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International Researcher IDs
Publons / Web Of Science ResearcherID: F-7440-2018

Education Information

Doctorate, Bogazici University, Institute Of Scıence, Elektrik-Elektronik Mühendisliği (Dr), Turkey 2005 - 2011
Postgraduate, Sabanci University, Institute Of Scıence, Elektronik Mühendisliği Ve Bilgisayar Bilimi (Yl) (Tezli), Turkey 2003 - 2005
Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, Turkey 1998 - 2003

Dissertations

Doctorate, Telephone-based text-dependent speaker verification, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), 2011
Postgraduate, Sub-word language modeling for Turkish speech recognition, Sabancı Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Mühendisliği Ve Bilgisayar Bilimi (Yl) (Tezli), 2005

Research Areas

Natural Language Processing, Human Computer Interaction, Text/Document Processing, Pattern Recognition and Image Processing, Neural Networks

Academic Titles / Tasks

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2018 - Continues
Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2013 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Context-Dependent Sequence-to-Sequence Turkish Spelling Correction**
BÜYÜK O.
ACM TRANSACTIONS ON ASIAN AND LOW-RESOURCE LANGUAGE INFORMATION PROCESSING, vol.19, no.4, 2020 (SCI-Expanded)

II. **Combination of Long-Term and Short-Term Features for Age Identification from Voice**
BÜYÜK O., Arslan M. L.
ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, vol.18, no.2, pp.101-108, 2018 (SCI-Expanded)

III. **Postprocessing Synthetic Speech With a Complex Cepstrum Vocoder for Spoofing Phase-Based Synthetic Speech Detectors**
Demiroglu C., BÜYÜK O., Khodabakhsh A., Maia R.
IEEE JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING, vol.11, no.4, pp.671-683, 2017 (SCI-Expanded)

IV. **Sentence-HMM state-based i-vector/PLDA modelling for improved performance in text dependent single utterance speaker verification**
BÜYÜK O.
IET SIGNAL PROCESSING, vol.10, no.8, pp.918-923, 2016 (SCI-Expanded)

V. **An investigation of the usability of sound recognition for source separation of packaging wastes in reverse vending machines**
Korucu M. K., KAPLAN Ö., BÜYÜK O., GÜLLÜ M. K.
Waste Management, vol.56, pp.46-52, 2016 (SCI-Expanded)

VI. **Combining log-spectral mean subtraction at different frequency resolutions for handset-channel compensation in single utterance speaker verification**
Buyuk O., Arslan L. M.
IET SIGNAL PROCESSING, vol.6, no.9, pp.824-828, 2012 (SCI-Expanded)

VII. **Model selection and score normalization for text-dependent single utterance speaker verification**
Buyuk O., Arslan M. L.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.20, pp.1277-1295, 2012 (SCI-Expanded)

Articles Published in Other Journals

I. **Effect of number and position of frames in speaker age estimation**
Osman M. M., Büyük O., TANGEL A.
Sigma Journal of Engineering and Natural Sciences, vol.41, no.2, pp.243-255, 2023 (ESCI)

II. **Turkish Speech Recognition Based on Deep Neural Networks**
Kimanuka U. A., BÜYÜK O.
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.22, pp.319-329, 2018 (Peer-Reviewed Journal)

III. **A new database for Turkish speech recognition on mobile devices and initial speech recognition results using the database**
BÜYÜK O.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.24, no.2, pp.180-184, 2018 (ESCI)

IV. **The vulnerability of mobile text dependent single utterance speaker verification to replay attacks**
BÜYÜK O.
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.8, no.1, pp.77-88, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Context Influence on Sequence to Sequence Turkish Spelling Correction**
BÜYÜK O., erden m., ARSLAN M. L.
IEEE Seventeenth Signal Processing and Communication Applications Conference, Sivas, Turkey, 24 - 26 April 2019

II. **Context influence on sequence to sequence Turkish spelling correction Diziden Diziye Türkçe Yazim Hatasi Düzeltmede Bağlamin Etkisi**
BÜYÜK O., Erden M., Arslan L. M.

27th Signal Processing and Communications Applications Conference, SIU 2019, Sivas, Turkey, 24 - 26 April 2019

III. **An investigation of multi-language age classification from voice**
BÜYÜK O., Arslan L. M.
12th International Conference on Bio-Inspired Systems and Signal Processing, BIOSIGNALS 2019 - Part of 12th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2019, Prague, Czech Republic, 22 - 24 February 2019, pp.85-92

IV. **Age identification from voice using feed-forward deep neural networks Ileri-Beslemeli Derin Sinir Aglarini Kullanarak Konusmadan Yas Tespiti**
BÜYÜK O., Arslan L. M.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

V. **Age identification from voice using feed-forward deep neural networks**
BÜYÜK O., ARSLAN M. L.
IEEE Twenty Sixth Signal Processing and Communication Applications Conference, İzmir, Turkey, 2 - 05 May 2018

VI. **Using of SVM Sound Recognition Technique in Source Separation of Packaging Wastes A New Approach for Reverse Vending Machines**
KORUCU M. K., KAPLAN Ö., GÜLLÜ M. K., BÜYÜK O.
Int. Conf. on Engineering and Natural Sciences (ICENS) 2016, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, pp.912-915

VII. **Experiments on fast scoring for GMM based speaker verification**
BÜYÜK O.
IEEE Twenty Third Signal Processing and Communication Applications Conference, Malatya, Turkey, 16 - 19 May 2015

VIII. **Combining spectral and prosodic features in HMM-based single utterance speaker verification**
BÜYÜK O., Arslan L. M.
8th International Conference on Bio-Inspired Systems and Signal Processing, BIOSIGNALS 2015, Lisbon, Portugal, 12 - 15 January 2015, pp.86-91

IX. **Experiment on Fast Scoring for GMM Based Speaker Verification**
BÜYÜK O.
23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.140-143

X. **HMM-based text-dependent speaker recognition with handset-channel recognition**
BÜYÜK O., ARSLAN M. L.
IEEE Eighteenth Signal Processing and Communication Applications Conference, Diyarbakır, Turkey, 22 - 24 April 2010

XI. **Turkish LVCSR system for call center conversations**
haznedaroğlu a., ARSLAN M. L., BÜYÜK O., erden m.
IEEE Eighteenth Signal Processing and Communication Applications Conference, Diyarbakır, Turkey, 22 - 24 April 2010

XII. **Application of Voice Conversion for Cross-Language Rap Singing Transformation**
Tuerk O., Bueyuek O., Haznedaroglu A., Arslan L. M.
IEEE International Conference on Acoustics, Speech and Signal Processing, Taipei, Taiwan, 19 - 24 April 2009, pp.3597-3598

XIII. **Keyword spotting using keyword adapted language model**
haznedaroğlu a., BÜYÜK O., ARSLAN M. L.
IEEE Fifteenth Signal Processing and Communication Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007

XIV. **Turkish speech recognition software with adaptable language model**
BÜYÜK O., haznedaroğlu a., ARSLAN M. L.
IEEE Fifteenth Signal Processing and Communication Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007

XV. **Incorporating language constraints in sub word based speech recognition**
erdoğan h., BÜYÜK O., oflazer k.

IEEE Automatic Speech Recognition and Understanding Workshop, November 2005, Cancun, Mexico, 27 November 2004 - 01 December 2005

XVI. **Using hybrid lexicon units and incorporating language constraints in speech recognition**
BÜYÜK O., erdoğan h., oflazer k.
IEEE Thirteenth Signal Processing and Communication Applications Conference, Kayseri, Turkey, 16 - 18 May 2005

Supported Projects

GÜLLÜ M. K., BÜYÜK O., TAŞYAPI ÇELEBİ A., KARACA A. C., Project Supported by Higher Education Institutions, 2019-
İşaret İşleme Ortak Araştırma Laboratuvarı (SPRL), 2020 - 2021

Metrics

Publication: 27
Citation (WoS): 47
Citation (Scopus): 70
H-Index (WoS): 4
H-Index (Scopus): 5