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Education Information

2008 - 2013	Doctorate, Yildiz Technical University, Faculty Of Electrical & Electronics, Computer Engineering, Turkey

Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing, Engineering and Technology

Academic Titles / Tasks

2019 - Continues	Assistant Professor, Yildiz Technical University, Bilgisayar Mühendisliği

Published journal articles indexed by SCI, SSCI, and AHCI

I. **A novel two-staged deep learning based workflow for analyzable metaphase detection**
Turkmen H. İ.
Multimedia Tools and Applications, vol.83, no.17, pp.52305-52333, 2024 (SCI-Expanded)

II. **Traffic Characteristics of Short and Long Public Holidays: A Hybrid Holiday-Oriented Speed Prediction Approach via Feature Engineering**
Atilgan I., Turkmen H. İ., GÜVENSAN M. A.
IEEE Sensors Journal, vol.23, no.20, pp.25016-25025, 2023 (SCI-Expanded)

III. **Long-term traffic flow estimation: a hybrid approach using location-based traffic characteristic**
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TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.3, pp.562-578, 2022 (SCI-Expanded)

IV. **Advanced computing solutions for analysis of laryngeal disorders.**
Turkmen H. İ., Karsligil M. E.
Medical & biological engineering & computing, vol.57, pp.2535-2552, 2019 (SCI-Expanded)

V. **Visible Vessels of Vocal Folds: Can They Have a Diagnostic Role?**
Turkmen H. İ., Karsligil M. E., Kocak I.
CURRENT MEDICAL IMAGING, vol.15, no.8, pp.785-795, 2019 (SCI-Expanded)

VI. **A Novel Segment-Based Approach for Improving Classification Performance of Transport Mode Detection**
GÜVENSAN M. A., DUSUN B., CAN B., TURKMEN H. İ.
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VII. **Superpixel-based segmentation of glottal area from videolaryngoscopy images**

Turkmen H. İ., Albayrak A., Karsligil M. E., Kocak I.

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VIII. **An Energy-Efficient Multi-Tier Architecture for Fall Detection on Smartphones**

GÜVENSAN M. A., KANSIZ A. O., Camgoz N. C., TURKMEN H. İ., YAVUZ A. G., KARSLIGIL M. E.

SENSORS, vol.17, no.7, 2017 (SCI-Expanded)

IX. **Classification of laryngeal disorders based on shape and vascular defects of vocal folds**

Turkmen H. İ., Karslıgıl M. E., Koçak I.

COMPUTERS IN BIOLOGY AND MEDICINE, vol.62, pp.76-85, 2015 (SCI-Expanded)

X. **Dysphonic Speech Reconstruction : Construction of a Novel System for Effective and Efficient Communication**

TÜRKMEN ÇİLİNGİR H. İ., KARSLIGİL YAVUZ M. E.

IEEE ENGINEERING IN MEDICINE AND BIOLOGY MAGAZINE, vol.1, pp.135-138, 2010 (SCI-Expanded)

Articles Published in Other Journals

I. **Battery-friendly tiny models for activity recognition on energyconstrained devices**

Akkiraz C., TÜRKMEN ÇİLİNGİR H. İ., GÜVENSAN M. A., CAN B.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.41, no.4, pp.716-728, 2023 (ESCI)

II. **Süper Piksel Tabanlı Otomatik Kanlı Bölge Tespit Sistemi**

Dursun Ö. F., Türkmen Çilingir H. İ.

International journal of advances in engineering and pure sciences (Online), vol.33, no.1, pp.28-38, 2021 (Peer-Reviewed Journal)

III. **MARKOV MODEL TABANLI ÇİFT ENSTRUMANLI MÜZİK BESTELEME**

Türkmen Çilingir H. İ.

Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.4, pp.1236-1247, 2020 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Linear Discriminant Analysis in Ottoman Alphabet Character Recognition**

KURT Z., TÜRKMEN ÇİLİNGİR H. İ., KARSLIGİL YAVUZ M. E.

in: Lecture Notes in Electrical Engineering: Proceedings of the European Computing Conference 2007, Mastorakis N., Mladenov V., Kontargyri V. , Editor, Springer-Verlag , Atina, pp.601-607, 2009

Refereed Congress / Symposium Publications in Proceedings

I. **A Weather Oriented Pre-Tuning Methodology For Long-term Traffic Speed Estimation**

Güvensan M. A., Türkmen Çilingir H. İ., Bilgin E.

4th IEEE International Workshop on Smart Computing for Smart Cities in conjunction with IEEE WoWMoM 2023, Massachusetts, United States Of America, 12 - 15 June 2023, pp.1-4

II. **Towards Accurate Traffic Accident Detection: Developing Deep Learning Strategies with Distant Past, Recent Past, and Adjacency Features**

Atilgan I., TÜRKMEN ÇİLİNGİR H. İ., GÜVENSAN M. A.

26th IEEE International Conference on Intelligent Transportation Systems, ITSC 2023, Bilbao, Spain, 24 - 28 September 2023, pp.6120-6125

III. **Towards Accurate Traffic Accident Detection: Developing Deep Learning Strategies with Distant Past, Recent Past, and Adjacency Features**

Atilgan I., TÜRKMEN ÇİLİNGİR H. İ., GÜVENSAN M. A.

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IV. **Long-term Traffic Speed Estimation via Regression using Weekly Day Patterns**
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2019 Innovations in Intelligent Systems and Applications Conference (ASYU), Izmir, Turkey, Turkey, 31 October - 02 November 2019

V. **Selection of Time Domain Features for Fall Detection Based on Supervised Learning**
KANSİZ A. O., GÜVENSAN M. A., TÜRKMEN ÇİLİNGİR H. İ.
Proceedings of the World Congress on Engineering and Computer Science, San Francisco, CA, USA. 2013, San-Francisco, United States Of America, 23 - 25 October 2013, vol.2, pp.23-25

VI. **CLASSIFICATION OF VOCAL FOLD NODULES AND CYSTS BASED ON VASCULAR DEFECTS OF VOCAL FOLDS**
Turkmen H. İ., Karsligil M. E., Koçak I.
23rd IEEE International Workshop on Machine Learning for Signal Processing (MLSP), Southampton, United Kingdom, 22 - 25 September 2013

VII. **Videolaringostroboskopi Görüntülerinden Ses Teli Üzerindeki Damarların Otomatik Olarak Belirlenmesi**
TÜRKMEN ÇİLİNGİR H. İ.
Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 01 April 2012

VIII. **Assessment of Videolaryngostroboscopy Images Based on Visible Vessels Of Vocal Folds**
Turkmen H. İ., Karsligil M. E., Koçak I.
34th Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBS), California, United States Of America, 28 August - 01 September 2012, pp.6251-6254

IX. **Konuşma Dili Kullanarak Demografi Bilgilerin Sınıflandırılması**
TÜRKMEN ÇİLİNGİR H. İ., DİRİ B., BİRİCİK G., DOĞAN R.
IEEE 19. Sinyal İşleme ve Uygulama Kurultayı, Antalya, Turkey, 20 April 2011, pp.1-5

X. **Akustik ve Sismik Sinyallerinden Araç Tanıma**
Türkmen H., SARI T., Karslıgil M., Yavuz A.
SİU, 01 April 2010

XI. **Disfonik Konuşmanın Yeniden Yapılandırılarak Normal Konuşma Elde Edilmesi**
TÜRKMEN ÇİLİNGİR H. İ.
Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 01 April 2009

XII. **Reconstruction of Dysphonic Speech by MELP**
TÜRKMEN ÇİLİNGİR H. İ., KARSLIGİL YAVUZ M. E.
13th Iberoamerican Congress on Pattern Recognition: Progress in Pattern Recognition, Image Analysis and Applications - 2008, Havana, Cuba, 09 September 2008, pp.767-774

XIII. **Karma Uyarımlı Doğrusal Öngörüm Kodlaması Tabanlı Fısıltılı Konuşmadan Normal Konuşma Elde Etme Sistemi**
TÜRKMEN ÇİLİNGİR H. İ.
Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 01 April 2008

XIV. **Global Feature Based Female facial Beauty Decision System**
TÜRKMEN ÇİLİNGİR H. İ., KURT Z., KARSLIGİL YAVUZ M. E.
The 15th European Signal Processing Conference - 2007, Poznan, Poland, 03 September 2007, pp.1945-1949

XV. **Linear Discriminant Analysis in Ottoman Alphabet Character Recognition**
KURT Z., Turkmen H. I., Karsligil M. E.
European Computer Conference-ECC, (Lecture Notes in Electrical Engineering, 2009), 01 September 2007

XVI. **A Database of Non Manual Signs in Turkish Sign Language**
ARAN O., ARİ İ., GÜVENSAN M. A., Haberdar H., KURT YAVUZ Z., TÜRKMEN ÇİLİNGİR H. İ., UYAR A., AKARUN ERSOY L.
Signal Processing and Communications Applications, 2007. SIU 2007. IEEE 15th, Turkey, 11 - 13 June 2007

XVII. **Türk İşaret Dili Yüz İfadesi ve Baş Hareketi Veritabanı**
Arı İ., Güvensan A., Haberdar H., KURT Z., Türkmen İ., Uyar A., Akarun L.
Sinyal İşleme Uygulamaları (SİU), 01 June 2007

XVIII. **Türk İşaret Diline Yönelik Yüz İfadesi ve Kafa Hareketi Tanıma Sistemi**
KURT Z., Uyar A., Türkmen H. İ.
Sinyal İşleme Uygulamaları (SİU), 01 June 2007

XIX. **DAA Yöntemi ile Osmanlıca Karakter Tanıma**
KURT Z., Türkmen H. İ., Karslıgil M. E.
Sinyal İşleme Uygulamaları (SİU), 01 June 2007

Supported Projects

2021 - 2023	Uzun Vadeli Trafik Akış Hızı Tahmini için Çoklu Özellik Uzayı Tabanlı Bir Modelin Oluşturulması ve Gerçeklenmesi, TUBITAK Project
2018 - 2020	Akıllı Telefonlar ve Akıllı Saatler İçin Ev İçi Ses Tanıma Uygulaması, TUBITAK Project
2013 - 2016	Akıllı Telefon Yardımı İle Günlük Aktivitelerin Takip Edilmesi Ve Kaza Tespiti Yapılması, Project Supported by Higher Education Institutions
2011 - 2013	Ses Teli Damar ve Şekil Özelliklerini Değerlendirerek Ses Teli Patolojilerinin Sınıflandırılması, Project Supported by Higher Education Institutions

Patent

2024	Güvensan M. A., Kara M. M., Türkmen Çilingir H. I., Bilgin E., Usta M., Atılgan I., Çoklu Esnek Model Ağı ile Uzun Vadeli Trafik Akış Hızı Tahmin Sistemi ve Yöntemi, Patent, CHAPTER B Implementation of Operations; Transport, Standard Registration, 2024

Metrics

Publication: 33
Citation (WoS): 57
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