

IEEE/ACM Transactions on Audio, Speech, and Language Processing

4.1
Impact Factor

0.96
Article Influence Score

0.00915
Eigenfactor

11.3
CiteScore
Powered by Scopus®



Title
History

- Home
- Popular
- Early Access
- Current Volume
- All Issues
- About Journal

Popular Documents - July 2017

Popular Article Feed

Includes the 50 most frequently accessed documents for this publication.

Export

Email Selected Results

Showing 1-50 of 50

Date

July 2017



Convolutional Neural Networks for Speech Recognition

Ossama Abdel-Hamid; Abdel-rahman Mohamed; Hui Jiang; Li Deng; Gerald Penn; Dong Yu

Publication Year: 2014 , Page(s): 1533 - 1545

Cited by: Papers (1604) | Patents (12)

Abstract

HTML



A Regression Approach to Speech Enhancement Based on Deep Neural Networks

Yong Xu; Jun Du; Li-Rong Dai; Chin-Hui Lee

Publication Year: 2015 , Page(s): 7 - 19

Cited by: Papers (833)

Abstract

HTML



Multichannel Signal Processing With Deep Neural Networks for Automatic Speech Recognition

Tara N. Sainath; Ron J. Weiss; Kevin W. Wilson; Bo Li; Arun Narayanan; Ehsan Variani; Michiel Bacchiani; Izhak Shafran; Andrew Senior; Kean Chin; Ananya Misra; Chanwoo Kim

Publication Year: 2017 , Page(s): 965 - 979

Cited by: Papers (164)

Abstract

HTML



Deep Learning Backend for Single and Multisession i-Vector Speaker Recognition

Omid Ghahabi; Javier Hernando

Publication Year: 2017 , Page(s): 807 - 817

Cited by: Papers (37)

Abstract

HTML



On-Bird Sound Recordings: Automatic Acoustic Recognition of Activities and Contexts

Dan Stowell; Emmanouil Benetos; Lisa F. Gill

Publication Year: 2017 , Page(s): 1193 - 1206

Cited by: Papers (41)

Abstract

HTML



Two-Stage Single-Channel Audio Source Separation Using Deep Neural Networks

Emad M. Grais; Gerard Roma; Andrew J. R. Simpson; Mark D. Plumbley

Publication Year: 2017 , Page(s): 1773 - 1783

Cited by: Papers (32)



☐	Abstract HTML  	
☐	Unsupervised Feature Learning Based on Deep Models for Environmental Audio Tagging Yong Xu; Qiang Huang; Wenwu Wang; Peter Foster; Siddharth Sigtia; Philip J. B. Jackson; Mark D. Plumbley Publication Year: 2017 , Page(s): 1230 - 1241 Cited by: Papers (52)	
☐	Abstract HTML  	
☐	Spatial Cepstrum as a Spatial Feature Using a Distributed Microphone Array for Acoustic Scene Analysis Keisuke Imoto; Nobutaka Ono Publication Year: 2017 , Page(s): 1335 - 1343 Cited by: Papers (33)	
☐	Generating Intelligible Audio Speech From Visual Speech Thomas Le Cornu; Ben Milner Publication Year: 2017 , Page(s): 1751 - 1761 Cited by: Papers (27)	
☐	Robust Sound Event Classification Using Deep Neural Networks Ian McLoughlin; Haomin Zhang; Zhipeng Xie; Yan Song; Wei Xiao Publication Year: 2015 , Page(s): 540 - 552 Cited by: Papers (202) Patents (1)	
☐	A Consolidated Perspective on Multimicrophone Speech Enhancement and Source Separation Sharon Gannot; Emmanuel Vincent; Shmulik Markovich-Golan; Alexey Ozerov Publication Year: 2017 , Page(s): 692 - 730 Cited by: Papers (417) Patents (2)	
☐	Modeling Sparsely Reflecting Outdoor Acoustic Scenes Using the Waveguide Web Francis Stevens; Damian T Murphy; Lauri Savioja; Vesa Välimäki Publication Year: 2017 , Page(s): 1566 - 1578 Cited by: Papers (18)	
☐	Adaptive Feedback Cancellation Using a Partitioned-Block Frequency-Domain Kalman Filter Approach With PEM-Based Signal Prewhitening Giuliano Bernardi; Toon van Waterschoot; Jan Wouters; Marc Moonen Publication Year: 2017 , Page(s): 1784 - 1798 Cited by: Papers (25)	
☐	AutoMashUpper: Automatic Creation of Multi-Song Music Mashups Matthew E. P. Davies; Philippe Hamel; Kazuyoshi Yoshii; Masataka Goto Publication Year: 2014 , Page(s): 1726 - 1737 Cited by: Papers (41) Patents (1)	
☐	Single-Channel Online Enhancement of Speech Corrupted by Reverberation and Noise Clement S. J. Doire; Mike Brookes; Patrick A. Naylor; Christopher M. Hicks; Dave Betts; Mohammad A. Dmour; Søren Holdt Jensen Publication Year: 2017 , Page(s): 572 - 587	

Cited by: [Papers \(27\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Determined Blind Source Separation Unifying Independent Vector Analysis and Nonnegative Matrix Factorization** 

Daichi Kitamura; Nobutaka Ono; Hiroshi Sawada; Hirokazu Kameoka; Hiroshi Saruwatari

Publication Year: 2016 , Page(s): 1626 - 1641

Cited by: [Papers \(249\)](#) | [Patents \(2\)](#)[v](#) Abstract [HTML](#)  

- ☐ **An Overview of Noise-Robust Automatic Speech Recognition** 

Jinyu Li; Li Deng; Yifan Gong; Reinhold Haeb-Umbach

Publication Year: 2014 , Page(s): 745 - 777

Cited by: [Papers \(379\)](#) | [Patents \(7\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Feedback-Driven Sensory Mapping Adaptation for Robust Speech Activity Detection** 

Ashwin Bellur; Mounya Elhilali

Publication Year: 2017 , Page(s): 481 - 492

Cited by: [Papers \(5\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Automatic Expressive Opinion Sentence Generation for Enjoyable Conversational Systems** 

Yoichi Matsuyama; Akihiro Saito; Shinya Fujie; Tetsunori Kobayashi

Publication Year: 2015 , Page(s): 313 - 326

Cited by: [Papers \(7\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Joint Optimization of Masks and Deep Recurrent Neural Networks for Monaural Source Separation** 

Po-Sen Huang; Minje Kim; Mark Hasegawa-Johnson; Paris Smaragdis

Publication Year: 2015 , Page(s): 2136 - 2147

Cited by: [Papers \(319\)](#) | [Patents \(9\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Convolutional Recurrent Neural Networks for Polyphonic Sound Event Detection** 

Emre Çakır; Giambattista Parascandolo; Toni Heittola; Heikki Huttunen; Tuomas Virtanen

Publication Year: 2017 , Page(s): 1291 - 1303

Cited by: [Papers \(362\)](#) | [Patents \(1\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Time-Frequency Masking in the Complex Domain for Speech Dereverberation and Denoising** 

Donald S. Williamson; DeLiang Wang

Publication Year: 2017 , Page(s): 1492 - 1501

Cited by: [Papers \(161\)](#) | [Patents \(2\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Perpendicular Cross-Spectra Fusion for Sound Source Localization With a Planar Microphone Array** 

Nikolaos Stefanakis; Despoina Pavlidis; Athanasios Mouchtaris

Publication Year: 2017 , Page(s): 1821 - 1835

Cited by: [Papers \(15\)](#)[v](#) Abstract [HTML](#)  

- ☐ **Automatic Sentiment Detection in Naturalistic Audio** 

Lakshmish Kaushik; Abhijeet Sangwan; John H. L. Hansen

Publication Year: 2017 , Page(s): 1668 - 1679

Cited by: [Papers \(24\)](#)

Abstract

HTML





A Reverberation-Time-Aware Approach to Speech Dereverberation Based on Deep Neural Networks

Bo Wu; Kehuang Li; Minglei Yang; Chin-Hui Lee

Publication Year: 2017 , Page(s): 102 - 111

Cited by: [Papers \(62\)](#)

Abstract

HTML





Turbo Automatic Speech Recognition

Simon Receveur; Robin Weiß; Tim Fingscheidt

Publication Year: 2016 , Page(s): 846 - 862

Cited by: [Papers \(13\)](#)

Abstract

HTML





Blind Speech Separation and Enhancement With GCC-NMF

Sean U. N. Wood; Jean Rouat; Stéphane Dupont; Gueorgui Pironkov

Publication Year: 2017 , Page(s): 745 - 755

Cited by: [Papers \(38\)](#) | [Patents \(1\)](#)

Abstract

HTML





Deep Learning Based Binaural Speech Separation in Reverberant Environments

Xueliang Zhang; DeLiang Wang

Publication Year: 2017 , Page(s): 1075 - 1084

Cited by: [Papers \(88\)](#)

Abstract

HTML





Online MVDR Beamformer Based on Complex Gaussian Mixture Model With Spatial Prior for Noise Robust ASR

Takuya Higuchi; Nobutaka Ito; Shoko Araki; Takuya Yoshioka; Marc Delcroix; Tomohiro Nakatani

Publication Year: 2017 , Page(s): 780 - 793

Cited by: [Papers \(81\)](#)

Abstract

HTML





Multichannel Audio Source Separation With Deep Neural Networks

Aditya Arie Nugraha; Antoine Liutkus; Emmanuel Vincent

Publication Year: 2016 , Page(s): 1652 - 1664

Cited by: [Papers \(197\)](#) | [Patents \(3\)](#)

Abstract

HTML





Power-Normalized Cepstral Coefficients (PNCC) for Robust Speech Recognition

Chanwoo Kim; Richard M. Stern

Publication Year: 2016 , Page(s): 1315 - 1329

Cited by: [Papers \(190\)](#) | [Patents \(2\)](#)

Abstract

HTML





A Two-Dimensional Framework of Multiple Kernel Subspace Learning for Recognizing Emotion in Speech

Xin Zhou Xu; Jun Deng; Nicholas Cummins; Zixing Zhang; Chen Wu; Li Zhao; Björn Schuller

Publication Year: 2017 , Page(s): 1436 - 1449

Cited by: [Papers \(19\)](#)

Abstract

HTML





Deep Convolutional Neural Networks for Predominant Instrument Recognition in Polyphonic Music

Yoonchang Han; Jaehun Kim; Kyogu Lee

Publication Year: 2017 , Page(s): 208 - 221

Cited by: [Papers \(137\)](#) | [Patents \(1\)](#)

▼ Abstract [HTML](#)  

- ☐ **Evaluation of Glottal Inverse Filtering Algorithms Using a Physiologically Based Articulatory Speech Synthesizer** 
- Yu-Ren Chien; Daryush D. Mehta; Jón Guðnason; Matías Zañartu; Thomas F. Quatieri
- Publication Year: 2017 , Page(s): 1718 - 1730
- Cited by: [Papers \(10\)](#)

▼ Abstract [HTML](#)   

- ☐ **Maximum Likelihood Decision Fusion for Weapon Classification in Wireless Acoustic Sensor Networks** 
- Héctor A. Sánchez-Hevia; David Ayllón; Roberto Gil-Pita; Manuel Rosa-Zurera
- Publication Year: 2017 , Page(s): 1172 - 1182
- Cited by: [Papers \(11\)](#) | [Patents \(1\)](#)

▼ Abstract [HTML](#)  

- ☐ **Sentence Compression for Aspect-Based Sentiment Analysis** 
- Wanxiang Che; Yanyan Zhao; Honglei Guo; Zhong Su; Ting Liu
- Publication Year: 2015 , Page(s): 2111 - 2124
- Cited by: [Papers \(93\)](#)

▼ Abstract [HTML](#)  

- ☐ **Bag-of-Features Methods for Acoustic Event Detection and Classification** 
- René Grzeszick; Axel Plinge; Gernot A. Fink
- Publication Year: 2017 , Page(s): 1242 - 1252
- Cited by: [Papers \(24\)](#)

▼ Abstract [HTML](#)  

- ☐ **Supervised Representation Learning for Audio Scene Classification** 
- Alain Rakotomamonjy
- Publication Year: 2017 , Page(s): 1253 - 1265
- Cited by: [Papers \(27\)](#)

▼ Abstract [HTML](#)  

- ☐ **An Iterative Approach to Source Counting and Localization Using Two Distant Microphones** 
- Lin Wang; Tsz-Kin Hon; Joshua D. Reiss; Andrea Cavallaro
- Publication Year: 2016 , Page(s): 1079 - 1093
- Cited by: [Papers \(49\)](#)

▼ Abstract [HTML](#)  

- ☐ **HMM-Based Phrase-Independent i-Vector Extractor for Text-Dependent Speaker Verification** 
- Hossein Zeinali; Hossein Sameti; Lukáš Burget
- Publication Year: 2017 , Page(s): 1421 - 1435
- Cited by: [Papers \(42\)](#)

▼ Abstract [HTML](#)  

- ☐ **Robust Detection of Environmental Sounds in Binaural Auditory Scenes** 
- Ivo Trowitzsch; Johannes Mohr; Youssef Kashef; Klaus Obermayer
- Publication Year: 2017 , Page(s): 1344 - 1356
- Cited by: [Papers \(12\)](#)

▼ Abstract [HTML](#)  

- ☐ **A Noniterative Method for Reconstruction of Phase From STFT Magnitude** 
- Zdeněk Průša; Peter Balazs; Peter Lempel Søndergaard
- Publication Year: 2017 , Page(s): 1154 - 1164
- Cited by: [Papers \(52\)](#) | [Patents \(2\)](#)

▼ Abstract HTML  	
☐	Denoised Bottleneck Features From Deep Autoencoders for Telephone Conversation Analysis Killian Janod; Mohamed Morchid; Richard Dufour; Georges Linarès; Renato De Mori Publication Year: 2017 , Page(s): 1809 - 1820 Cited by: Papers (12) ▼ Abstract HTML  
☐	Intelligibility Enhancement Based on Mutual Information Seyran Khademi; Richard C. Hendriks; W. Bastiaan Kleijn Publication Year: 2017 , Page(s): 1694 - 1708 Cited by: Papers (17) ▼ Abstract HTML  
☐	A Gender Mixture Detection Approach to Unsupervised Single-Channel Speech Separation Based on Deep Neural Networks Yannan Wang; Jun Du; Li-Rong Dai; Chin-Hui Lee Publication Year: 2017 , Page(s): 1535 - 1546 Cited by: Papers (31) Patents (2) ▼ Abstract HTML  
☐	Translation Quality Estimation Using Only Bilingual Corpora Lemao Liu; Atsushi Fujita; Masao Utiyama; Andrew Finch; Eiichiro Sumita Publication Year: 2017 , Page(s): 1762 - 1772 Cited by: Papers (7) ▼ Abstract HTML  
☐	Simultaneous Optimization of Multiple Tree-Based Factor Analyzed HMM for Speech Synthesis Takenori Yoshimura; Kei Hashimoto; Keiichiro Oura; Yoshihiko Nankaku; Keiichi Tokuda Publication Year: 2017 , Page(s): 1836 - 1845 Cited by: Papers (1) ▼ Abstract HTML  
☐	Feature Learning With Matrix Factorization Applied to Acoustic Scene Classification Victor Bisot; Romain Serizel; Slim Essid; Gaël Richard Publication Year: 2017 , Page(s): 1216 - 1229 Cited by: Papers (73) ▼ Abstract  
☐	Using Recurrent Neural Networks for Slot Filling in Spoken Language Understanding Grégoire Mesnil; Yann Dauphin; Kaisheng Yao; Yoshua Bengio; Li Deng; Dilek Hakkani-Tur; Xiaodong He; Larry Heck; Gokhan Tur; Dong Yu; Geoffrey Zweig Publication Year: 2015 , Page(s): 530 - 539 Cited by: Papers (243) Patents (10) ▼ Abstract HTML  
☐	Anti-Spoofing for Text-Independent Speaker Verification: An Initial Database, Comparison of Countermeasures, and Human Performance Zhizheng Wu; Phillip L. De Leon; Cenk Demiroglu; Ali Khodabakhsh; Simon King; Zhen-Hua Ling; Daisuke Saito; Bryan Stewart; Tomoki Toda; Mirjam Wester; Junichi Yamagishi Publication Year: 2016 , Page(s): 768 - 783 Cited by: Papers (68) Patents (24) ▼ Abstract HTML  

 [Submit Manuscript](#)

 [Submission Guidelines](#)

 [Become a Reviewer](#)

 [Open Access Publishing Options](#)

 [Add Title To My Alerts](#) [Add to My Favorites](#) 

Contact Information

Editor-in-Chief

Paris Smaragdis
University of Illinois at Urbana-Champaign
Champaign
USA
paris@illinois.edu

[Editorial Board](#) 

[Author Center](#) 

[IEEE/ACM Transactions on Audio, Speech, and Language Processing](#) 

[Additional Information](#) 

[Information for Authors](#) 

[Publishing Policies](#)

IEEE Personal Account

[CHANGE USERNAME/PASSWORD](#)

Purchase Details

[PAYMENT OPTIONS](#)
[VIEW PURCHASED DOCUMENTS](#)

Profile Information

[COMMUNICATIONS PREFERENCES](#)
[PROFESSION AND EDUCATION](#)
[TECHNICAL INTERESTS](#)

Need Help?

[US & CANADA: +1 800 678 4333](#)
[WORLDWIDE: +1 732 981 0060](#)
[CONTACT & SUPPORT](#)

Follow

    

[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Accessibility](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [IEEE Ethics Reporting](#)  | [Sitemap](#) | [IEEE Privacy Policy](#)

A public charity, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2025 IEEE - All rights reserved, including rights for text and data mining and training of artificial intelligence and similar technologies.