

## Prof. SEVİNÇ İLHAN OMURCA

### Personal Information

**Office Phone:** [+90 262 303 3572](tel:+902623033572)

**Email:** [silhan@kocaeli.edu.tr](mailto:silhan@kocaeli.edu.tr)

**Web:** <https://avesis.kocaeli.edu.tr/silhan>

### International Researcher IDs

ScholarID: VxU0ntkAAAAJ&hl=en

ORCID: 0000-0003-1214-9235

Publons / Web Of Science ResearcherID: F-7594-2018

ScopusID: 55014691600

Yoksis Researcher ID: 40220

### Education Information

Doctorate, Kocaeli University, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği Anabilim Dalı, Turkey 2004 - 2009

Postgraduate, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2001 - 2004

Undergraduate, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 1997 - 2001

### Dissertations

Doctorate, Küme Merkezlerinin Belirlenmesinde Yeni bir Yöntem (IFART), Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği Anabilim Dalı, 2009

Postgraduate, Bulanık Mantık Temelli Akıllı Bir Sorgulama Aracı, Kocaeli Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2004

### Research Areas

Knowledge Engineering, Computer Learning, Fuzzy Sets and Systems, Natural Language Processing, Text/Document Processing, Pattern Recognition and Image Processing, Neural Networks

### Academic Titles / Tasks

Associate Professor, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2016 - Continues

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2010 - 2016

Lecturer, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2004 - 2010

Research Assistant, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2001 - 2004

### Academic and Administrative Experience

Kocaeli Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2014 - Continues

Kocaeli Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2011 - 2014

## Courses

Olasılık ve Raslantı Değişkenleri, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Yazılım Laboratuvarı- II, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Artificial Intelligence, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Olasılık ve Raslantı Değişkenleri, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Artificial Intelligence, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Introduction to Data Mining, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Operating Systems, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Machine Learning, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Operating Systems, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Yazılım Laboratuvarı - I, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Introduction to Data Mining, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Text Mining, Doctorate, 2017 - 2018, 2016 - 2017

## Advising Theses

İlhan Omurca S., Görüntü başlıklama yöntemi ile ürün görüntülerine uygun başlıkların üretilmesi, Postgraduate, B.ATICI(Student), 2021  
İlhan Omurca S., Gizli dirichlet ayrımı ve Word2vec yöntemlerinin birleşimi ile özgün bir metin temsil modeli geliştirilmesi, Postgraduate, H.İBRAHİM(Student), 2020  
İlhan Omurca S., Babelnet ile zenginleştirilen twitter doküman uzayında duygu analizi için işbirlikçi model kurulması, Postgraduate, S.SEVİM(Student), 2019  
İlhan Omurca S., Dokümanların anlamsal benzerliklerine dayalı özgün bir konu modelleme yöntemi, Doctorate, E.EKİNCİ(Student), 2019  
İlhan Omurca S., Topluluk sınıflandırıcıları ve özellik seçme metotlarıyla geliştirilen uzay ormanları, Doctorate, Z.HİLAL(Student), 2018  
İlhan Omurca S., Büyük veride duygu analizine dayalı öneri sistemleri, Postgraduate, Y.YENGİ(Student), 2016

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

- I. **Application of machine learning algorithms and feature selection methods for better prediction of sludge production in a real advanced biological wastewater treatment plant**  
Ekinci E., ÖZBAY B., İLHAN OMURCA S., SAYIN F. E., ÖZBAY İ.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.348, 2023 (SCI-Expanded)
- II. **A document image classification system fusing deep and machine learning models**  
Omurca S. İ., Ekinci E., Sevim S., Edinç E. B., EKEN S., SAYAR A.  
Applied Intelligence, vol.53, no.12, pp.15295-15310, 2023 (SCI-Expanded)
- III. **Comparative assessment of modeling deep learning networks for modeling ground-level ozone concentrations of pandemic lock-down period**  
Ekinci E., İLHAN OMURCA S., ÖZBAY B.  
ECOLOGICAL MODELLING, vol.457, 2021 (SCI-Expanded)
- IV. **Concept-LDA: Incorporating Babelfy into LDA for aspect extraction**  
Ekinci E., İLHAN OMURCA S.  
Journal of Information Science, vol.46, no.3, pp.406-418, 2020 (SCI-Expanded)
- V. **Enhancement of the Heuristic Optimization Based on Extended Space Forests using Classifier**

## **Ensembles**

KİLİMCİ Z. H., İLHAN OMURCA S.

INTERNATIONAL ARAB JOURNAL OF INFORMATION TECHNOLOGY, vol.17, no.2, pp.188-195, 2020 (SCI-Expanded)

**VI. NET-LDA: a novel topic modeling method based on semantic document similarity**

Ekinci E., İLHAN OMURCA S.

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.28, no.4, pp.2244-2260, 2020 (SCI-Expanded)

**VII. A New Approach for A Domain-Independent Turkish Sentiment Seed Lexicon Compilation**

EKİNCİ E., İLHAN OMURCA S.

INTERNATIONAL ARAB JOURNAL OF INFORMATION TECHNOLOGY, no.16, 2018 (SCI-Expanded)

**VIII. Extended Feature Spaces Based Classifier Ensembles for Sentiment Analysis of Short Texts**

Kilimci Z. H., Omurca S.

INFORMATION TECHNOLOGY AND CONTROL, vol.47, no.3, pp.457-470, 2018 (SCI-Expanded)

**IX. A comparative study of production-inventory model for determining effective production quantity and safety stock level**

Keskin G. A., Omurca S., Aydin N., Ekinci E.

APPLIED MATHEMATICAL MODELLING, vol.39, no.20, pp.6359-6374, 2015 (SCI-Expanded)

**X. A Variant Perspective to Performance Appraisal System Fuzzy C Means Algorithm**

ÖZKAN C., AYDIN KESKİN G., İLHAN OMURCA S.

International Journal Of Industrial Engineering-Theory Applications And Practice, vol.21, pp.168-178, 2014 (SCI-Expanded)

**XI. An intelligent supplier evaluation, selection and development system**

Omurca S.

APPLIED SOFT COMPUTING, vol.13, no.1, pp.690-697, 2013 (SCI-Expanded)

**XII. Improved Fuzzy Art Method for Initializing K-means**

Ilhan S., DURU N., Adali E.

INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, vol.3, no.3, pp.274-279, 2010 (SCI-Expanded)

**XIII. The Fuzzy ART algorithm A categorization method for supplier evaluation and selection**

AYDIN KESKİN G., İLHAN OMURCA S., ÖZKAN C.

Expert Systems With Applications, vol.37, pp.1235-1240, 2010 (SCI-Expanded)

**XIV. A comparative study for crisp and fuzzy query by a software tool**

Ilhan S., Duru N.

SOFT COMPUTING, vol.11, no.2, pp.141-147, 2007 (SCI-Expanded)

**XV. Fuzzy logic based intelligent tool for databases**

Ilhan S., Duru N.

KNOWLEDGE-BASED INTELLIGENT INFORMATION AND ENGINEERING SYSTEMS, PT 2, PROCEEDINGS, vol.3682, pp.386-392, 2005 (SCI-Expanded)

## **Articles Published in Other Journals**

**I. Semantic Similarity Comparison Between Production Line Failures for Predictive Maintenance**

Tekgöz h., İLHAN OMURCA S., koç K. y., topçu u., Çelik O.

International Conference on Artificial Intelligence and Applied Mathematics in Engineering, vol.3, no.1, pp.1-12, 2023 (Peer-Reviewed Journal)

**II. An alternative word embedding approach for knowledge representation in online consumers' reviews**

EKİNCİ E., İLHAN OMURCA S.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.29, pp.220-229, 2023 (ESCI)

- III. **Multi-Class Document Image Classification using Deep Visual and Textual Features**  
Sevim S., Ekinci E., İLHAN OMURCA S., Edinc E. B., EKEN S., Erdem T., SAYAR A.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE AND APPLICATIONS, vol.21, no.02, 2022 (ESCI)
- IV. **Automatic Detection of the Topics in Customer Complaints with Artificial Intelligence**  
İLHAN OMURCA S., EKİNCİ E., yakupoğlu e., arslan e., çapar b.  
Balkan Journal of Electrical and Computer Engineering, vol.9, pp.268-277, 2021 (Peer-Reviewed Journal)
- V. **Classification of Chinese Number Patterns with Convolutional Neural Networks (CNN)**  
kayalı n. z., İLHAN OMURCA S.  
Journal of Computer Science, pp.184-191, 2021 (Peer-Reviewed Journal)
- VI. **Setting Reward Function of Sensor Based DDQN Model**  
kabataş M. G., İLHAN OMURCA S.  
Avrupa Bilim ve Teknoloji Dergisi, 2021 (Peer-Reviewed Journal)
- VII. **Improve offensive language detection with ensemble classifiers**  
Ekinci E., Omurca S., Sevim S.  
International Journal of Intelligent Systems and Applications in Engineering, vol.8, no.2, pp.109-115, 2020 (Scopus)
- VIII. **Tıp Veri Kümesi için Gizli Dirichlet Ayrımı**  
EKİNCİ E., İLHAN OMURCA S., Kırık E., taşçı ş.  
Deu Muhendislik Fakultesi Fen ve Muhendislik, vol.22, no.64, pp.67-80, 2020 (Peer-Reviewed Journal)
- IX. **Using Machine Learning Approaches for Prediction of the Types of Asthmatic Allergy across the Turkey**  
İLHAN OMURCA S., EKİNCİ E., Çakmak B., Özkan S. G.  
DATA SCIENCE AND APPLICATIONS, vol.2, no.2, pp.8-12, 2019 (Peer-Reviewed Journal)
- X. **An Aspect-Sentiment Pair Extraction Approach Based on Latent Dirichlet Allocation**  
EKİNCİ E., İLHAN OMURCA S.  
International Journal of Intelligent Systems and Applications in Engineering, vol.3, pp.209-213, 2018 (Peer-Reviewed Journal)
- XI. **The Impact of Enhanced Space Forests with Homogeneous Classifier Ensembles**  
KİLİMCİ Z. H., İLHAN OMURCA S.  
International Journal of Intelligent Systems and Applications in Engineering, 2018 (Peer-Reviewed Journal)
- XII. **An Ensemble Model using a BabelNet Enriched Document Space for Twitter Sentiment Classification**  
SEVİM S., İLHAN OMURCA S., EKİNCİ E.  
International Journal of Information Technology and Computer Science, vol.10, pp.24-31, 2018 (Peer-Reviewed Journal)
- XIII. **Ürün Özelliklerinin Konu Modelleme Yöntemi ile Çıkarılması**  
EKİNCİ E., İLHAN OMURCA S.  
Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi, vol.9, pp.51-58, 2017 (Peer-Reviewed Journal)
- XIV. **Design and Implementation of an Intelligent Mobile Game**  
EKİNCİ E., KAYA F., İLHAN OMURCA S.  
International Journal of Modern Education and Computer Science, vol.9, pp.10-16, 2017 (Scopus)
- XV. **Multi-word Aspect Term Extraction Using Turkish User Reviews**  
EKİNCİ E., TÜRKMEN H., İLHAN OMURCA S.  
International Journal of Computer Engineering and Information Technology, vol.9, pp.15-23, 2017 (Peer-Reviewed Journal)
- XVI. **Distributed Recommender Systems with Sentiment Analysis**  
Yengi Y., İLHAN OMURCA S.  
European Journal of Science and Technology, vol.4, no.7, pp.51-57, 2016 (Peer-Reviewed Journal)
- XVII. **An Aspect Based Sentiment Analysis on Turkish Hotel Reviews**  
TÜRKMEN H., İLHAN OMURCA S., EKİNCİ E.  
Girne American University Journal of Social and Applied Sciences, vol.6, pp.12-15, 2016 (Peer-Reviewed Journal)
- XVIII. **A Turkish Wikipedia Text Summarization System for Mobile Devices**  
Akif H., İLHAN OMURCA S.

International Journal of Information Technology and Computer Science, vol.8, no.1, pp.1-10, 2016 (Peer-Reviewed Journal)

**XIX. An Efficient Document Categorization Approach for Turkish Based Texts**

İLHAN OMURCA S., BAŞ S., EKİNCİ E.

INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS AND APPLICATIONS IN ENGINEERING, vol.3, no.1, pp.7-13, 2015 (Peer-Reviewed Journal)

**XX. Türkçe Metin Özetlemede Melez Modelleme**

Akif H., İLHAN OMURCA S.

DOKUZ EYLÜL ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ FEN VE MÜHENDİSLİK DERGİSİ, vol.17, no.50, pp.1-14, 2015 (Peer-Reviewed Journal)

**XXI. Lojistik Regresyonun Özellik Azaltma Teknikleri ile Gen Dizilimlerinin Sınıflandırılmasındaki Başarısı**

Yeliz Y., İLHAN OMURCA S.

Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi, vol.8, no.1, pp.1-12, 2015 (Peer-Reviewed Journal)

**XXII. Bulanık Mantık Temelli Esnek Sorgulama Aracı**

İLHAN OMURCA S., DURU N.

Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi, no.1, pp.53-60, 2005 (Peer-Reviewed Journal)

## Books & Book Chapters

**I. Defect Detection on Steel Surface with Deep Active Learning Methods on Fewer Data**

Gölcük B., İLHAN OMURCA S.

in: Engineering Cyber-Physical Systems and Critical Infrastructures, D.Jude Hemanth, Tuncay Yiğit, Utku Köse, Uğur Güvenç, Editor, Springer, pp.549-559, 2023

**II. Generating Classified Ad Product Image Titles with Image Captioning**

Atıcı B., İlhan Omurca S.

in: Lecture Notes on Data Engineering and Communications Technologies, Hemanth J., Yigit T., Patrut B., Angelopoulou A., Editor, Springer International Publishing, Dubendorf, pp.211-219, 2021

**III. A Novel Method for Extracting Feature Opinion Pairs for Turkish**

TÜRKMEN H., EKİNCİ E., İLHAN OMURCA S.

in: Lecture Notes in Artificial Intelligence, Dichev Christo, Agre Gennady, Editor, Springer International Publishing Switzerland, pp.162-171, 2016

**IV. A Novel Method for Extracting Feature Opinion Pairs for Turkish**

Turkmen H., EKİNCİ E., İLHAN OMURCA S.

in: Artificial Intelligence Methodology Systems and Applications, Christo Dichev, Gennady Agre, Editor, Springer International Publishing, pp.162-171, 2016

**V. Computer Simulation, Applications of Fuzzy Logic**

İLHAN OMURCA S., DURU N.

in: PROCEEDING OF THE IV<sup>th</sup> INTERNATIONAL WORKSHOP ON APPLICATIONS OF WAVELETS TO REAL WORLD PROBLEMS, A. Hasan Siddiqi, Zafer Aslan, Nil Pembe Özer, Funda Dökmen, Nevcihan Duru, Hülya Kodal Sevindir, Editor, Kocaeli University, Ihsaniye Vocational School, pp.152-159, 2009

## Refereed Congress / Symposium Publications in Proceedings

**I. Generating Image Captions Using Deep Neural Networks**

Ertuğrul M. A. C., İlhan Omurca S.

IEEE - UBMK-2023 VIII. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, Burdur, Turkey, 13 - 15 September 2023, pp.1-5

**II. Offensive Language Detection in Social Media for Turkish Language**

acar a. n., İLHAN OMURCA S.

IEEE - UBMK-2023 VIII. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, 13 September 2023

III. **Defect Detection on Steel Surface With Deep Active Learning Method on Fewer Data**

Gölcük B., İLHAN OMURCA S.

ICAAME 2022, 20 May 2022

IV. **Semantic Similarity Comparison of Production Line Failure Explanations In the Field of Predictive Maintenance**

Tekgöz H., Koç K. Y., İLHAN OMURCA S., Topçu U., Çelik o.

ICAAME 2022, 20 May 2022

V. **AĞ TRAFİĞİNİN MAKİNE ÖĞRENMESİ YÖNTEMLERİ İLE SINIFLANDIRILMASI**

GENÇTÜRK T. H., Vatansever Y., İLHAN OMURCA S., KAYA GÜLAĞIZ F.

International Informatics Congress (IIC2022), Batman, Turkey, 17 February 2022, pp.531-540

VI. **Estimation of Remaining Useful Life Based on Time Series Analysis**

Tekgoz H., Omurca S. I., Koc K. Y.

7th International Conference on Computer Science and Engineering, UBMK 2022, Diyarbakır, Turkey, 14 - 16 September 2022, pp.273-277

VII. **Document Image Classification with Vision Transformers**

Sevim S., Omurca S. İ., Ekinci E.

1st International Congress of Electrical and Computer Engineering, ICECENG 2022, Bandırma, Turkey, 9 - 12 February 2022, vol.436 LNICST, pp.68-81

VIII. **Setting Reward Function of Sensor Based DDQN Model**

Kabataş M. G., İlhan Omurca S.

International Conference on Applied Engineering and Natural Sciences ICAENS 2021, Konya, Turkey, 1 - 03 November 2021, pp.1

IX. **Semantic Similarity Comparison of Word Representation Methods in the Field of Health**

Tekgöz H., Çelenli H. İ., İlhan Omurca S.

UBMK 2021 (6. Uluslararası Bilgisayar Mühendisliği Konferansı) , 15 - 17 September 2021, pp.1

X. **Comparative Analysis of Offline Recommendation Systems with Machine Learning Algorithms**

Çelik E., İlhan Omurca S.

Global Conference on Engineering Research (GLOBECER'21), 2 - 05 June 2021, pp.649-659

XI. **Generating Classified Ad Product Image Titles with Image Captioning**

Atıcı B., İlhan Omurca S.

International Conference on Artificial Intelligence and Applied Mathematics, Antalya, Turkey, 9 - 11 October 2020, pp.1

XII. **Dijital Dokümanların Anahtar Kelime Tabanlı Doğrulanması**

şahin s., ardıç s., erdem t., gültekin a., EKİNCİ E., EKEN S., İLHAN OMURCA S., SAYAR A.

6. Ulusal Yüksek Başarımlı Hesaplama Konferansı, Turkey, 8 - 09 October 2020

XIII. **Co-training ile Çoklu Görünümlü Doküman Sınıflandırma**

SEVİM S., EKİNCİ E., İLHAN OMURCA S.

SIU 2020 - 28. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 5 - 07 October 2020

XIV. **Emotion Recognition with Wavelet Transforms from EEG Signals**

ÇELİK E., ONAY DURDU P., İLHAN OMURCA S.

INTERNATIONALINFORMATICSandSOFTWARE ENGINEERINGCONFERENCE, 6 - 07 November 2019, pp.480-483

XV. **Using Machine Learning Techniques to Predict the Type of Asthmatic Allergy**

İLHAN OMURCA S., EKİNCİ E., çakmak b., Özkan S. G.

The 2nd International Conference on Data Science and Applications, 3 - 06 October 2019, pp.50

XVI. **Improving Parkinson's Disease Diagnosis with Machine Learning Methods**

Celik E., Omurca S.

International Scientific Meeting on Electrical-Electronics and Biomedical Engineering and Computer Science (EBBT), İstanbul, Turkey, 24 - 26 April 2019

XVII. **The Impact of Extended Space Forests with Heterogeneous Classifier Ensembles on Turkish Texts**

Kilimci Z. H., Akyokus S., İlhan Omurca S.

Elektrik-Elektronik ve Biyomedikal Mühendisliği Konferansı, Bursa, Turkey, 29 November - 01 December 2018, pp.1-6

- XVIII. **Babely-Based Extraction of Collocations from Turkish Hotel Reviews**  
EKİNCİ E., İLHAN OMURCA S.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), Malatya, Turkey, 28 - 30 September 2018
- XIX. **Using Adjusted Laplace Smoothing to Extract Implicit Aspects from Turkish Hotel Reviews**  
Omurca S., Ekinci E.  
2018 IEEE International Conference on Innovations in Intelligent Systems and Applications, INISTA 2018, Thessaloniki, Greece, 3 - 05 July 2018
- XX. **A Comparative Study on Machine Learning Techniques Using Titanic Dataset**  
EKİNCİ E., İLHAN OMURCA S., ACUN N.  
7th International Conference on Advanced Technologies, Antalya, Turkey, 28 April - 01 May 2018
- XXI. **Using Adjusted Laplace Smoothing to Extract Implicit Aspects from Turkish Hotel Reviews**  
Omurca S., Ekinci E.  
IEEE (SMC) International Conference on Innovations in Intelligent Systems and Applications (INISTA), Thessaloniki, Greece, 3 - 05 July 2018
- XXII. **Determining Multi Word Aspects by Using Apriori Algorithm and Syntactic Rules for Turkish Hotel Reviews**  
EKİNCİ E., TÜRKMEN H., İLHAN OMURCA S.  
8th Language Technology Conference: Human Language Technologies as a Challenge for Computer Science and Linguistics, Poznan, Poland, 17 - 19 November 2017
- XXIII. **A Comparison of Extended Space Forests for Classifier Ensembles on Short Turkish Texts**  
Kilimci Z. H., İlhan Omurca S.  
International Academic Conference on Engineering, IT and Artificial Intelligence, Praha, Czech Republic, 11 - 14 August 2017, pp.96-104
- XXIV. **Extended space forests with homogeneous classifier ensembles using heuristic optimization techniques for Biomedicine Dataset**  
Kilimci Z. H., İlhan Omurca S.  
World Conference on Innovation and Computer Science , Priştine, Kosova, 20 April 2017 - 22 April 2020, pp.1
- XXV. **Improvement of the Extended Space Forest with Homogeneous Classifier Ensembles using AntColony Optimization for Biomedicine Datasets**  
KİLİMCİ Z. H., İLHAN OMURCA S.  
7th WORLD CONFERENCE on INNOVATION and COMPUTER SCIENCE (INSODE-2017), 20 - 22 April 2017
- XXVI. **Extracting Implicit Aspects based on Latent Dirichlet Allocation**  
EKİNCİ E., İLHAN OMURCA S.  
9th International Conference on Agents and Artificial Intelligence, Porto, Portugal, 24 - 26 February 2017
- XXVII. **An Annotated Corpus for Turkish Sentiment Analysis at Sentence Level**  
Omurca S., Ekinci E., Turkmen H.  
2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017
- XXVIII. **Product Aspect Detection in Customer Complaints by Using Latent Dirichlet Allocation**  
ATICI B., Omurca S., Ekinci E.  
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.250-254
- XXIX. **The Evaluation of Heterogeneous Classifier Ensembles for Turkish Texts**  
Kilimci Z. H., Akyokus S., Omurca S.  
IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Gdynia, Poland, 3 - 05 July 2017, pp.307-311
- XXX. **Yazılım Projelerinde Başarı Anahtarı Efor Tahmini**

bilgin b., DURU N., İLHAN OMURCA S.

Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, 20 - 23 October 2016

**XXXI. Success Key in Software Projects Effort Estimation**

bilgin b., DURU N., İLHAN OMURCA S.

UBMK 2016, 20 - 23 October 2016

**XXXII. Multi word Aspect Extraction from User Reviews**

EKİNCİ E., TÜRKMEN H., İLHAN OMURCA S.

6th WORLD CONFERENCE on INNOVATION and COMPUTER SCIENCE (INSODE-2016), Antalya, Turkey, 12 - 14 May 2016

**XXXIII. The Effectiveness of Homogenous Ensemble Classifiers for Turkish and English Texts**

Kilimci Z. H., Akyokus S., Omurca S.

International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Sinaia, Romania, 2 - 05 August 2016

**XXXIV. A Novel Method for Extracting Feature Opinion Pairs for Turkish**

Turkmen H., Ekinci E., Omurca S.

17th International Conference on Artificial Intelligence - Methodology, Systems and Applications (AIMSA), Varna, Bulgaria, 7 - 10 September 2016, vol.9883, pp.162-171

**XXXV. An Alternative Method for Sentiment Classification with Expectation Maximization and Priority Aging**

yeliz y., karayel m., İLHAN OMURCA S.

The Third International Symposium on Engineering, Artificial Intelligence and Applications, 4 - 06 November 2015

**XXXVI. An Alternative Evaluation of Post Traumatic Stress Disorder with Machine Learning Methods**

Omurca S., Ekinci E.

International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2015), Madrid, Spain, 2 - 04 September 2015, pp.231-237

**XXXVII. An Empirical Study for Turkish Sentiment Analysis by Machine Learning Methods**

Hazal T., İLHAN OMURCA S.

International Conference on Advanced Technology & Sciences, Turkey, 12 - 15 August 2014

**XXXVIII. Decreasing Iteration Number of K medoids Algorithm with IFART**

İLHAN OMURCA S., DURU N.

International Conference on Electrical and Electronics Engineering, Turkey, 1 - 04 December 2011

**XXXIX. An Improved Method for Fuzzy Clustering**

Ilhan S., DURU N.

5th International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control, Famagusta, CYPRUS, 2 - 04 September 2009, pp.188-191

**XL. Improved Fuzzy Art and Rough Sets: A Hybrid Solution to Characterize Clustered Data**

İLHAN OMURCA S., DURU N.

INISTA 2009 Proceeding Book, International Symposium on Innovations in Intelligent Systems and Applications, (2009), 02 September 2009

**XLI. Improved Fuzzy Arts for Clustering Patterns**

İLHAN OMURCA S., DURU N.

PROCEEDING BOOK, 4th. INTERNATIONAL WORKSHOP "ON APPLICATIONS OF WAVELETS TO REAL WORLD PROBLEMS", IWW 2009, 02 September 2009

**XLII. Improved Fuzzy Art and Rough Sets A Hybrid Solution to Characterize Clustered Data**

İLHAN OMURCA S., DURU N.

International Symposium on Innovations in Intelligent Systems and Applications, Turkey, 29 June - 01 July 2009

**XLIII. Metin Madenciliği ile Soru Cevaplama Sistemi**

İLHAN OMURCA S., DURU N., Şenol K., Sağır M.

ELEKTRİK - ELEKTRONİK ve BİLGİSAYAR MÜHENDİSLİĞİ SEMPOZYUMU, Turkey, 26 - 30 November 2008

**XLIV. Fuzzy Art Algoritması İle Etkin Bir Kümeleme Analizi**

İLHAN OMURCA S., DURU N.

Bilimde Modern Yöntemler Sempozyumu, Turkey, 15 - 17 October 2008, vol.1, pp.273-280

- XLV. **An Alternative Method FOR Cell Formation Fuzzy Art**  
AYDIN KESKİN G., İLHAN OMURCA S., ÖZKAN C.  
Operations Research, Germany, 5 - 07 September 2007
- XLVI. **A Scholarship Evaluation Application Based on Decision Tree Induction**  
İLHAN OMURCA S., DURU N.  
International Symposium on INnovations in Intelligent SysTems and Applications, 15 - 18 June 2005
- XLVII. **Birliktelik Kurallarının Yapay Sinir Ağı Eğitiminde Kullanılması**  
ŞAHİN S., İLHAN OMURCA S., AKTAŞ K.  
Bilimde Modern Yöntemler Sempozyumu, Turkey, 01 June 2005, pp.972-979
- XLVIII. **Öğrenci Başarısının Değerlendirilmesinde Kullanılacak Akıllı BirSorgulama Aracı**  
İLHAN OMURCA S., DURU N.  
Akıllı Sistemlerde Yenilikler ve UygulamalarıSempozyumu, İstanbul, Turkey, 23 - 25 June 2004

## Supported Projects

İLHAN OMURCA S., ŞAHİN S., KİLİMCİ Z. H., Sevim S., Project Supported by Higher Education Institutions, Doküman Benzerliklerinin Proje-Hakem Eşleşmesi için Değerlendirilmesi, 2022 - 2023

İLHAN OMURCA S., KORKMAZ ERDEM G., ŞAHİN S., KURT PEHLİVANOĞLU M., KAYA GÜLAĞIZ F., EKER A. G., Project Supported by Higher Education Institutions, Beyin tümör ameliyatları sırasında hekime yardımcı bir sistem geliştirmek amacıyla Beyin Ultrason Görüntülerinde Tümör Segmentasyonu Gerçekleştirme, 2022 - 2023

ŞAHİN S., AKBULUT O., KAYA GÜLAĞIZ F., ÖZCAN H., ALTUNCU M. A., İLKİN S., İNNER A. B., İLHAN OMURCA S., Project Supported by Higher Education Institutions, TIBBİ GÖRÜNTÜLERDE GÜVENLİ VERİ PAYLAŞIMI AMACIYLA HİBRİT BİR YÖNTEM GELİŞTİRİLMESİ, 2020 - 2021

İLHAN OMURCA S., SAYAR A., GÜLTEKİN A., EKİNCİ E., EKEN S., Project Supported by Higher Education Institutions, KOÜDOS Farklı Programlara Yapılan Başvuru Dosyalarının Doğrulanması, 2020 - 2021

İLHAN OMURCA S., BECERİKLİ Y., DURU N., GÜN A., ŞAHİN S., Project Supported by Higher Education Institutions, 2019-Akıllı Sistemler Laboratuvarı, 2019 - 2020

İlhan Omurca S., TUBİTAK Project, Ürünlerin Zayıf Özelliklerinin Türkçe Kullanıcı Yorumlarından Özellik Tabanlı Sentiment Analizi ile Kesfedilmesi, 2015 - 2018

ŞAHİN S., İNNER A. B., GÖK O., KAYA GÜLAĞIZ F., ÖZCAN H., GÖZ F., İLHAN OMURCA S., Project Supported by Higher Education Institutions, KOÜ ARAŞTIRMA HASTANESİ HASTA DOSYALARI DİJİTAL ARŞİVLEME VE TAKİP SİSTEMİ, 2015 - 2016

İLHAN OMURCA S., Project Supported by Higher Education Institutions, Etkin Üretim Miktarı ve Emniyet Stoğu Seviyesinin Belirlenmesinde Kullanılacak Yeni Bir Yöntem, 2011 - 2013

İlhan Omurca S., Project Supported by Higher Education Institutions, ETKİN ÜRETİM MİKTARI VE EMNİYET STOĞU SEVİYESİNİN BELİRLENMESİNDE KULLANILACAK YENİ BİR YÖNTEM, 2011 - 2013

## Scientific Refereeing

TUBİTAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, July 2023

TUBİTAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, June 2023

TUBİTAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, June 2023

TUBİTAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, TÜBİTAK, Turkey, June 2023

TUBİTAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, TÜBİTAK, Turkey, June 2023

TUBİTAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, May 2023

TUBİTAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, December 2022

TUBİTAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Kocaeli University,

Turkey, November 2022

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, October 2022

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, October 2022

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, October 2022

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, July 2022

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, TÜBİTAK, Turkey, May 2022

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, TÜBİTAK, Turkey, May 2022

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, April 2022

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2022

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, April 2022

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Kocaeli University, Turkey, November 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, October 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, October 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, September 2021

TUBITAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, TÜBİTAK, Turkey, July 2021

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, May 2021

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, TÜBİTAK, Turkey, May 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, May 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2021

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, May 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, May 2020

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, April 2020

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, March 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, February 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, February 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, February 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, January 2020

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, November 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, November 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, August 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, July 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, March 2019

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, October 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, October 2018

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, September 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, September 2018

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, August 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, April 2018

TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, March 2018

TUBITAK Project, 1511 - TUBITAK Priority Fields Research Technology Development and Innovation PDP, TÜBİTAK, Turkey, March 2018

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, November 2017

TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, July 2017

TUBITAK Project, 1511 - TUBITAK Priority Fields Research Technology Development and Innovation PDP, TÜBİTAK, Turkey, July 2017  
TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, July 2017  
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Tübitak, Turkey, May 2017  
TUBITAK Project, 1501 - Industry R & D Projects Support Program, TÜBİTAK, Turkey, May 2017  
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, TÜBİTAK, Turkey, January 2015

## Scientific Consultations

IPera Teknoloji Çözümleri Yazılım Araşt. Gelişt. San. Tic. A.Ş. , Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2023 - Continues  
Golive Yazılım Hizmetleri A.Ş., Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2023 - Continues  
Tübitak, Project Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2021 - Continues  
Dataport Bilgi İşlem Çözümleri San. ve Tic. A.Ş., Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2023 - 2023  
YSM Yazılım Ve Bilişim Tek. San. Ve Tic. Ltd. Şti, Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2022 - 2023  
KOU TTO A.Ş., Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2021 - 2023  
Argelabs Bilişim Teknolojileri San. ve Tic. Ltd. Şti., Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2021 - 2021  
CMS Teknoloji Bora Tayfun Şahinoğlu Burak Kır ve Ort.Koll. Şti., Scientific Consultancy, Kocaeli University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey, 2020 - 2020

## Metrics

Publication: 91  
Citation (WoS): 274  
Citation (Scopus): 377  
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H-Index (Scopus): 8

## Non Academic Experience

IBSS Danışmanlık Bilgisayar ve Eğitim Hizmetleri San. ve Tic. Ltd. Şti.  
Argelabs Bilişim Teknolojileri San. ve Tic. Ltd. Şti.  
CMS Teknoloji Bora Tayfun Şahinoğlu Burak Kır ve Ort.Koll. Şti.