

Assoc. Prof. ALEV MUTLU

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: F-7067-2018

Yoksis Researcher ID: 122072

Education Information

Doctorate, Middle East Technical University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 2002 - 2013

Undergraduate, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 1998 - 2002

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Improving Scalability and Efficiency of ILP-based and Graph-based Concept Discovery Systems, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2013

Research Areas

Computer Sciences, Database and Data Structures, Database Systems, Artificial Intelligence, Computer Learning and Pattern Recognition, Knowledge Engineering, Software, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2014 - 2018

Academic and Administrative Experience

Deputy Head of Department, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2019 - Continues

Advising Theses

Mutlu A., BALIK TAZELİĞİNİN TRANSFER ÖĞRENME İLE SINIFLANDIRILMASI, Postgraduate, E.TAŞDEMİR(Student), 2024

Mutlu A., Farklı kelime gömme yaklaşımlarının akademik makalelerden anahtar kelime çıkarımındaki performansının analizi, Postgraduate, G.M(Student), 2023

Mutlu A., Tele-bankacılık için potansiyel müşteri tahmininde sınıflandırma algoritmalarının performans analizi, Postgraduate, A.GÖKTÜRK(Student), 2023

Mutlu A., Retweet tahminlemesinin makine öğrenmesi algoritmaları ile karşılaştırılması ve önerilen tweet öznetelikleri ile iyileştirilmesi, Postgraduate, S.ENES(Student), 2023

Mutlu A., Akademik makalelerde anahtar kelime çıkarımı için yeni yaklaşımlar, Doctorate, F.GÖZ(Student), 2022

Mutlu A., Çizge tabanlı anahtar kelime çıkarılmasında kelime konumlarının etkisi, Postgraduate, O.KABASAKAL(Student), 2022

Mutlu A., A rule-based approach for metadata extraction from bank documents, Postgraduate, M.AMIN(Student), 2022

Mutlu A., Karagöz P., Predicting the academic influence and trending research topics, Doctorate, M.YÜKSELEN(Student), 2022

Mutlu A., Anahtar kelime çıkarımı için kelime vektörleri: Karşılaştırmalı bir değerlendirme, Postgraduate, I.DİBRA(Student), 2022

Mutlu A., Tümevaran kavram keşif sistemleri için TF-IDF tabanlı sezgisel bir yöntem, Postgraduate, C.ONUR(Student), 2020

Mutlu A., Çizge veritabanlarında kavram keşfi, Postgraduate, F.GÖZ(Student), 2017

Mutlu A., Head Output Connected ilişkiler için çizge tabanlı bir kavram keşif sistemi, Postgraduate, N.PEKER(Student), 2017

MUTLU A., New heuristics for performance improvement of ilp-based concept discovery systems, Postgraduate, A.DOĞAN(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **SkyWords: An automatic keyword extraction system based on the skyline operator and semantic similarity**
GÖZ F., MUTLU A.
Engineering Applications of Artificial Intelligence, vol.123, 2023 (SCI-Expanded)
- II. **MGRank: A keyword extraction system based on multigraph GoW model and novel edge weighting procedure**
GÖZ F., MUTLU A.
KNOWLEDGE-BASED SYSTEMS, vol.251, 2022 (SCI-Expanded)
- III. **SkySlide: A Hybrid Method for Landslide Susceptibility Assessment based on Landslide-Occurring Data Only**
MUTLU A., GÖZ F.
COMPUTER JOURNAL, vol.65, no.3, 2022 (SCI-Expanded)
- IV. **Predicting the Trending Research Topics by Deep Neural Network Based Content Analysis**
Yukselen M., MUTLU A., KARAGÖZ P.
IEEE ACCESS, vol.10, pp.90887-90902, 2022 (SCI-Expanded)
- V. **IFIT: an unsupervised discretization method based on the Ramer-Douglas-Peucker algorithm**
Mutlu A., Göz F., Akbulut O.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.3, pp.2344-2360, 2019 (SCI-Expanded)
- VI. **Graph-Based Concept Discovery**
MUTLU A., KARAGÖZ P., Kavurucu Y.
ENCYCLOPEDIA OF INFORMATION SCIENCE AND TECHNOLOGY, 4TH EDITION, pp.1974-1983, 2018 (SCI-Expanded)
- VII. **A comparative study for landslide susceptibility mapping using GIS-based multi-criteria decision**

analysis (MCDA), logistic regression (LR) and association rule mining (ARM)

ERENER A., MUTLU A., Duzgun H. S.

ENGINEERING GEOLOGY, vol.203, pp.45-55, 2016 (SCI-Expanded)

VIII. Policy-based memoization for ILP-based concept discovery systems

Mutlu A., KARAGÖZ P.

JOURNAL OF INTELLIGENT INFORMATION SYSTEMS, vol.46, no.1, pp.99-120, 2016 (SCI-Expanded)

IX. Improving Hit Ratio of ILP-based Concept Discovery System with Memoization

Mutlu A., Senkul P.

COMPUTER JOURNAL, vol.57, no.1, pp.138-153, 2014 (SCI-Expanded)

X. Improving the scalability of ILP-based multi-relational concept discovery system through parallelization

MUTLU A., Senkul P., Kavurucu Y.

KNOWLEDGE-BASED SYSTEMS, vol.27, pp.352-368, 2012 (SCI-Expanded)

Articles Published in Other Journals

I. Dijital Kütüphanelerde Dokümanlardan Bilgi Geri Kazanımı için Kullanılan Güncel Teknolojiler: Derleme Çalışması

Mutlu A., Abdisamad M. A., Kabasakal O., Göz F., Tüfekçi Ö., Küçük K.

Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.9, no.1, pp.79-90, 2021 (Peer-Reviewed Journal)

II. The Role of Self-Efficacy and Perceived Enjoyment in Predicting Computer Engineering Students' Continuous Use Intention of Scratch

Arpacı İ., Onay Durdu P., Mutlu A.

International Journal of E-Adoption , vol.11, no.2, pp.1-12, 2019 (ESCI)

III. Guiding Search in Relational Pathfinding-based Concept Discovery via Bivariate Statistical Methods

Mutlu A., Göz F., Zeren H.

International Journal of Intelligent Systems and Applications in Engineering, vol.7, no.3, pp.118-123, 2019 (Peer-Reviewed Journal)

IV. Graph Representation of Relational Database for Concept Discovery

Igde M., KAVURUCU Y., MUTLU A.

Procedia - Social and Behavioral Sciences, vol.195, pp.1981-1989, 2015 (Peer-Reviewed Journal)

V. Using Graphs in Multi Relational Data Mining

Igde M., KAVURUCU Y., MUTLU A.

DENİZ HARP OKULU DENİZ BİLİMLERİ VE MÜHENDİSLİĞİ DERGİSİ, vol.11, pp.19-33, 2015 (Peer-Reviewed Journal)

VI. Yol Arkadaşı Android tabanlı Sistemler İçin Bir Araba İmecesi Uygulaması

İlhan A., MUTLU A.

Selcuk Üniversitesi Mühendislik, Bilim ve Teknoloji Dergisi, vol.2, pp.16-25, 2014 (Peer-Reviewed Journal)

Books & Book Chapters

I. Graph-Based Concept Discovery

MUTLU A., KARAGÖZ P., KAVURUCU Y.

in: Encyclopedia of Information Science and Technology, Fourth Edition, Mehdi Khosrow-Pour, D.B.A., Editor, IGI Global, 2018

II. A Graph-Based Concept Discovery Method for n-Ary Relations

Abay N. C., MUTLU A., Karagoz P.

in: Big Data Analytics and Knowledge Discovery, Sanjay Madria, Takahiro Hara, Editor, Springer International Publishing, pp.391-402, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **A Comparative Assessment of Various Embeddings for Keyword Extraction**
Ashqar G., MUTLU A.
5th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, HORA 2023, İstanbul, Turkey, 8 - 10 June 2023
- II. **Improving Retweet Prediction via Tweet Features**
Turkoglu S. E., MUTLU A.
5th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, HORA 2023, İstanbul, Turkey, 8 - 10 June 2023
- III. **Learning to Rank for Text Summarization: Revisiting the Features and Methods for Turkish Bank Documents**
GÖZ F., Şener F., MUTLU A., KÜÇÜK K., Temur M.
2021 International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Kocaeli, Turkey, 25 - 27 August 2021
- IV. **Türkçe Metinlerden Anahtar Kelime Çıkarma için Merkezilik Ölçütlerinin İncelenmesi**
GÖZ F., MUTLU A., KÜÇÜK K., Temur M., GÜN A.
29. IEEE SİNYAL İŞLEME VE İLETİŞİM UYGULAMALARI KURULTAYI, İstanbul, Turkey, 09 June 2021
- V. **Ultrasonic Power Calculation by Linear Regression Method**
Karaböce B., MUTLU A., Çetin E., Özdingiş M., Durmuş H. O.
2020 IEEE International Instrumentation and Measurement Technology Conference (I2MTC), Dubrovnik, Croatia, 25 - 28 May 2020
- VI. **Comparison of Querying Performance of Neo4j on Graph and Hyper-graph Data Model**
Erdemir M., GÖZ F., MUTLU A., KARAGÖZ P.
11th International Conference on Knowledge Discovery and Information Retrieval, 16 - 19 September 2019
- VII. **Influence Oriented Topic Prediction: Investigating the Effect of Influence on the Author**
Yükselen M., Mutlu A., Karagöz P.
M. Yukselen, A. Mutlu, P. Karagoz, "Influence Oriented Topic Prediction: Investigating the Effect of Influence on the Author, The 9th International Conference on Web Intelligence, Seoul, South Korea, 26 - 28 June 2019
- VIII. **Analysis of Ramer-Douglas-Peucker algorithm as a discretization method Ramer Douglas Peucker algoritmasının ayırıklaştırma yöntemi olarak analizi**
GÖZ F., MUTLU A., AKBULUT O.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4
- IX. **Learning Logical Definitions of n-ary Relations in Graph Databases**
GÖZ F., MUTLU A.
The 13th International Conference on Hybrid Artificial Intelligence Systems, 20 - 22 June 2018
- X. **Analysis of Ramer-Douglas-Peucker Algorithm As a Discretization Method**
GÖZ F., MUTLU A., AKBULUT O.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XI. **WEKA VERİ MADENCİLİĞİ ARACI İÇİN KISMI-OTOMATİK ARFFGİRDİ OLUŞTURUCU**
ÖZCAN H., MUTLU A.
UMAS 2017, 11 - 13 September 2017, pp.25-26
- XII. **Learning Relational Patterns for Mutagenic Compounds**
GÖZ F., MUTLU A.
International Conference on Applications in Chemistry and Chemical Engineering, SARAYBOSNA, Bosnia And Herzegovina, 11 - 15 October 2017, pp.22
- XIII. **Concept Discovery in Graph Databases**
GÖZ F., MUTLU A.
International Conference on Hybrid Artificial Intelligence Systems, Spain, 21 - 23 June 2017
- XIV. **Cosine Similarity based Pruning for Concept Discovery**

DOĞAN A., MUTLU A., KARAGÖZ P.

31st International Symposium on Computer and Information Sciences, 27 - 28 October 2016

XV. A Graph path Counting Approach for Learning Head Output Connected Relations

Bekar N., MUTLU A.

8th International Conference on Computational Collective Intelligence, 28 - 30 September 2016

XVI. Scratch Programlama Ortamının Bilgisayar Mühendisliği Öğrencileri Tarafından Kabulü

ARPACI İ., ONAY DURDU P., İNCEBACAK D., MUTLU A.

10th International Computer and Instructional Technologies Symposium (ICITS), 16 - 18 May 2016

XVII. Personalized time aware outdoor activity recommendation system

Rahimiaghdam S., KARAGÖZ P., MUTLU A.

Proceedings of the 31st Annual ACM Symposium on Applied Computing - SAC '16, Pisa, Italy, 4 - 08 April 2016

XVIII. Graph based concept discovery in multi relational data

KAVURUCU Y., MUTLU A., ENSARİ T.

2016 6th International Conference - Cloud System and Big Data Engineering (Confluence), India, 14 - 15 January 2016

XIX. UYMS Arastirma Egilimleri Bir SistematiK Esleme Calismasi

Tudaliev N., Bilgin B., Gencay D., Durdu P. O., Incebacak D., MUTLU A.

Ulusal Yazilim Muhendisligi Sempozyumu, İzmir, Turkey, 9 - 11 September 2015

XX. A Path Finding based Method for Concept Discovery in Graphs

Abay C., MUTLU A., Karagoz P.

The 6th IEEE International Conference on Information, Intelligence, Systems and Applications, 6 - 10 July 2015

XXI. A Graph-Based Concept Discovery Method for n-Ary Relations

Abay N. C., MUTLU A., KARAGÖZ P.

17th International Conference on Big Data Analytics and Knowledge Discovery (DaWaK), Valencia, Spain, 1 - 04 September 2015, vol.9263, pp.391-402

Expert Reports

I. YAYIN HAKEMI Sanal Sürücü Simülatörü ile Acemi Sürücüler için Trafik Eğitimi

MUTLU A.

2016

II. YAYIN HAKEMI Keyword Extraction from Hindi Documents using Document Statistics and Fuzzy Modelling

MUTLU A.

2015

Supported Projects

ONAY DURDU P., MUTLU A., ERAT K., Project Supported by Higher Education Institutions, MYO Kol Bandı ve Android Tabanlı Mobil Uygulama Kullanarak Türk İşaret Dili Çeviricisi Geliştirme, 2021 - 2023

Küçük K., Mutlu A., TUBITAK Project, Hiyerarşik Dokümanlarda Belge Parmak İzleri Temelli İlişkili Metin Arama Motoru, 2020 - 2021

ONAY DURDU P., ERAT K., MUTLU A., UZUN M., Project Supported by Higher Education Institutions, 2019-İNSAN BİLGİSAYAR ETKİLEŞİMİ LABORATUVARI, 2019 - 2020

Mutlu A., Karagöz P., TUBITAK Project, Çizge Veritabanı İçin Haber Odaklı Metin Ve Sosyal Ağ Verilerinden Bilgi Çıkarımı Amaçlı Çizge Madenciliği Kütüphanesi, 2018 - 2020

Metrics

Publication: 43
Citation (WoS): 134
Citation (Scopus): 167
H-Index (WoS): 4
H-Index (Scopus): 4

Non Academic Experience

Case Western Reserve University