

Asst. Prof. ALEV MUTLU

Personal Information

Email: alev.mutlu@kocaeli.edu.tr

Web: <https://www.ceng.metu.edu.tr/~mutlu>

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., 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

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **SkySlide: A Hybrid Method for Landslide Susceptibility Assessment based on Landslide-Occurring Data Only**
Mutlu A., Göz F.
Computer Journal, vol.0, no.0, 2020 (Journal Indexed in SCI Expanded)
- II. **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 (Journal Indexed in SCI)
- III. **Graph-Based Concept Discovery**
MUTLU A., KARAGÖZ P., Kavurucu Y.
ENCYCLOPEDIA OF INFORMATION SCIENCE AND TECHNOLOGY, 4TH EDITION, pp.1974-1983, 2018 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **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 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)
- VII. **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 (Journal Indexed in SCI)

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 (National Refreed University 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 (Journal Indexed in ESCI)
- III. **Landslide Susceptibility Assessment Using Skyline Operator And Majority Voting**
Mutlu A., Göz F., Koksakal K., Erenner A.
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.5, pp.782-787, 2019 (Refereed Journals of Other Institutions)
- IV. **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 (National Refreed University Journal)
- V. **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 (Refereed Journals of Other Institutions)

VI. 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 (Other Refereed National Journals)

VII. Yol Arkadasi Android tabanlı Sistemler Icin Bir Araba Imecesi Uygulaması

İlhan A., MUTLU A.

Selcuk Universitesi Muhendislik, Bilim ve Teknoloji Dergisi, vol.2, pp.16-25, 2014 (Other Refereed National Journals)

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. 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

II. 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

III. 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

IV. 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

V. Infuencee Oriented Topic Prediction: Investigating the Effect of Influence on the Author

Yükselen M., Mutlu A., Karagöz P.

M. Yukselen, A. Mutlu, P. Karagoz, "Infuencee 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

VI. Analysis of Ramer-Douglas-Peucker algorithm as a discretization method Ramer Douglas Peucker algoritmasının ayriklaştırma 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

VII. Learning Logical Definitions of n-ary Relations in Graph Databases

GÖZ F., MUTLU A.

he 13th International Conference on Hybrid Artificial Intelligence Systems, 20 - 22 June 2018

- VIII. **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
- IX. **WEKA VERİ MADENCİLİĞİ ARACI İÇİN KISMI-OTOMATİK ARFFGİRDİ OLUŞTURUCU**
ÖZCAN H., MUTLU A.
UMAS 2017, 11 - 13 September 2017, pp.25-26
- X. **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
- XI. **Concept Discovery in Graph Databases**
GÖZ F., MUTLU A.
International Conference on Hybrid Artificial Intelligence Systems, Spain, 21 - 23 June 2017
- XII. **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
- XIII. **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
- XIV. **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
- XV. **Scratch Programlama Ortamının Bilgisayar Muhendisligi Ogrencileri Tarafından Kabulü**
ARPACI İ., ONAY DURDU P., İncebacak D., MUTLU A.
10th Computers and Instructional Technologies Symposium (ICITS'16), Rize, Turkey, 16 - 18 May 2016
- XVI. **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
- XVII. **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
- XVIII. **UYMS Arastirma Egilimleri Bir Sistemantik 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
- XIX. **Uyms Arastirma Egilimleri: Bir Sistemantik Esleme Calismasi**
TURDALİEV N., BİLGİN B., DENİZ G., ONAY DURDU P., İNCEBACAK D., MUTLU A.
9. Ulusal Yazılım Mühendisliği Sempozyumu, İzmir, Turkey, 9 - 11 September 2015, vol.1483, pp.550-561
- 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 Simülâtörü 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., ERAT K., MUTLU A., UZUN M., Project Supported by Higher Education Institutions, 2019-İNSAN BİLGİSAYAR ETKİLEŞİMİ LABORATUVARI, 2019 - Continues

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

Citations

Total Citations (WOS):57

h-index (WOS):3