

## Prof. Dr. ZEKERİYA TÜFEKÇİ

### Kişisel Bilgiler

İş Telefonu: [+90 322 338 7101](tel:+903223387101) Dahili: 2663

E-posta: [ztufekci@cu.edu.tr](mailto:ztufekci@cu.edu.tr)

Web: <https://avesis.cu.edu.tr//ztufekci>

Posta Adresi: Çukurova Üniversitesi Bilgisayar Mühendisliği Bölümü Balcalı-SARIÇAM/ADANA

### Uluslararası Araştırmacı ID'leri

ORCID: 0000-0001-7835-2741

Publons / Web Of Science ResearcherID: G-4701-2018

Yoksis Araştırmacı ID: 132910

### Eğitim Bilgileri

Doktora, Clemson University, Yabancı Diller Yüksekokulu, Electrical Engineering, Amerika Birleşik Devletleri 1996 - 2001

Yüksek Lisans, Clemson University, Yabancı Diller Yüksekokulu, Electrical Engineering, Amerika Birleşik Devletleri 1994 - 1996

Lisans, Hacettepe Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik, Türkiye 1982 - 1987

### Yabancı Diller

İngilizce, B2 Orta Üstü

### Yaptığı Tezler

Doktora, Local Feature Extraction for Robust Speech Recognition in the presence of Noise, Clemson University, Faculty Of Engineering, Electrical Engineering, 2001

### Araştırma Alanları

Bilgi Sistemleri, Haberleşme ve Kontrol Mühendisliği, Sinyal İşleme, Konuşma Analizi ve İşleme Teknikleri , Sinyal İşleme Kuramı ve Metotları, Mühendislik ve Teknoloji

### Akademik Unvanlar / Görevler

Doç. Dr., Çukurova Üniversitesi, Mühendislik Mimarlık Fakültesi, Bilgisayar Mühendisliği, 2011 - Devam Ediyor

### Akademik İdari Deneyim

Çukurova Üniversitesi, Mühendislik Mimarlık Fakültesi, Bilgisayar Mühendisliği, 2013 - Devam Ediyor

## Yönetilen Tezler

TÜFEKÇİ Z., Noise Robust Speech Recognition Using Parallel Model Compensation and Voice Activity Detection Methods, Yüksek Lisans, S.HIZLISOY(Öğrenci), 2015

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Feature-based hybrid strategies for gradient descent optimization in end-to-end speech recognition**  
Dokuz Y., TÜFEKÇİ Z.  
MULTIMEDIA TOOLS AND APPLICATIONS, cilt.81, sa.7, ss.9969-9988, 2022 (SCI-Expanded)
- II. **Mini-batch sample selection strategies for deep learning based speech recognition**  
Dokuz Y., TÜFEKÇİ Z.  
APPLIED ACOUSTICS, cilt.171, 2021 (SCI-Expanded)
- III. **Scale-invariant MFCCs for speech/speaker recognition**  
TÜFEKÇİ Z., Disken G.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.27, sa.5, ss.3758-3762, 2019 (SCI-Expanded)
- IV. **A robust polynomial regression-based voice activity detector for speaker verification**  
DISKEN G., TÜFEKÇİ Z., ÇEVİK U.  
EURASIP JOURNAL ON AUDIO SPEECH AND MUSIC PROCESSING, 2017 (SCI-Expanded)
- V. **A Review on Feature Extraction for Speaker Recognition under Degraded Conditions**  
DISKEN G., TÜFEKÇİ Z., SARIBULUT L., ÇEVİK U.  
IETE TECHNICAL REVIEW, cilt.34, sa.3, ss.321-332, 2017 (SCI-Expanded)
- VI. **Speaker Model Clustering to Construct Background Models for Speaker Verification**  
DISKEN G., TÜFEKÇİ Z., ÇEVİK U.  
ARCHIVES OF ACOUSTICS, cilt.42, sa.1, ss.127-135, 2017 (SCI-Expanded)
- VII. **Convolutional bias removal based on normalizing the-filterbank spectral magnitude**  
Tufekci Z.  
IEEE SIGNAL PROCESSING LETTERS, cilt.14, sa.7, ss.485-488, 2007 (SCI-Expanded)
- VIII. **Applied mel-frequency discrete wavelet coefficients and parallel model compensation for noise-robust speech recognition**  
Tufekci Z., Gowdy J. N., Gurbuz S., Patterson E.  
SPEECH COMMUNICATION, cilt.48, sa.10, ss.1294-1307, 2006 (SCI-Expanded)
- IX. **Moving-talker, speaker-independent feature study, and baseline results using the WAVE Multimodal speech corpus**  
Patterson E., Gurbuz S., Tufekci Z., Gowdy J.  
EURASIP JOURNAL ON APPLIED SIGNAL PROCESSING, cilt.2002, sa.11, ss.1189-1201, 2002 (SCI-Expanded)
- X. **Affine-invariant visual features contain supplementary information to enhance speech recognition**  
Gurbuz S., Patterson E., Tufekci Z., Gowdy J.  
AUDIO- AND VIDEO-BASED BIOMETRIC PERSON AUTHENTICATION, PROCEEDINGS, cilt.2091, ss.175-181, 2001 (SCI-Expanded)

## Diğer Dergilerde Yayınlanan Makaleler

- I. **Noise-Robust Spoofed Speech Detection Using Discriminative Autoencoder**  
Dişken G., TÜFEKÇİ Z.  
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, cilt.19, sa.2, ss.167-174, 2023 (Hakemli Dergi)
- II. **A Review on Deep Learning Architectures for Speech Recognition**  
DOKUZ Y., TÜFEKÇİ Z.  
European Journal of Science and Technology, cilt.2020, ss.169-176, 2020 (Hakemli Dergi)
- III. **LSTM Hiperparametrelerinin Ses Tanıma Performansına olan Etkilerinin Araştırılması**

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **A Review on Deep Learning Architectures for Speech Recognition**  
DOKUZ Y., TÜFEKÇİ Z.  
International Conference On Access To Recent Advances In Engineering And Digitalization (ARACONF), Kayseri, Türkiye, 5 - 07 Mart 2020, ss.68-69
- II. **Investigation of the Effect of LSTM Hyperparameters on Speech Recognition Performance**  
DOKUZ Y., TÜFEKÇİ Z.  
International Conference On Access To Recent Advances In Engineering And Digitalization (ARACONF), Kayseri, Türkiye, 5 - 07 Mart 2020, ss.66-67
- III. **Real-Time Speaker Independent Isolated Word Recognition on Banana Pi**  
Disken G., Saribulut L., TÜFEKÇİ Z., ÇEVİK U.  
10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Iasi, Romanya, 28 - 30 Haziran 2018
- IV. **NOISE ROBUST SPEECH RECOGNITION USING PARALLEL MODEL COMPENSATION AND VOICE ACTIVITY DETECTION METHODS**  
HIZLISOY S., TÜFEKÇİ Z.  
2016 5th International Conference on Electronic Devices, Systems and Applications (ICEDSA 2016), Râ`S Al-Khaimah, Birleşik Arap Emirlikleri, 6 - 08 Aralık 2016, ss.1-4
- V. **Noise Robust Speech Recognition Using Parallel Model Compensation and Voice Activity Detection Methods**  
HIZLISOY S., TÜFEKÇİ Z.  
5th International Conference on Electronic Devices, Systems and Applications (ICEDSA), Ras al-Khaimah, Birleşik Arap Emirlikleri, 6 - 08 Aralık 2016
- VI. **Subband feature extraction using lapped orthogonal transform for speech recognition**  
TÜFEKÇİ Z., Gowdy J.  
IEEE International Conference on Acoustics, Speech, and Signal Processing, Salt Lake City, Amerika Birleşik Devletleri, 7 - 11 Mayıs 2011, cilt.1, ss.149-152
- VII. **Application of affine-invariant Fourier descriptors to lipreading for audio-visual speech recognition**  
Gurbuz S., TÜFEKÇİ Z., Patterson E., Gowdy J.  
IEEE International Conference on Acoustics, Speech, and Signal Processing, Salt Lake City, Amerika Birleşik Devletleri, 7 - 11 Mayıs 2011, cilt.1, ss.177-180
- VIII. **Noise Robust Speaker Verification Using Mel Frequency Discrete Wavelet Coefficients and Parallel Model Compensation**  
TÜFEKÇİ Z., gurbuz s.  
ICASSP 2005, 19 - 23 Mart 2005
- IX. **İYTE de Sinyal İşleme Eğitimi**  
ALTINKAYA M. A., GÜMÜŞTEKİN Ş., TÜFEKÇİ Z., SAVACI F. A.  
SIU 2003, Türkiye, 18 - 22 Haziran 2003
- X. **Multi Stream Product Modal Audio Visual Integration Strategy for Robust Adaptive Speech Recognition**  
gurbuz s., patterson e., TÜFEKÇİ Z., gowdy j.  
ICASSP 2002, 13 Mayıs 2002 - 17 Mayıs 2001
- XI. **CUAVE A New Audio Visual Database for Multimodal Human Computer Interface Research**  
patterson e., gurbuz s., TÜFEKÇİ Z., gowdy j.  
ICASSP, 13 - 17 Mayıs 2002
- XII. **Noise Based Audio Visual Fusion for Robust Speech Recognition**

patterson e., gurbuz s., TÜFEKÇİ Z., gowdy j.

AVSP-2001, 7 - 09 Eylül 2001

**XIII. Lip-Reading from Parametric Lip Contours for Audio-Visual Speech Recognition**

Gurbuz s., Patterson E., TÜFEKÇİ Z., Gowdy J.

European Conference on Speech Communication and Technology, Aalborg, Danimarka, 3 - 07 Eylül 2001, cilt.1, ss.140-143

**XIV. Applying Parallel Model Compensation with Mel-Frequency Discrete Wavelet Coefficients for Noise-Robust Speech Recognition**

TÜFEKÇİ Z., Gowdy J., Gurbuz S., Patterson E.

European Conference on Speech Communication and Technology, Aalborg, Danimarka, 3 - 07 Eylül 2001, cilt.1, ss.120-123

**XV. Independent Information from Visual Features for Multimodal Speech Recognition**

gurbuz s., TÜFEKÇİ Z., patterson e., gowdy j.

IEEE Southeastcon, 31 Mart - 01 Nisan 2001

**XVI. Mel-scaled discrete wavelet coefficients for speech recognition**

Gowdy J., TÜFEKÇİ Z.

2000 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, İstanbul, Türkiye, 5 - 09 Haziran 2000, cilt.5, ss.1351-1354

**XVII. Feature extraction using discrete wavelet transform for speech recognition**

TÜFEKÇİ Z., Gowdy J.

Southeastcon 2000., Nashville, Amerika Birleşik Devletleri, 7 - 09 Nisan 2000, cilt.1, ss.116-123

**XVIII. Speech spectrogram based model adaptation for speaker identification**

Gurbuz S., Gowdy J., TÜFEKÇİ Z.

Southeastcon 2000, Nashville, Amerika Birleşik Devletleri, 7 - 09 Nisan 2000, cilt.1, ss.110-115

## Metrikler

Yayın: 33

Atf (WoS): 91

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H-İndeks (Scopus): 4