

Asst. Prof. MEHMET GÖKHAN BAKAL

Personal Information

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International Researcher IDs

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Education Information

Doctorate, University of Kentucky, College of Engineering, Computer Science, United States Of America 2014 - 2019

Postgraduate, University of Kentucky, College of Engineering, Computer Science, United States Of America 2012 - 2014

Undergraduate, Trakya University, Faculty Of Engineering And Architecture, Department Of Computer Engineering, Turkey 2005 - 2009

Research Areas

Biostatistics and Medical Informatics, bioinformatics, Knowledge Engineering, Computer Learning, Natural Language Processing, Text/Document Processing, Neural Networks

Academic Titles / Tasks

Assistant Professor, Abdullah Gul University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2022 - Continues

Lecturer PhD, Abdullah Gul University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2020 - 2022

Academic and Administrative Experience

Deputy Head of Department, Abdullah Gul University, Faculty of Engineering, Computer Engineering, 2023 - Continues

Courses

Database Management Systems, Undergraduate, 2023 - 2024

Software Engineering, Undergraduate, 2023 - 2024

Text Mining, Doctorate, 2020 - 2021

Art of Computing, Undergraduate, 2020 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

1. Building a challenging medical dataset for comparative evaluation of classifier capabilities

Bozkurt B., Coskun K., Bakal G.

Computers in Biology and Medicine, vol.178, pp.1-8, 2024 (SCI-Expanded)

II. Exploiting semantic patterns over biomedical knowledge graphs for predicting treatment and causative relations

Bakal G., Talari P., Kakani E., Kavuluru R.

JOURNAL OF BIOMEDICAL INFORMATICS, vol.82, pp.189-199, 2018 (SCI-Expanded)

Articles Published in Other Journals

I. An empirical study of sentiment analysis utilizing machine learning and deep learning algorithms

Erkantarci B., Bakal M. G.

Journal of Computational Social Science, vol.6, pp.1-17, 2024 (ESCI)

II. Document Classification with Contextually Enriched Word Embeddings

Mahmood R. S., Bakal M. G., Akbaş A.

Balkan Journal of Electrical and Computer Engineering, vol.12, no.1, pp.90-97, 2024 (Peer-Reviewed Journal)

III. Machine Learning based Network Intrusion Detection with Hybrid Frequent Item Set Mining

Firat M., Bakal M. G., Akbaş A.

Journal of Polytechnic, vol.1, no.1, pp.1, 2024 (ESCI)

IV. Non-Negative Matrix Factorization for Drug Repositioning: Experiments with the repoDB Dataset.

Bakal G., Kilicoglu H., Kavuluru R.

AMIA ... Annual Symposium proceedings. AMIA Symposium, vol.2019, pp.238-247, 2020 (Peer-Reviewed Journal)

V. Predicting Treatment Relations with Semantic Patterns over Biomedical Knowledge Graphs.

Bakal G., Kavuluru R.

Mining intelligence and knowledge exploration : third International Conference, MIKE 2015, Hyderabad, India, December 9-11, 2015. Proceedings. MIKE (Conference) (3rd : 2015 : Hyderabad, India), vol.9468, pp.586-596, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

I. A Sentiment Analysis Example Using Bert Model

Öztürk I., Bakal M. G.

in: Classification Models in Data Mining and Applied Examples in R language, Ömer Faruk Rençber, Editor, Nobel Yayın Dağıtım, Ankara, pp.187-217, 2022

II. Classification Approach with Hybrid Modelling

Bakal M. G., Öztürk I.

in: Classification Models in Data Mining and Applied Examples in R language, Ömer Faruk Rençber, Editor, Nobel Yayın Dağıtım, Ankara, pp.219-236, 2022

III. On Clustering Covid-19 Tweets with Text Mining Perspective

Bakal M. G., Abar H., Öztürk I., Abar O., Abar O. (Editor)

in: Text Mining Applications Using Real-World Data in Python, Orhan Abar, Editor, Nobel Yayınevi, Ankara, pp.1-22, 2021

Refereed Congress / Symposium Publications in Proceedings

I. Improving Salary Offer Processes With Classification Based Machine Learning Models

Kaya R., Saatçi M., Bakal G.

2024 8th International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 21 - 22 September 2024, pp.1-7

- II. **Graph-based Biomedical Knowledge Discovery**
Altuner O., Bakır-Gungor B., Bakal G.
2024 32nd Signal Processing and Communications Applications Conference (SIU), Mersin, Turkey, 15 - 18 May 2024, pp.1-4
- III. **A Transfer Learning Application on the Reliability of Psychological Drugs' Comments**
Şen T. Ü., Bakal G.
2023 International Conference on Smart Applications, Communications and Networking (SmartNets), İstanbul, Turkey, 25 - 27 July 2023, pp.1-6
- IV. **A Computational Drug Repositioning Effort using Patients' Reviews Dataset**
Akkaya A., Bakal G.
2023 International Conference on Smart Applications, Communications and Networking (SmartNets), İstanbul, Turkey, 25 - 27 July 2023, pp.1-6
- V. **On Comparative Classification of Relevant Covid-19 Tweets**
Bakal M. G., Abar O.
2021 6th International Conference on Computer Science and Engineering (UBMK), Ankara, Turkey, 15 - 17 September 2021, pp.287-291
- VI. **A Comparative Analysis on Medical Article Classification Using Text Mining & Machine Learning Algorithms**
Kulukisa B., Dedetürk B. K., Adanur Dedetürk B., Gülşen A., Bakal M. G.
2021 6th International Conference on Computer Science and Engineering (UBMK), Ankara, Turkey, 15 - 17 September 2021, pp.360-365
- VII. **Non-Negative Matrix Factorization for Drug Repositioning: Experiments with the repoDB Dataset.**
BAKAL M. G., kılıçoğlu h., kavuluru r.
AMIA ... Annual Symposium proceedings. AMIA Symposium, Washington, Kiribati, 16 - 20 November 2019, vol.2019, pp.238-247
- VIII. **On the Predictive Potential of Graph Patterns for Biomedical Relation Extraction**
BAKAL M. G., Wallace s., kavuluru r.
AMIA 2016 ANNUAL SYMPOSIUM, Chicago, IL, United States Of America, 12 - 16 November 2016
- IX. **On Quantifying Diffusion of Health Information on Twitter**
Bakal G., Kavuluru R.
4th IEEE EMBS International Conference on Biomedical and Health Informatics (BHI), Florida, United States Of America, 16 - 19 February 2017, pp.485-488

Supported Projects

Bakal M. G., Abar O., TUBITAK Project, Text Classification Using Complete Subgraphs Generated over N-grams, 2022 - 2024

Scientific Consultations

ARGEVA INFORMATION TECHNOLOGIES INDUSTRY AND TRADE LIMITED COMPANY, Project Consultancy, Abdullah Gul University, Turkey, 2024 - 2025

Tasks In Event Organizations

Bakal M. G., INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE & MACHINE LEARNING AI and ML Renaissance: Pioneering the Path to Future Intelligence, Scientific Congress, Osaka, Japan, Mayis 2025

Bakal M. G., 4th Asia Conference on Algorithms, Computing and Machine Learning, Scientific Congress, Guangzhou, China,

Mart 2025

Bakal M. G., 5th International Conference on Cloud, Big Data and IoT , Scientific Congress, Toronto, Canada, Eylül 2024

Bakal M. G., The 4'th International Conference on Intelligent Systems and Pattern Recognition, Scientific Congress, İstanbul, Turkey, Haziran 2024

Metrics

Publication: 19

Citation (WoS): 28

Citation (Scopus): 48

H-Index (WoS): 2

H-Index (Scopus): 3

Awards

Bakal M. G., AWS Cloud Credit for Research Application, Amazon Web Services, Inc., May 2024

Bakal M. G., Google Cloud Arařtırma Kredisi, Google Cloud Platform, January 2023

Non Academic Experience

Business Establishment Private, DDI Technology, Software Development