Etienne Barnard

List of Publications by Year
in descending order

61 papers	1,913 citations	516710 16 h-index	302126 39 g-index
64 all docs	64 docs citations	64 times ranked	1108 citing authors

#	Article	IF	Citations
1	Automatic speech recognition for under-resourced languages: A survey. Speech Communication, 2014, 56, 85-100.	2.8	320
2	Backpropagation neural nets with one and two hidden layers. IEEE Transactions on Neural Networks, 1993, 4, 136-141.	4.2	260
3	Reviewing automatic language identification. IEEE Signal Processing Magazine, 1994, 11, 33-41.	5.6	190
4	Optimization for training neural nets. IEEE Transactions on Neural Networks, 1992, 3, 232-240.	4.2	180
5	Avoiding false local minima by proper initialization of connections. IEEE Transactions on Neural Networks, 1992, 3, 899-905.	4.2	177
6	Invariance and neural nets. IEEE Transactions on Neural Networks, 1991, 2, 498-508.	4.2	63
7	A smartphone-based ASR data collection tool for under-resourced languages. Speech Communication, 2014, 56, 119-131.	2.8	60
8	Shift invariance and the neocognitron. Neural Networks, 1990, 3, 403-410.	5.9	45
9	Pronunciation prediction with Default&Refine. Computer Speech and Language, 2008, 22, 374-393.	4.3	36
10	Collecting and evaluating speech recognition corpora for 11 South African languages. Language Resources and Evaluation, 2011, 45, 289-309.	2.7	36
11	Pitch detection with a neural-net classifier. IEEE Transactions on Signal Processing, 1991, 39, 298-307.	5.3	32
12	The spoken web search task at MediaEval 2012. , 2013, , .		30
13	Language independent search in MediaEval's Spoken Web Search task. Computer Speech and Language, 2014, 28, 1066-1082.	4.3	30
14	ASR corpus design for resource-scarce languages. , 0, , .		30
15	Factors that affect the accuracy of text-based language identification. Computer Speech and Language, 2012, 26, 307-320.	4.3	29
16	Related approaches to gradient-based thresholding. Pattern Recognition Letters, 1993, 14, 567-572.	4.2	28
17	Backpropagation uses prior information efficiently. IEEE Transactions on Neural Networks, 1993, 4, 794-802.	4.2	26
18	Combining regression and classification methods for improving automatic speaker age recognition. , 2010, , .		21

#	Article	IF	Citations
19	Development of an approach to automatic language identification based on phone recognition. Computer Speech and Language, 1996, 10, 37-54.	4.3	18
20	HIV health information access using spoken dialogue systems: Touchtone vs. speech. , 2009, , .		18
21	Feature-based classification of aerospace radar targets using neural networks. Neural Networks, 1996, 9, 129-142.	5.9	17
22	Continuous speech recognition with sparse coding. Computer Speech and Language, 2009, 23, 200-219.	4.3	17
23	A voice service for user feedback on school meals. , 2012, , .		16
24	The efficient generation of pronunciation dictionaries: human factors during bootstrapping. , 0, , .		14
25	A comparative study of optimization techniques for backpropagation. Neurocomputing, 1994, 6, 19-30.	5.9	12
26	Phonetics of intonation in South African Bantu languages. Southern African Linguistics and Applied Language Studies, 2008, 26, 235-254.	0.5	11
27	Performance and generalization of the classification figure of merit criterion function. IEEE Transactions on Neural Networks, 1991, 2, 322-325.	4.2	10
28	The dynamic modelling of ill-defined processing operations using connectionist networks. Chemical Engineering Science, 1993, 48, 1945-1958.	3.8	10
29	Woefzela - an open-source platform for ASR data collection in the developing world. , 0, , .		10
30	Multilingual speaker age recognition: Regression analyses on the Lwazi corpus. , 2009, , .		9
31	Efficient harvesting of internet audio for resource-scarce ASR. , 0, , .		9
32	The estimation of kinematic viscosity of petroleum crude oils and fractions with a neural net. The Chemical Engineering Journal, 1993, 51, 151-158.	0.3	8
33	Neural nets for the simulation of mineral processing operations: Part I. Theoretical principles. Minerals Engineering, 1993, 6, 1127-1134.	4.3	8
34	Predicting utterance pitch targets in YorÃ¹bÃ¡ for tone realisation in speech synthesis. Speech Communication, 2014, 56, 229-242.	2.8	8
35	Optical correlation CGHs with modulated error diffusion. Applied Optics, 1989, 28, 5358.	2.1	7
36	Comments on "Bayes statistical behavior and valid generalization of pattern classifying neural networks" [with reply]. IEEE Transactions on Neural Networks, 1992, 3, 1026-1027.	4.2	7

#	Article	IF	Citations
37	Neural nets for the simulation of mineral processing operations: Part II. Applications. Minerals Engineering, 1993, 6, 1135-1153.	4.3	7
38	A Fast Histogram-Based Postprocessor That Improves Posterior Probability Estimates. Neural Computation, 1999, 11, 1235-1248.	2.2	7
39	Vowel variation in Southern Sotho: an acoustic investigation. Southern African Linguistics and Applied Language Studies, 2008, 26, 255-265.	0.5	7
40	The Lwazi community communication service. , 2011, , .		6
41	The efficient generation of pronunciation dictionaries: machine learning factors during bootstrapping. , 0, , .		6
42	Bootstrapping pronunciation dictionaries: practical issues. , 0, , .		5
43	The least-squares discriminant function. Optics Communications, 1992, 89, 73-79.	2.1	4
44	Toward new language adaptation for language identification. Speech Communication, 1997, 21, 245-254.	2.8	4
45	The utility of spoken dialog systems. , 2008, , .		4
46	Efficient data selection for ASR. Language Resources and Evaluation, 2015, 49, 327-353.	2.7	4
47	Applying Topic Modeling to Forensic Data. International Federation for Information Processing, 2008, , 115-126.	0.4	4
48	Developing consistent pronunciation models for phonemic variants. , 0, , .		4
49	Process modeling with the regression network. IEEE Transactions on Neural Networks, 1995, 6, 78-93.	4.2	3
50	Realisations of a single high tone in Northern Sotho. Southern African Linguistics and Applied Language Studies, 2009, 27, 357-380.	0.5	3
51	Determination and the No-Free-Lunch Paradox. Neural Computation, 2011, 23, 1899-1909.	2.2	3
52	Wolof Speech Recognition Model of Digits and Limited-Vocabulary Based on HMM and ToolKit. , 2012, , .		3
53	DNNs as Layers of Cooperating Classifiers. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 3725-3732.	4.9	3
54	A model for nonpolynomial decrease in error rate with increasing sample size. IEEE Transactions on Neural Networks, 1994, 5, 994-997.	4.2	2

#	Article	IF	Citations
55	Realisation of two adjacent high tones: Acoustic evidence from Northern Sotho. Southern African Linguistics and Applied Language Studies, 2010, 28, 101-121.	0.5	2
56	Unsupervised acoustic model training: Comparing South African English and isiZulu. , 2015, , .		2
57	Efficiency measurements in IVR systems for oral users. , 2011, , .		1
58	Benign interpolation of noise in deep learning. South African Computer Journal, 2020, 32, .	0.2	1
59	Scaling of CGHs with hologram size. Optics Communications, 1990, 78, 25-29.	2.1	0
60	Consequences of deploying culturally inclined earcons in speech technology design for oral users in South Africa. , 2013, , .		0
61	Openphone User Engagement and Requirements Solicitation in Low Literacy Users. International Federation for Information Processing, 2008, , 189-193.	0.4	0