Yu Tsao

List of Publications by Year in Descending Order

170 papers	2,236 citations	25 h-index	41 g-index
222 ext. papers	3,269 ext. citations	3.3 avg, IF	5.36 L-index

#	Paper	IF	Citations
170	Predicting the Travel Distance of Patients to Access Healthcare Using Deep Neural Networks.. *IEEE Journal of Translational Engineering in Health and Medicine*, **2022**, 10, 4900411	3	0
169	CITISEN: A Deep Learning-Based Speech Signal-Processing Mobile Application. *IEEE Access*, **2022**, 1-1	3.5	1
168	Improved Lite Audio-Visual Speech Enhancement. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2022**, 30, 1345-1359	3.6	0
167	Continuous Speech for Improved Learning Pathological Voice Disorders.. *IEEE Open Journal of Engineering in Medicine and Biology*, **2022**, 3, 25-33	5.9	1
166	SVSNet: An End-to-End Speaker Voice Similarity Assessment Model. *IEEE Signal Processing Letters*, **2022**, 29, 767-771	3.2	1
165	Detection of Glottic Neoplasm Based on Voice Signals Using Deep Neural Networks **2022**, 6, 1-4		
164	Neural correlates of individual differences in predicting ambiguous sounds comprehension level.. *NeuroImage*, **2022**, 119012	7.9	
163	SEOFP-NET: Compression and Acceleration of Deep Neural Networks for Speech Enhancement Using Sign-Exponent-Only Floating-Points. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2021**, 1-1	3.6	0
162	Coupling a Generative Model With a Discriminative Learning Framework for Speaker Verification. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2021**, 29, 3631-3641	3.6	
161	. *IEEE Transactions on Multimedia*, **2021**, 23, 365-377	6.6	15
160	Improving the Intelligibility of Speech for Simulated Electric and Acoustic Stimulation Using Fully Convolutional Neural Networks. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2021**, 29, 184-195	4.8	6
159	Bone-Conducted Speech Enhancement Using Hierarchical Extreme Learning Machine. *Lecture Notes in Electrical Engineering*, **2021**, 153-162	0.2	1
158	Domain-Adaptive Fall Detection Using Deep Adversarial Training. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2021**, 29, 1243-1251	4.8	0
157	Sensing ecosystem dynamics via audio source separation: A case study of marine soundscapes off northeastern Taiwan. *PLoS Computational Biology*, **2021**, 17, e1008698	5	5
156	Ensemble and Multimodal Learning for Pathological Voice Classification **2021**, 5, 1-4		2
155	Self-Supervised Denoising Autoencoder with Linear Regression Decoder for Speech Enhancement **2020**,		4
154	Overall survival prediction of non-small cell lung cancer by integrating microarray and clinical data with deep learning. *Scientific Reports*, **2020**, 10, 4679	4.9	26

153	Forecasting Air Quality in Taiwan by Using Machine Learning. *Scientific Reports*, **2020**, 10, 4153	4.9	21
152	Source separation in ecoacoustics: a roadmap towards versatile soundscape information retrieval. *Remote Sensing in Ecology and Conservation*, **2020**, 6, 236-247	5.3	19
151	Multichannel Speech Enhancement by Raw Waveform-Mapping Using Fully Convolutional Networks. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2020**, 28, 1888-1900	3.6	9
150	Subspace-Based Representation and Learning for Phonotactic Spoken Language Recognition. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2020**, 28, 3065-3079	3.6	1
149	ASVspoof 2019: A large-scale public database of synthesized, converted and replayed speech. *Computer Speech and Language*, **2020**, 64, 101114	2.8	32
148	Learning With Learned Loss Function: Speech Enhancement With Quality-Net to Improve Perceptual Evaluation of Speech Quality. *IEEE Signal Processing Letters*, **2020**, 27, 26-30	3.2	15
147	Ensemble Hierarchical Extreme Learning Machine for Speech Dereverberation. *IEEE Transactions on Cognitive and Developmental Systems*, **2020**, 12, 744-758	3	5
146	Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *IEEE Signal Processing Letters*, **2020**, 27, 1035-1039	3.2	7
145	Atypical Frequency Sweep Processing in Chinese Children With Reading Difficulties: Evidence From Magnetoencephalography. *Frontiers in Psychology*, **2020**, 11, 1649	3.4	0
144	Blind Monaural Source Separation on Heart and Lung Sounds Based on Periodic-Coded Deep Autoencoder. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 3203-3214	7.2	2
143	. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2020**, 28, 2756-2769	3.6	4
142	A Study of Joint Effect on Denoising Techniques and Visual Cues to Improve Speech Intelligibility in Cochlear Implant Simulation. *IEEE Transactions on Cognitive and Developmental Systems*, **2020**, 1-1	3	3
141	The IPIN 2019 Indoor Localisation Competition Description and Results. *IEEE Access*, **2020**, 8, 206674-206718	3.48	15
140	Automatic recognition of murmurs of ventricular septal defect using convolutional recurrent neural networks with temporal attentive pooling. *Scientific Reports*, **2020**, 10, 21797	4.9	5
139	Multimodal Deep Learning Framework for Image Popularity Prediction on Social Media. *IEEE Transactions on Cognitive and Developmental Systems*, **2020**, 1-1	3	5
138	. *IEEE Signal Processing Letters*, **2020**, 27, 2149-2153	3.2	13
137	Unsupervised Representation Disentanglement Using Cross Domain Features and Adversarial Learning in Variational Autoencoder Based Voice Conversion. *IEEE Transactions on Emerging Topics in Computational Intelligence*, **2020**, 4, 468-479	4.1	7
136	. *IEEE Access*, **2019**, 7, 43286-43297	3.5	3

135	Auditory identification of frequency-modulated sweeps and reading difficulties in Chinese. *Research in Developmental Disabilities*, **2019**, 86, 53-61	2.7	5
134	Noise Reduction in ECG Signals Using Fully Convolutional Denoising Autoencoders. *IEEE Access*, **2019**, 7, 60806-60813	3.5	81
133	Computation-Performance Optimization of Convolutional Neural Networks With Redundant Filter Removal. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2019**, 66, 1908-1921	3.9	5
132	New Templated Ostwald Ripening Process of Mesostructured FeOOH for Third-Harmonic Generation Bioimaging. *Small*, **2019**, 15, e1805086	11	7
131	Garment Detectives: Discovering Clothes and Its Genre in Consumer Photos **2019**,		8
130	Combining acoustic signals and medical records to improve pathological voice classification. *APSIPA Transactions on Signal and Information Processing*, **2019**, 8,	4.4	5
129	Reinforcement Learning Based Speech Enhancement for Robust Speech Recognition **2019**,		5
128	Increasing Compactness of Deep Learning Based Speech Enhancement Models With Parameter Pruning and Quantization Techniques. *IEEE Signal Processing Letters*, **2019**, 26, 1887-1891	3.2	4
127	Evaluating Indoor Positioning Systems in a Shopping Mall: The Lessons Learned From the IPIN 2018 Competition. *IEEE Access*, **2019**, 7, 148594-148628	3.5	35
126	A Mobile Phone-Based Approach for Hearing Screening of School-Age Children: Cross-Sectional Validation Study. *JMIR MHealth and UHealth*, **2019**, 7, e12033	5.5	10
125	Subjective Feedback-based Neural Network Pruning for Speech Enhancement **2019**,		2
124	Investigation of Neural Network Approaches for Unified Spectral and Prosodic Feature Enhancement **2019**,		1
123	Refined WaveNet Vocoder for Variational Autoencoder Based Voice Conversion **2019**,		6
122	Robust S1 and S2 heart sound recognition based on spectral restoration and multi-style training. *Biomedical Signal Processing and Control*, **2019**, 49, 173-180	4.9	5
121	Detection of Pathological Voice Using Cepstrum Vectors: A Deep Learning Approach. *Journal of Voice*, **2019**, 33, 634-641	1.9	62
120	Toward Automating Oral Presentation Scoring During Principal Certification Program Using Audio-Video Low-Level Behavior Profiles. *IEEE Transactions on Affective Computing*, **2019**, 10, 552-567	5.7	1
119	. *IEEE Systems Journal*, **2018**, 12, 20-29	4.3	13
118	Suppression by Selecting Wavelets for Feature Compression in Distributed Speech Recognition. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2018**, 26, 564-579	3.6	11

117	Deep Learning-Based Noise Reduction Approach to Improve Speech Intelligibility for Cochlear Implant Recipients. *Ear and Hearing*, **2018**, 39, 795-809	3.4	33
116	Adaptive Noise Cancellation Using Deep Cerebellar Model Articulation Controller. *IEEE Access*, **2018**, 6, 37395-37402	3.5	12
115	End-to-End Waveform Utterance Enhancement for Direct Evaluation Metrics Optimization by Fully Convolutional Neural Networks. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2018**, 26, 1570-1584	3.6	105
114	Comparison of passive acoustic soniferous fish monitoring with supervised and unsupervised approaches. *Journal of the Acoustical Society of America*, **2018**, 143, EL278	2.2	21
113	Audio-Visual Speech Enhancement Using Multimodal Deep Convolutional Neural Networks. *IEEE Transactions on Emerging Topics in Computational Intelligence*, **2018**, 2, 117-128	4.1	79
112	Bone-conducted speech enhancement using deep denoising autoencoder. *Speech Communication*, **2018**, 104, 106-112	2.8	16
111	Off-Line Evaluation of Mobile-Centric Indoor Positioning Systems: The Experiences from the 2017 IPIN Competition. *Sensors*, **2018**, 18,	3.8	37
110	Coral Reef Soundscape to Measure the Species Distribution and Biodiversity **2018**,		1
109	Listening to the Deep: Exploring Marine Soundscape Variability by Information Retrieval Techniques **2018**,		5
108	Voice Conversion Based on Cross-Domain Features Using Variational Auto Encoders **2018**,		7
107	Speech Enhancement Based on Reducing the Detail Portion of Speech Spectrograms in Modulation Domain via DiscreteWavelet Transform **2018**,		3
106	A Study on Speech Enhancement Using Exponent-Only Floating Point Quantized Neural Network (EOFP-QNN) **2018**,		4
105	**2018**,		1
104	Deep Denoising Autoencoder Based Post Filtering for Speech Enhancement **2018**,		1
103	Improving the performance of hearing aids in noisy environments based on deep learning technology. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 404-408	0.9	1
102	Architecture Design of Convolutional Neural Networks for Face Detection on an FPGA Platform **2018**,		2
101	Congruent Visual Stimulation Facilitates Auditory Frequency Change Detection: An ERP Study. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 2446-2449	0.9	
100	Enhancement and Analysis of Conversational Speech: JSALT 2017 **2018**,		3

99	**2018**,	4
98	A Novel LSTM-Based Speech Preprocessor for Speaker Diarization in Realistic Mismatch Conditions **2018**,	10
97	Demographic and Symptomatic Features of Voice Disorders and Their Potential Application in Classification Using Machine Learning Algorithms. *Folia Phoniatrica Et Logopaedica*, **2018**, 70, 174-182	1.5 · 11
96	S1 and S2 Heart Sound Recognition Using Deep Neural Networks. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 372-380	5 · 90
95	Multi-style learning with denoising autoencoders for acoustic modeling in the internet of things (IoT). *Computer Speech and Language*, **2017**, 46, 481-495	2.8 · 10
94	Regularization of neural network model with distance metric learning for i-vector based spoken language identification. *Computer Speech and Language*, **2017**, 44, 48-60	2.8 · 6
93	. *IEEE Access*, **2017**, 5, 10339-10351	3.5 · 17
92	Joint Dictionary Learning-Based Non-Negative Matrix Factorization for Voice Conversion to Improve Speech Intelligibility After Oral Surgery. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 2584-2594	5 · 23
91	Personalizing Recurrent-Neural-Network-Based Language Model by Social Network. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2017**, 25, 519-530	3.6 · 12
90	Raw waveform-based speech enhancement by fully convolutional networks **2017**,	77
89	Track-Clustering Error Evaluation for Track-Based Multi-camera Tracking System Employing Human Re-identification **2017**,	4
88	Effects of noise suppression and envelope dynamic range compression on the intelligibility of vocoded sentences for a tonal language. *Journal of the Acoustical Society of America*, **2017**, 142, 1157	2.2 · 5
87	Learning Transportation Modes From Smartphone Sensors Based on Deep Neural Network. *IEEE Sensors Journal*, **2017**, 17, 6111-6118	4 · 64
86	Experimental Study on Extreme Learning Machine Applications for Speech Enhancement. *IEEE Access*, **2017**, 5, 25542-25554	3.5 · 27
85	Discriminative autoencoders for speaker verification **2017**,	3
84	Improving biodiversity assessment via unsupervised separation of biological sounds from long-duration recordings. *Scientific Reports*, **2017**, 7, 4547	4.9 · 32
83	A Deep Denoising Autoencoder Approach to Improving the Intelligibility of Vocoded Speech in Cochlear Implant Simulation. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 1568-1578	5 · 48
82	Object-based on-line video summarization for internet of video things **2017**,	2

81	Computing biodiversity change via a soundscape monitoring network **2017**,		7
80	**2017**,		47
79	A deep learning based noise reduction approach to improve speech intelligibility for cochlear implant recipients in the presence of competing speech noise **2017**,		4
78	Adaptive Dynamic Range Compression for Improving Envelope-Based Speech Perception: Implications for Cochlear Implants **2017**, 191-214		1
77	Dictionary update for NMF-based voice conversion using an encoder-decoder network **2016**,		2
76	Modeling speech intelligibility with recovered envelope from temporal fine structure stimulus. *Speech Communication*, **2016**, 81, 120-128	2.8	1
75	Generalized maximum a posteriori spectral amplitude estimation for speech enhancement. *Speech Communication*, **2016**, 76, 112-126	2.8	25
74	Image Retrieval Using Color-Aware Tag on Progressive Image Search and Recommendation System. *Lecture Notes in Computer Science*, **2016**, 162-173	0.9	
73	Adaptive subspace-constrained diagonal loading **2016**,		1
72	Maximum Entropy Learning with Deep Belief Networks. *Entropy*, **2016**, 18, 251	2.8	5
71	Transportation Modes Classification Using Sensors on Smartphones. *Sensors*, **2016**, 16,	3.8	35
70	Wavelet Speech Enhancement Based on Nonnegative Matrix Factorization. *IEEE Signal Processing Letters*, **2016**, 23, 1101-1105	3.2	17
69	A pseudo-task design in multi-task learning deep neural network for speaker recognition **2016**,		2
68	Voice conversion from non-parallel corpora using variational auto-encoder **2016**,		64
67	Assessing the perceptual contributions of level-dependent segments to sentence intelligibility. *Journal of the Acoustical Society of America*, **2016**, 140, 3745	2.2	8
66	A linear regression model with dynamic pulse transit time features for noninvasive blood pressure prediction **2016**,		6
65	Audio-visual speech enhancement using deep neural networks **2016**,		10
64	Improving the Performance of Noise Reduction in Hearing Aids Based on the Genetic Algorithm. *IFMBE Proceedings*, **2016**, 209-214	0.2	

63	Auditory Perception, Suprasegmental Speech Processing, and Vocabulary Development in Chinese Preschoolers. *Perceptual and Motor Skills*, **2016**, 123, 365-82	2.2	8
62	Channel State Reconstruction Using Multilevel Discrete Wavelet Transform for Improved Fingerprinting-Based Indoor Localization. *IEEE Sensors Journal*, **2016**, 16, 7784-7791	4	26
61	Acoustic Echo Cancellation Using a Vector-Space-Based Adaptive Filtering Algorithm. *IEEE Signal Processing Letters*, **2015**, 22, 351-355	3.2	7
60	A probabilistic interpretation for artificial neural network-based voice conversion **2015**,		4
59	Temporal information in tone recognition **2015**,		1
58	Rapid Converging M-Max Partial Update Least Mean Square Algorithms with New Variable Step-Size Methods. *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, **2015**, E98.A, 2650-2657	0.4	1
57	Improving denoising auto-encoder based speech enhancement with the speech parameter generation algorithm **2015**,		5
56	Robust Voice Activity Detection Algorithm Based on Feature of Frequency Modulation of Harmonics and Its DSP Implementation. *IEICE Transactions on Information and Systems*, **2015**, E98.D, 1808-1817	0.6	14
55	A discriminative post-filter for speech enhancement in hearing aids **2015**,		2
54	A deep neural network based approach to mandarin consonant/vowel separation **2015**,		2
53	A new frequency lowering technique for Mandarin-speaking hearing aid users **2015**,		1
52	Compensating for Orientation Mismatch in Robust Wi-Fi Localization Using Histogram Equalization. *IEEE Transactions on Vehicular Technology*, **2015**, 64, 5210-5220	6.8	14
51	Ensemble environment modeling using affine transform group. *Speech Communication*, **2015**, 68, 55-68	2.8	1
50	Effects of Adaptation Rate and Noise Suppression on the Intelligibility of Compressed-Envelope Based Speech. *PLoS ONE*, **2015**, 10, e0133519	3.7	10
49	. *IEEE/ACM Transactions on Audio Speech and Language Processing*, **2014**, 22, 403-416	3.6	4
48	Incorporating local information of the acoustic environments to MAP-based feature compensation and acoustic model adaptation. *Computer Speech and Language*, **2014**, 28, 709-726	2.8	4
47	Variable Selection Linear Regression for Robust Speech Recognition. *IEICE Transactions on Information and Systems*, **2014**, E97.D, 1477-1487	0.6	1
46	Acoustic feature conversion using a polynomial based feature transferring algorithm **2014**,		1

45	A Transfer Probabilistic Collective Factorization Model to Handle Sparse Data in Collaborative Filtering **2014**,		12
44	**2014**,		1
43	Robust anchorperson detection based on audio streams using a hybrid I-vector and DNN system **2014**,		2
42	**2014**,		14
41	Sparse representation based on a bag of spectral exemplars for acoustic event detection **2014**,		16
40	**2013**,		7
39	Evaluation of generalized maximum a posteriori spectral amplitude (GMAPA) speech enhancement algorithm in hearing aids **2013**,		6
38	**2013**,		6
37	Incorporating global variance in the training phase of GMM-based voice conversion **2013**,		8
36	Exploring mutual information for GMM-based spectral conversion **2012**,		4
35	A study on cepstral sub-band normalization for robust ASR **2012**,		4
34	A linear projection approach to environment modeling for robust speech recognition **2012**,		2
33	Feature normalization and selection for robust speaker state recognition **2011**,		3
32	An acoustic segment model approach to incorporating temporal information into speaker modeling for text-independent speaker recognition **2010**,		6
31	Ensemble speaker and speaking environment modeling approach with advanced online estimation process **2009**,		5
30	MAP estimation of online mapping parameters in ensemble speaker and speaking environment modeling **2009**,		1
29	. *IEEE Transactions on Audio Speech and Language Processing*, **2009**, 17, 1025-1037		19
28	A programmable analog radial-basis-function based classifier. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, **2008**,	1.6	1

27	Two extensions to ensemble speaker and speaking environment modeling for robust automatic speech recognition **2007**,		3
26	Segmental eigenvoice with delicate eigenspace for improved speaker adaptation. *IEEE Transactions on Speech and Audio Processing*, **2005**, 13, 399-411		13
25	A recommendation mechanism for contextualized mobile advertising. *Expert Systems With Applications*, **2003**, 24, 399-414	7.8	90
24	A study on knowledge source integration for candidate rescoring in automatic speech recognition		1
23	Lite Audio-Visual Speech Enhancement		4
22	Incorporating Broad Phonetic Information for Speech Enhancement		2
21	Speech enhancement based on deep denoising autoencoder		113
20	SNR-Aware Convolutional Neural Network Modeling for Speech Enhancement		63
19	Locally Linear Embedding for Exemplar-Based Spectral Conversion		12
18	Pair-Wise Distance Metric Learning of Neural Network Model for Spoken Language Identification		2
17	Voice Conversion from Unaligned Corpora Using Variational Autoencoding Wasserstein Generative Adversarial Networks		71
16	Wavelet Speech Enhancement Based on Robust Principal Component Analysis		2
15	Temporal Attentive Pooling for Acoustic Event Detection		4
14	Quality-Net: An End-to-End Non-intrusive Speech Quality Assessment Model Based on BLSTM		25
13	Investigation of F0 Conditioning and Fully Convolutional Networks in Variational Autoencoder Based Voice Conversion		3
12	MOSNet: Deep Learning-Based Objective Assessment for Voice Conversion		14
11	Speaker-Aware Deep Denoising Autoencoder with Embedded Speaker Identity for Speech Enhancement		5
10	A study on separation between acoustic models and its applications		3

List of Publications