protein interactions and mutations for precision medicine**
Dogan R. I., Kim S., Chatr-aryamontri A., Wei C., Comeau D. C., Antunes R., Matos S., Chen Q., Elangovan A., Panyam N. C., et al.
DATABASE-THE JOURNAL OF BIOLOGICAL DATABASES AND CURATION, vol.2019, 2019 (SCI-Expanded)
- VI. **Word sense disambiguation using semantic kernels with class-based term values**
Altinel B., GANİZ M. C., Sipal B., Erkaya E., Yucedag O. C., Dogan M. A.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.4, pp.3180-3194, 2019 (SCI-Expanded)
- VII. **Semantic text classification: A survey of past and recent advances**
Altinel B., GANİZ M. C.
INFORMATION PROCESSING & MANAGEMENT, vol.54, no.6, pp.1129-1153, 2018 (SCI-Expanded)
- VIII. **Instance labeling in semi-supervised learning with meaning values of words**
Altinel B., GANİZ M. C., DİRİ B.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.62, pp.152-163, 2017 (SCI-Expanded)
- IX. **A new hybrid semi-supervised algorithm for text classification with class-based semantics**
Altinel B., GANİZ M. C.
KNOWLEDGE-BASED SYSTEMS, vol.108, pp.50-64, 2016 (SCI-Expanded)
- X. **A novel semantic smoothing kernel for text classification with class-based weighting**
Altinel B., DİRİ B., GANİZ M. C.
KNOWLEDGE-BASED SYSTEMS, vol.89, pp.265-277, 2015 (SCI-Expanded)
- XI. **A corpus-based semantic kernel for text classification by using meaning values of terms**
Altinel B., GANİZ M. C., DİRİ B.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.43, pp.54-66, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Türkçe Faturaların Sınıflandırılmasında Farklı Öznitelik Seçimi Yöntemleri ile Topluluk Öğrenme Algoritmalarının Etkilerinin İncelenmesi**
KOTAN A. E., Yıldız İ., ALTINEL GİRĞİN A. B.
Avrupa Bilim ve Teknoloji Dergisi, vol.2023, no.52, pp.272-278, 2023 (Peer-Reviewed Journal)
- II. **Topluluk Hibrit Öğrenme Algoritması Kullanılarak DDİ ve Özellik Çıkarma ile Duygu Analizinin Performansının İyileştirilmesi**
ALTINEL GİRĞİN A. B., ŞAHİN S.
International journal of advances in engineering and pure sciences (Online), vol.35, no.1, pp.125-141, 2023 (Peer-Reviewed Journal)
- III. **From past to present: Spam detection and identifying opinion leaders in social networks**
ALTINEL GİRĞİN A. B., Gümüşçekiçi G.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.40, no.2, pp.441-463, 2022 (ESCI)
- IV. **CLUDS: Combining Labeled and Unlabeled Data with Logistic Regression for Social Media Analysis**
ALTINEL A. B.
Mühendislik Bilimleri ve Tasarım Dergisi, vol.9, no.4, pp.1048-1061, 2021 (Peer-Reviewed Journal)
- V. **Türkçe Metinlerde Makine Öğrenmesi Algoritmalarının Duygu Analizi Problemi Üzerindeki Performansının Kıyaslanması**
ALTINEL A. B.
Avrupa Bilim ve Teknoloji Dergisi, no.28, pp.1056-1061, 2021 (Peer-Reviewed Journal)
- VI. **Identifying Topic-based Opinion Leaders in Social Networks by Content and User Information**
ALTINEL A. B., HAKKOZ M. A., BOZDAĞ E. B., GANİZ M. C.
International Journal of Intelligent Systems and Applications in Engineering, vol.8, no.4, pp.214-220, 2020 (Scopus)

Books & Book Chapters

- I. 6
ŞİPAL B., ORMANCI B. B., ALTINEL GİRĞİN A. B.
in: MÜHENDİSLİK ALANINDA ULUSLARARASI ARAŞTIRMALAR, Levent Covic, Editor, Eğitim Yayınevi, Konya, pp.75-86, 2022
- II. 6
ALTINEL GİRĞİN A. B., Buzlu K.
in: MÜHENDİSLİK ALANINDA ULUSLARARASI ARAŞTIRMALAR, Levent Covic, Editor, Eğitim Yayınevi, Konya, pp.63-74, 2022
- III. **Chapter 10: Music Recommendation by Modeling User's Preferred Perspectives of Content, Singer/Genre and Popularity**
ÇATALTEPE Z., ALTINEL A. B.
in: Collaborative and Social Information Retrieval and Access: Techniques for Improved User Modeling, M. Chevalier, C. Julien and C. Soulé-Dupuy, Editor, IGI Global, pp.203-221, 2009

Refereed Congress / Symposium Publications in Proceedings

- I. **Turkish Sentiment Analysis: a Comparative Study on Different Sentiment Dictionaries with Generated Features and Presenting a New Sentiment Dictionary**
Elma E., Altinel A. B., Ispirli Y.
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023
- II. **Türkçe fatura veri kümesi üzerinde makine öğrenmesi ve adlandırılmış varlık tespiti uygulamaları**
Yıldız İ., KOTAN A. E., ALTINEL GİRĞİN A. B.
4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), Ankara, Turkey, 14 December 2022, vol.1, pp.1410-1416
- III. **Performance Analysis of Different Sentiment Polarity Dictionaries on Turkish Sentiment Detection**
ALTINEL GİRĞİN A. B., Buzlu K., İpek K.
2022 International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Biarritz, France, 08 August 2022, vol.1, pp.1-6
- IV. **Multi-Class Turkish Sentiment Analysis Using Machine Learning Algorithms**
ALTINEL GİRĞİN A. B., Gümüçkeçi G.
3rd International Conference on Applied Engineering and Natural Sciences ICAENS 2022 will be held on July 20 - 23, 2022 in Konya, Turkey, Konya, Turkey, 20 - 23 July 2022, vol.1, pp.2091-2096
- V. **Türkçe metinlerde derin öğrenme algoritmalarının duygu analizi problemi üzerindeki performansının kıyaslanması**
ALTINEL A. B.
SCIENCE, ENGINEERING AND TECHNOLOGY(EurasianSciEnTech 2021), Ankara, Turkey, 15 - 17 December 2021, pp.548-554
- VI. **ML-SPD: Machine Learning based Sentiment Polarity Detection**
GRAOVAC J., RADOVIC M., ALTINEL A. B.
In 2020 International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Montenegro, 24 August 2020
- VII. **Turkish Tweet Classification with Transformer Encoder**
YÜKSEL A. E., TÜRKMEN A., ÖZGÜR TÜRKMEN A., ALTINEL A. B.
IEEE International Conference Recent Advances In Natural Language Processing (RANLP), 2 - 04 September 2019, pp.1381-1388
- VIII. **Diffused Label Propagation based Transductive Classification Algorithm for Word Sense Disambiguation**

KOCAMAN G., ŞİPAL B., AYDIN G., ALTINEL A. B., GANİZ M. C.

In 2019 IEEE International Symposium on INnovations in Intelligent SysTems and Applications, 3 - 05 July 2019, pp.1-6

- IX. **Text Classification using Ontology and Semantic Values of Terms for Mining Protein Interactions and Mutations**
ALTINEL A. B., Hüsünbeyi Z. M., ÖZGÜR TÜRKMEN A.
Biocreative VI Workshop, 18 - 20 October 2017
- X. **Hybrid music recommendation based on different dimensions of audio content and an entropy measure**
ÇATALTEPE Z., ALTINEL A. B.
Signal Processing Conference, 2007 15th European, 3 - 07 September 2007
- XI. **A Simple Semantic Kernel Approach for SVM using Higher Order Paths**
ALTINEL A. B., GANİZ M. C., DİRİ B.
INISTA 2014, 23 - 25 June 2014, pp.431-435
- XII. **A Semantic Kernel for Text Classification Based on Iterative Higher Order Relations between Words and Documents**
ALTINEL A. B., GANİZ M. C., DİRİ B.
The 13th International Conference on Artificial Intelligence and Soft Computing, 1 - 05 June 2014, vol.8467, pp.505-517
- XIII. **A Novel Higher Order Semantic Kernel for Text Classification**
ALTINEL A. B., GANİZ M. C., DİRİ B.
ICECCO 2013, 10th International Conference on Electronics, Computer and Computation, 7 - 09 November 2013, pp.216-219
- XIV. **Music recommendation based on adaptive feature and user grouping**
ÇATALTEPE Z., ALTINEL A. B.
iscis 2007, 7 - 09 November 2007

Supported Projects

Altinel Girgin A. B., Project Supported by Higher Education Institutions, Çevrimiçi Sosyal Ağlarda Rahatsız Edici Davranış Tespiti ve Azaltma Stratejileri, 2022 - 2023

Altinel Girgin A. B., TUBITAK Project, Metinlerin Konusal ve Duygusal Sınıflandırması için Makine Öğrenmesi Algoritmalarının Kullanılması, 2021 - 2023

Altinel Girgin A. B., TUBITAK Project, Mikroblog Ortamlarında Konu Bazlı Kanaat Önderlerinin Tespit Edilmesi, 2017 - 2020

Altinel Girgin A. B., Ganiz M. C., TUBITAK Project, Metin Sınıflandırması için Semantik Gözetimli ve Yarı Gözetimli Kelime Kalıplama Algoritmalarının Geliştirilmesi, 2017 - 2019

Ganiz M. C., TUBITAK Project, METİNSEL VERİ MADENCİLİĞİ İÇİN ANLAMSAL YARI EĞİTİMLİ ALGORİTMALARIN GELİŞTİRİLMESİ Proje NO 111E239, 2012 - 2015

Metrics

Publication: 35

Citation (WoS): 217

Citation (Scopus): 387

H-Index (WoS): 8

H-Index (Scopus): 10

Non Academic Experience

TUBITAK, BİLGEM, Submarine Defense Systems

Company, Softtech A.Ş. (A Participation of Türkiye İş Bankası), Credit Cards

Company, Argela Technologies, ArGe

Troysis Yazılım San. A.Ş.