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#	Paper	IF	Citations
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2229	DECISION TREES DO NOT GENERALIZE TO NEW VARIATIONS. 2010 , 26, 449-467		34
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2224	A Novel Text Classification Approach Based on Deep Belief Network. 2010 , 314-321		14
2223	. 2010,		5
2222	. 2010,		6
2221	Re-usable features in a hierarchical concept network for autonomous learning in complex games. 2011 ,		2
2220	Comparing multilayer perceptron to Deep Belief Network Tandem features for robust ASR. 2011,		23
2219	Bayesian model selection of Stochastic Blockmodels for random graphs. 2011,		
2218	. 2011,		2
2217	Exploring speaker-specific characteristics with deep learning. 2011,		5
2216	Deep Learning and Its Applications to Signal and Information Processing [Exploratory DSP]. 2011 , 28, 145-154		272

2215	Meta-Learning in Computational Intelligence. 2011 ,	15
2214	Improving offline handwritten text recognition with hybrid HMM/ANN models. 2011 , 33, 767-79	155
2213	Deep Belief Networks for Financial Prediction. 2011 , 766-773	19
2212	Learning speaker-specific characteristics with a deep neural architecture. 2011 , 22, 1744-56	65
2211	Maximum Correntropy Criterion for Robust Face Recognition. 2011 , 33, 1561-76	401
221 0	Pattern Recognition by Hierarchical Temporal Memory. 2011 ,	11
2209	A thermodynamic perspective of immune capabilities. 2011 , 287, 48-63	32
2208	Neural network-based symbol recognition using a few labeled samples. 2011 , 35, 955-966	7
2207	Machine Lifelong Learning: Challenges and Benefits for Artificial General Intelligence. 2011 , 370-375	10
2206	A Tabu-Search Heuristic for Deterministic Two-Mode Blockmodeling of Binary Network Matrices. 2011 , 76, 612-33	25
2205	Low resolution face recognition with pose variations using deep belief networks. 2011,	1
2204	A Regularized Correntropy Framework for Robust Pattern Recognition. 2011 , 23, 2074-2100	87
2203	On the Expressive Power of Deep Architectures. 2011 , 18-36	84
2202	Learning invariant color features with sparse topographic restricted Boltzmann machines. 2011,	3
2201	Unsupervised and transfer learning challenge. 2011,	13
2200	Stochastic blockmodels and community structure in networks. 2011 , 83, 016107	849
2199	Learning message-passing inference machines for structured prediction. 2011 ,	39
2198	Formation and activation of feature hierarchies under reinforcement. 2011 ,	1

2197	Bootstrapping sensorimotor cascades: A group-theoretic perspective. 2011 ,	4
2196	Unsupervised vocabulary discovery using non-negative matrix factorization with graph regularization. 2011 ,	2
2195	Deep Learning Networks for Off-Line Handwritten Signature Recognition. 2011 , 523-532	15
2194	Optimal Support Features for Meta-Learning. 2011 , 317-358	1
2193	Learning, memory, and the role of neural network architecture. 2011 , 7, e1002063	35
2192	Analogue neural networks on correlated random graphs. 2012 , 45, 365001	1
2191	The impact of images on user clicks in product search. 2012 ,	3
2190	Revisiting Recurrent Neural Networks for robust ASR. 2012 ,	66
2189	Learning feature hierarchies under reinforcement. 2012,	2
2188	Extracting typical users' moving patterns using deep learning. 2012,	2
2187	A discriminative deep model for pedestrian detection with occlusion handling. 2012,	25
2186	A few useful things to know about machine learning. 2012 , 55, 78-87	1274
2185	Comparative study for inference of hidden classes in stochastic block models. 2012 , 2012, P12021	22
2184	Deep learning for acupuncture point selection patterns based on veteran doctor experience of Chinese medicine. 2012 ,	2
2183	Improving Convergence of Restricted Boltzmann Machines via a Learning Adaptive Step Size. 2012 , 511-518	2
2182	Performing complex associations using a generalised bidirectional associative memory. 2012 , 24, 23-42	1
2181	Flexible Algorithm Selection Framework for Large Scale Metalearning. 2012,	1
2180	Fuzzy Pattern Trees: Ein alternativer Ansatz zur Fuzzy-Modellierung. 2012 , 60, 622-629	1

2179 Hidden Conditional Neural Fields for Continuous Phoneme Speech Recognition. 2012 , E95.D, 2094-2104	2
2178 . 2012 , 100, 1567-1584	88
Robust speech recognition by extracting invariant features. 2012 , 32, 230-237	3
2176 Can Deep Neural Networks Discover Meaningful Pattern Features?. 2012 , 12, 194-199	11
2175 Emergent clustering methods for empirical OM research. 2012 , 30, 454-466	27
2174 Seeing through the blur. 2012 ,	5
Large-scale neuro-modeling for understanding and explaining some brain-related chaotic behavior. 2173 2012 , 88, 1316-1337	5
2172 Evolving spiking neural networks for spatio-and spectro-temporal pattern recognition. 2012 ,	6
2171 Learning Abstract Behaviors with the Hierarchical Incremental Gaussian Mixture Network. 2012 ,	1
2170 3D skeletal reconstruction from low-resolution multi-view images. 2012 ,	
2169 An unsupervised feature learning approach to improve automatic incident detection. 2012 ,	5
2168 Multitasking associative networks. 2012 , 109, 268101	8o
Toward a Sequential Approach to Pipelined Image Recognition. 2012 ,	
2166 Deep, super-narrow neural network is a universal classifier. 2012 ,	2
2165 Push-pull separability objective for supervised layer-wise training of neural networks. 2012 ,	
2164 How does the brain solve visual object recognition?. 2012 , 73, 415-34	931
2163 Analysis of the IJCNN 2011 UTL challenge. 2012 , 32, 174-8	O
2162 An efficient learning procedure for deep Boltzmann machines. 2012 , 24, 1967-2006	299

2161	Practical Recommendations for Gradient-Based Training of Deep Architectures. 2012, 437-478	625
2160	Scalable stacking and learning for building deep architectures. 2012 ,	108
2159	Restricted Boltzmann Machines and Deep Belief Networks on multi-core processors. 2012,	9
2158	Deep Structure Learning: Beyond Connectionist Approaches. 2012 ,	2
2157	Mapping the Landscape of Human-Level Artificial General Intelligence. 2012 , 33, 25-42	60
2156	Evolving Spiking Neural Networks and Neurogenetic Systems for Spatio- and Spectro-Temporal Data Modelling and Pattern Recognition. 2012 , 234-260	14
2155	Machine learning methods for property prediction in chemoinformatics: Quo Vadis?. 2012 , 52, 1413-37	146
2154	Brain plasticity through the life span: learning to learn and action video games. 2012 , 35, 391-416	308
2153	Dimensionality reduction by Mixed Kernel Canonical Correlation Analysis. 2012 , 45, 3003-3016	109
2152	Context-Dependent Pre-Trained Deep Neural Networks for Large-Vocabulary Speech Recognition. 2012 , 20, 30-42	1517
2151	The segmentation of the left ventricle of the heart from ultrasound data using deep learning architectures and derivative-based search methods. 2012 , 21, 968-82	127
2150	DETONATION CLASSIFICATION FROM ACOUSTIC SIGNATURE WITH THE RESTRICTED BOLTZMANN MACHINE. 2012 , 28, 261-288	7
2149	Learning with infinitely many features. 2013 , 91, 43-66	9
2148	Network anomaly detection with the restricted Boltzmann machine. 2013 , 122, 13-23	229
2147	Evolutionary computation for supervised learning. 2013,	
2146	Deep hierarchies in the primate visual cortex: what can we learn for computer vision?. 2013 , 35, 1847-71	226
2145	Deep Belief Networks Based Voice Activity Detection. 2013 , 21, 697-710	158
2144	Assessment and Validation of Machine Learning Methods for Predicting Molecular Atomization Energies. 2013 , 9, 3404-19	410

(2013-2013)

2143 Representation learning: a review and new perspectives. 2013 , 35, 1798-828	5396
2142 Feature learning and deep architectures: new directions for music informatics. 2013 , 41, 461-481	59
2141 Parallel Deep Learning with Suggestive Activation for Object Category Recognition. 2013 , 354-363	4
2140 Multiobjective blockmodeling for social network analysis. 2013 , 78, 498-525	21
2139 High-dimensional sequence transduction. 2013 ,	44
2138 Source code author identification with unsupervised feature learning. 2013 , 34, 330-334	13
2137 Interpolating destin features for image classification. 2013 ,	1
2136 Variable structure dynamic artificial neural networks. 2013 , 6, 126-130	10
2135 Unsupervised Deep Learning for Hippocampus Segmentation in 7.0 Tesla MR Images. 2013 , 1-8	12
2134 Multi-source deep learning for information trustworthiness estimation. 2013 ,	27
2133 A fast proximal method for convolutional sparse coding. 2013 ,	26
2132 Brain and Health Informatics. 2013 ,	
Complex scenes and situations visualization in hierarchical learning algorithm with dynamic 3D NeoAxis engine. 2013 ,	
2130 The learning problem of multi-layer neural networks. 2013 , 46, 116-23	16
2129 Machine Learning in Handwritten Arabic Text Recognition. 2013 , 31, 443-469	6
Combining multiple dynamic models and deep learning architectures for tracking the left ventricle endocardium in ultrasound data. 2013 , 35, 2592-607	83
2127 Stacked calibration of off-policy policy evaluation for video game matchmaking. 2013 ,	
Weakly Supervised Learning of Mid-Level Features with Beta-Bernoulli Process Restricted Boltzmann Machines. 2013 ,	16

2125	Document similarity estimation for sentiment analysis using neural network. 2013 ,	6
2124	Towards Scaling Up Classification-Based Speech Separation. 2013 , 21, 1381-1390	247
2123	Tag-aware image classification via Nested Deep Belief nets. 2013,	2
2122	Latent feature learning in social media network. 2013,	15
2121	Tensor deep stacking networks. 2013 , 35, 1944-57	92
2120	Intelligent condition based monitoring of rotating machines using sparse auto-encoders. 2013,	42
2119	Sparse representations in deep learning for noise-robust digit classification. 2013,	2
2118	Left ventricle segmentation from cardiac MRI combining level set methods with deep belief networks. 2013 ,	26
2117	Restricted Boltzmann machine approach to couple dictionary training for image super-resolution. 2013 ,	4
2116	Sparse maximum entropy deep belief nets. 2013 ,	
2116	Sparse maximum entropy deep belief nets. 2013, Investigation of multilingual deep neural networks for spoken term detection. 2013,	33
2115		33
2115	Investigation of multilingual deep neural networks for spoken term detection. 2013,	33
2115	Investigation of multilingual deep neural networks for spoken term detection. 2013, Classification Related Manifold Dimension Estimation with Restricted Boltzmann Machine. 2013,	
2115 2114 2113	Investigation of multilingual deep neural networks for spoken term detection. 2013, Classification Related Manifold Dimension Estimation with Restricted Boltzmann Machine. 2013, Learning deep physiological models of affect. 2013, 8, 20-33	151
2115 2114 2113 2112 2111	Investigation of multilingual deep neural networks for spoken term detection. 2013, Classification Related Manifold Dimension Estimation with Restricted Boltzmann Machine. 2013, Learning deep physiological models of affect. 2013, 8, 20-33 Human behavior prediction for smart homes using deep learning. 2013,	151
2115 2114 2113 2112 2111	Investigation of multilingual deep neural networks for spoken term detection. 2013, Classification Related Manifold Dimension Estimation with Restricted Boltzmann Machine. 2013, Learning deep physiological models of affect. 2013, 8, 20-33 Human behavior prediction for smart homes using deep learning. 2013, 3D convolutional neural networks for human action recognition. 2013, 35, 221-31	151 13 2990

(2013-2013)

2107 Early experiments with neural diversity machines. 2013 , 113, 36-48	4
2106 Enhanced gradient for training restricted Boltzmann machines. 2013 , 25, 805-31	30
2105 . 2013 , 21, 1060-1089	182
2104 Deep Learning of Representations. 2013 , 1-28	23
2103 Physiologically inspired model for the visual recognition of transitive hand actions. 2013 , 33, 6563-80	68
2102 Face recognition using Deep PCA. 2013 ,	11
2101 Gaussian-Bernoulli deep Boltzmann machine. 2013 ,	49
2100 A study of transformation-invariances of deep belief networks. 2013 ,	2
Optimized Deep Learning Architectures with Fast Matrix Operation Kernels on Parallel Platform. 2099 2013 ,	1
2098 A New Training Principle for Stacked Denoising Autoencoders. 2013 ,	2
Structural and functional discovery in dynamic networks with non-negative matrix factorization. 2013 , 88, 042812	30
2096 Contrastive divergence learning for the Restricted Boltzmann Machine. 2013,	5
2095 Restricted Boltzmann machines for pre-training deep Gaussian networks. 2013 ,	3
2094 Linear Online Learning over Structured Data with Distributed Tree Kernels. 2013 ,	4
2093 Efficient image representations and features. 2013 ,	
2092 Networks of transform-based evolvable features for object recognition. 2013 ,	2
2091 Charles Bonnet syndrome: evidence for a generative model in the cortex?. 2013 , 9, e1003134	28
2090 Hierarchical model of natural images and the origin of scale invariance. 2013 , 110, 3071-6	25

2089 Predicting drug-target interactions using restricted Boltzmann machines. 2013 , 29, i126-34	133
2088 Are we predictive engines? Perils, prospects, and the puzzle of the porous perceiver. 2013 , 36, 233-53	132
2087 Deep learning-based feature representation for AD/MCI classification. 2013 , 16, 583-90	197
2086 Hierarchical Representation Using NMF. 2013 , 466-473	38
2085 Learning Facial Expression Codes with Sparse Auto-Encoder. 2013 , 433-435, 334-337	
$_{ m 2084}$ Deep learning for robust feature generation in audiovisual emotion recognition. 2013 ,	166
2083 A novel sparse auto-encoder for deep unsupervised learning. 2013 ,	17
2082 Advances in optimizing recurrent networks. 2013 ,	176
2081 Deep Learning of Representations: Looking Forward. 2013 , 1-37	179
2080 Intersensory Causality Modeling Using Deep Neural Networks. 2013 ,	2
2079 Exponential random graph models for networks with community structure. 2013 , 88, 032810	14
20 7 8 . 2013 ,	2
2077 Statistical parametric speech synthesis using deep neural networks. 2013 ,	125
2076 Joint Deep Learning for Pedestrian Detection. 2013 ,	348
2075 Multilingual training of deep neural networks. 2013 ,	55
2074 Parallel auto-encoder for efficient outlier detection. 2013 ,	10
2073 Action Recognition by Hierarchical Sequence Summarization. 2013 ,	53
2072 Scaling up spike-and-slab models for unsupervised feature learning. 2013 , 35, 1902-14	23

2071	Learning Separable Filters. 2013 ,	89
2070	Modeling Mutual Visibility Relationship in Pedestrian Detection. 2013,	75
2069	Extended Decision Tree with or Relationship for HMM-Based Speech Synthesis. 2013,	0
2068	Learning features in deep architectures with unsupervised kernel k-means. 2013,	1
2067	Hybrid Deep Learning for Face Verification. 2013,	154
2066	Automatic localization of a language-independent sub-network on deep neural networks trained by multi-lingual speech. 2013 ,	3
2065	Classification-based close talk speech enhancement. 2013 ,	1
2064	. 2013,	12
2063	Deep neural networks for syllable based acoustic modeling in Chinese speech recognition. 2013,	6
2062	Multi-task deep neural network for multi-label learning. 2013,	32
	Multi-task deep neural network for multi-label learning. 2013, Dynamic Scene Classification: Learning Motion Descriptors with Slow Features Analysis. 2013,	32
2061	Dynamic Scene Classification: Learning Motion Descriptors with Slow Features Analysis. 2013 , Morpheme-based feature-rich language models using Deep Neural Networks for LVCSR of Egyptian	44
2061 2060	Dynamic Scene Classification: Learning Motion Descriptors with Slow Features Analysis. 2013, Morpheme-based feature-rich language models using Deep Neural Networks for LVCSR of Egyptian Arabic. 2013,	44
2061 2060 2059	Dynamic Scene Classification: Learning Motion Descriptors with Slow Features Analysis. 2013, Morpheme-based feature-rich language models using Deep Neural Networks for LVCSR of Egyptian Arabic. 2013, Towards context-aware mobile services through the use of Hierarchical Temporal Memory. 2013, Comparing Image Representations for Training a Convolutional Neural Network to Classify Gender.	44 6
2061 2060 2059 2058	Dynamic Scene Classification: Learning Motion Descriptors with Slow Features Analysis. 2013, Morpheme-based feature-rich language models using Deep Neural Networks for LVCSR of Egyptian Arabic. 2013, Towards context-aware mobile services through the use of Hierarchical Temporal Memory. 2013, Comparing Image Representations for Training a Convolutional Neural Network to Classify Gender. 2013,	44 6 1
2061 2060 2059 2058	Dynamic Scene Classification: Learning Motion Descriptors with Slow Features Analysis. 2013, Morpheme-based feature-rich language models using Deep Neural Networks for LVCSR of Egyptian Arabic. 2013, Towards context-aware mobile services through the use of Hierarchical Temporal Memory. 2013, Comparing Image Representations for Training a Convolutional Neural Network to Classify Gender. 2013, Deep Network with Support Vector Machines. 2013, 458-465	44 6 1 7

The two stages hierarchical unsupervised learning system for complex dynamic scene recognition. **2013**,

2052	CONSISTENCY UNDER SAMPLING OF EXPONENTIAL RANDOM GRAPH MODELS. 2013 , 41, 508-535	89
2051	Computational phenotype discovery using unsupervised feature learning over noisy, sparse, and irregular clinical data. 2013 , 8, e66341	177
2050	Adaptive learning in a compartmental model of visual cortex-how feedback enables stable category learning and refinement. 2014 , 5, 1287	2
2049	Sufficient Forecasting Using Factor Models. 2014 ,	2
2048	A Novel Semi-Supervised Deep Learning Framework for Affective State Recognition on EEG Signals. 2014 ,	38
2047	Voice Conversion Using Deep Neural Networks With Layer-Wise Generative Training. 2014 , 22, 1859-1872	91
2046	A Latent Semantic Model with Convolutional-Pooling Structure for Information Retrieval. 2014,	232
2045	An Anarchy of Methods: Current Trends in How Intelligence Is Abstracted in Al. 2014 , 29, 56-62	1
2044	Deep Embedding Network for Clustering. 2014,	56
2043	A generative model of identifying informative proteins from dynamic PPI networks. 2014 , 57, 1080-9	2
2042	An Improved Bilinear Deep Belief Network Algorithm for Image Classification. 2014,	4
2041	Universal approximation depth and errors of narrow belief networks with discrete units. 2014 , 26, 1386-407	16
2040	Storing sparse messages in networks of neural cliques. 2014 , 25, 980-9	16
2039	An Information-Theoretic View of Cloud Workloads. 2014,	3
2038	Robotic object manipulation with multilevel part-based model in RGB-D data. 2014,	
2037	Deep learning for brain decoding. 2014 ,	4
2036	A hopfield recurrent neural network trained on natural images performs state-of-the-art image compression. 2014 ,	3

2035	A tutorial survey of architectures, algorithms, and applications for deep learning. 2014 , 3,	246
2034	Maximum-margin based representation learning from multiple atlases for Alzheimer's disease classification. 2014 , 17, 212-9	6
2033	Learning Multiple Complex Features Based on Classification Results. 2014,	
2032	Emotion detection in speech using deep networks. 2014,	9
2031	Unsupervised Feature Pre-training of the Scattering Wavelet Transform for Musical Genre Recognition. 2014 , 18, 133-139	5
2030	Information acquisition performance by supervised information-theoretic self-organizing maps. 2014 ,	O
2029	Visualization of driving behavior using deep sparse autoencoder. 2014 ,	14
2028	Recognition of Handwritten Characters in Chinese Legal Amounts by Stacked Autoencoders. 2014 ,	8
2027	Interpolating Deep Spatio-Temporal Inference Network features for image classification. 2014,	
2026	Identifying Top Sellers In Underground Economy Using Deep Learning-Based Sentiment Analysis. 2014 ,	36
2025	Prediction of Stock Trend Based on Deep Belief Networks. 2014 , 644-650, 5538-5541	1
2024	Multilayer Perceptron and Stacked Autoencoder for Internet Traffic Prediction. 2014 , 61-71	9
2023	More Personality in Personality Computing. 2014 , 5, 297-300	17
2022	Storage capacity of ultrametric committee machines. 2014 , 47, 065002	
2021	Multi-granularity distance metric learning via neighborhood granule margin maximization. 2014 , 282, 321-331	32
2020	Unsupervised discovery of intentional process models from event logs. 2014,	18
2019	AirCloud. 2014,	129
2018	Hierarchical local binary pattern for branch retinal vein occlusion recognition with fluorescein angiography images. 2014 , 50, 1902-1904	6

2017 Deep learning for healthcare decision making with EMRs. 2014 ,	75
2016 Deep learning of the tissue-regulated splicing code. 2014 , 30, i121-9	276
2015 Improved contact predictions using the recognition of protein like contact patterns. 2014 , 10, e1003889	123
2014 Learning Convolutional Nonlinear Features for K Nearest Neighbor Image Classification. 2014 ,	8
2013 Deep supervised, but not unsupervised, models may explain IT cortical representation. 2014 , 10, e1003915	531
2012 Challenging the Recognition of Facial Expression via Deep Learning. 2014 , 571-572, 717-720	
RMSE-ELM: Recursive Model Based Selective Ensemble of Extreme Learning Machines for Robustness Improvement. 2014 , 2014, 1-12	
2010 Ensemble learning with trees and rules: Supervised, semi-supervised, unsupervised. 2014 , 18, 857-872	4
2009 Robust Method of Sparse Feature Selection for Multi-Label Classification with Naive Bayes. 2014 ,	8
2008 Artificial General Intelligence: Concept, State of the Art, and Future Prospects. 2014 , 5, 1-48	81
2007 Sparse coding with a global connectivity constraint. 2014 ,	
A Tibetan Component Representation Learning Method for Online Handwritten Tibetan Character Recognition. 2014 ,	7
2005 A multilayer neural network for image demosaicking. 2014 ,	19
Information-theoretic multi-layered supervised self-organizing maps for improved prediction performance and explicit internal representation. 2014 ,	
Feature Extraction and Pattern Recognition for Human Motion by a Deep Sparse Autoencoder. 2003 2014 ,	12
Single image main objects extraction via stacked sparse auto-encoders using sharpness information. 2014 ,	1
2001 A deep graph embedding network model for face recognition. 2014 ,	5
2000 Inexpensive user tracking using Boltzmann Machines. 2014,	5

1999 Visual analytics for neuroscience-inspired dynamic architectures. 2014 ,	2
1998 Cross-language transfer learning for deep neural network based speech enhancement. 2014 ,	10
1997 Web Classification Using Deep Belief Networks. 2014 ,	1
1996 A Hybrid Holistic/Semantic Approach for Scene Classification. 2014 ,	2
1995 Study on Distributed Representation of Words with Sparse Neural Network Language Model. 2014 ,	
1994 Information, noise, coding, modulation: What about the brain?. 2014 ,	2
1993 . 2014 , 16, 2154-2167	86
1992 SPINDLE. 2014 ,	54
1991 User-level psychological stress detection from social media using deep neural network. 2014 ,	65
1990 Learning Compact Face Representation. 2014 ,	26
1989 Parametric Learning of Deep Convolutional Neural Network. 2014 ,	1
Performance evaluation of typical unsupervised feature learning algorithms for visual object recognition. 2014 ,	1
Performance evaluation of typical unsupervised feature learning algorithms for visual object	2
Performance evaluation of typical unsupervised feature learning algorithms for visual object recognition. 2014 , Robust anchorperson detection based on audio streams using a hybrid I-vector and DNN system.	
Performance evaluation of typical unsupervised feature learning algorithms for visual object recognition. 2014 , Robust anchorperson detection based on audio streams using a hybrid I-vector and DNN system. 2014 ,	2
Performance evaluation of typical unsupervised feature learning algorithms for visual object recognition. 2014, Robust anchorperson detection based on audio streams using a hybrid I-vector and DNN system. 2014, Cross-Media Hashing with Neural Networks. 2014, Automatic detection of invasive ductal carcinoma in whole slide images with convolutional neural	2 21
Performance evaluation of typical unsupervised feature learning algorithms for visual object recognition. 2014, Robust anchorperson detection based on audio streams using a hybrid I-vector and DNN system. 2014, Cross-Media Hashing with Neural Networks. 2014, Automatic detection of invasive ductal carcinoma in whole slide images with convolutional neural networks. 2014,	2 21 136

1981 Start from Scratch. 2014 ,	47
Speech separation based on improved deep neural networks with dual outputs of speech features for both target and interfering speakers. 2014 ,	27
1979 Cross-modal Retrieval with Correspondence Autoencoder. 2014 ,	264
1978 An Intrusion Detection Model Based on Deep Belief Networks. 2014 ,	121
1977 Self-synchronizing signal parsing with spiking feature-detection filters. 2014 ,	0
1976 An automatic setting for training restricted boltzmann machine. 2014 ,	4
1975 Mining the impact of social news on the emotions of users based on deep model. 2014 ,	
Stacked Denoising Autoencoder for feature representation learning in pose-based action recognition. 2014 ,	9
1973 . 2014 ,	12
1972 Neural Conditional Energy Models for Multi-label Classification. 2014 ,	1
1971 Training Restricted Boltzmann Machines with Overlapping Partitions. 2014 , 195-208	2
1970 An asymmetric stagewise least square loss function for imbalanced classification. 2014 ,	4
1969 Detecting double compressed AMR audio using deep learning. 2014 ,	8
Graphics processing unit-accelerated techniques for bio-inspired computation in the primary visual cortex. 2014 , 26, 1799-1818	3
1967 Soft sensor modeling of mill level based on Deep Belief Network. 2014 ,	4
1966 Advanced integration of multimedia assistive technologies: A prospective outlook. 2014 ,	3
1965 Learning features from High Speed Train vibration signals with Deep Belief Networks. 2014 ,	18
1964 . 2014 , 16, 1624-1635	18

1963 Multivariate analysis, chemometrics, and machine learning in laser spectroscopy. 2014 , 125-164	9
Reducing structure of deep Convolutional Neural Networks for Huawei Accurate and Fast Mobile Video Annotation Challenge. 2014 ,	2
1961 Pre-release sales forecasting: A model-driven context feature extraction approach. 2014 , 58, 8:1-8:13	1
1960 Natural Language Processing and Chinese Computing. 2014 ,	3
1959 Multi-source Deep Learning for Human Pose Estimation. 2014 ,	132
1958 Granular computing with multiple granular layers for brain big data processing. 2014 , 1, 1-10	16
1957 Dictionary Learning for Analysis-Synthesis Thresholding. 2014 , 62, 5962-5972	29
1956 Dual Deep Neural Network approach to matching data in different modes. 2014 ,	4
Joint optimization of algorithmic suites for EEG analysis. 2014 , 2014, 2997-3000	1
1954 Robust feature learning by stacked autoencoder with maximum correntropy criterion. 2014 ,	34
1953 Deep Boltzmann Machines based vehicle recognition. 2014 ,	1
1952 Transformation Pursuit for Image Classification. 2014 ,	35
1951 Deep neural networks for Mandarin tone recognition. 2014 ,	3
1950 Deep learning to classify difference image for image change detection. 2014 ,	24
1949 One-Shot Periodic Activity Recognition Using Convolutional Neural Networks. 2014 ,	4
1948 Joint layer based deep learning framework for bilingual machine transliteration. 2014 ,	3
1947 Shallow Classification or Deep Learning: An Experimental Study. 2014 ,	4
1946 Deep neural network based speech separation for robust speech recognition. 2014 ,	12

1945 An ensemble of deep neural networks for object tracking. 2014 ,	25
1944 Classification of hyperspectral image based on deep belief networks. 2014 ,	95
Human Action Recognition Based on MOCAP Information Using Convolution Neural Networks. 2014 ,	12
1942 Editorial. 2014 , 26, 1-4	3
1941 Improving transfer learning accuracy by reusing Stacked Denoising Autoencoders. 2014 ,	20
1940 Comparison of machine learning methods for estimating energy consumption in buildings. 2014 ,	25
1939 Preview on structures and algorithms of deep learning. 2014 ,	16
Using hierarchical dirichlet processes to regulate weight parameters of Restricted Boltzmann Machines. 2014 ,	
1937 A novel deep model for image recognition. 2014 ,	O
1936 Table of contents. 2014 , 29, c2-1	
1935 Multi-feature deep learning for face gender recognition. 2014 ,	3
1934 Deep Learning for Cerebellar Ataxia Classification and Functional Score Regression. 2014 , 8679, 6	8-76 1 ₇
1933 Learning Semantic Similarity for Multi-label Text Categorization. 2014 , 260-269	4
1932 Image De-Noising Using Deep Learning. 2014 , 641-642, 1287-1290	
1931 Privacy-preserving restricted boltzmann machine. 2014 , 2014, 138498	
1930 Robust deep network with maximum correntropy criterion for seizure detection. 2014 , 2014, 703	816 10
1929 A Study of Deep Belief Network Based Chinese Speech Emotion Recognition. 2014 ,	3
1928 Improving Content-based and Hybrid Music Recommendation using Deep Learning. 2014 ,	166

1927	Wrist pulse signals analysis based on Deep Convolutional Neural Networks. 2014 ,	14
1926	Feature extraction with stacked autoencoders for epileptic seizure detection. 2014 , 2014, 4184-7	34
1925	Enhancing performance of restricted Boltzmann machines via log-sum regularization. 2014 , 63, 82-96	17
1924	Deep learning based classification of focal liver lesions with contrast-enhanced ultrasound. 2014 , 125, 4057-4063	62
1923	Learning to predict eye fixations for semantic contents using multi-layer sparse network. 2014 , 138, 61-68	39
1922	On MAP and MMSE estimators for the co-sparse analysis model. 2014 , 28, 57-74	10
1921	A Machine Learning Approach for Abstraction based on the Idea of Deep Belief Artificial Neural Networks. 2014 , 69, 1499-1508	1
1920	Towards adaptive learning with improved convergence of deep belief networks on graphics processing units. 2014 , 47, 114-127	45
1919	Learning deep hierarchical visual feature coding. 2014 , 25, 2212-25	75
1918	Data-intensive applications, challenges, techniques and technologies: A survey on Big Data. 2014 , 275, 314-347	1541
1918 1917		1541
1917	275, 314-347	
1917	275, 314-347 Multimodal integration learning of robot behavior using deep neural networks. 2014 , 62, 721-736	132
1917 1916	275, 314-347 Multimodal integration learning of robot behavior using deep neural networks. 2014, 62, 721-736 A deep learning approach to the classification of 3D CAD models. 2014, 15, 91-106 An Automated Approach for Land Cover Classification Based on a Fuzzy Supervised Learning	132
1917 1916 1915	Multimodal integration learning of robot behavior using deep neural networks. 2014 , 62, 721-736 A deep learning approach to the classification of 3D CAD models. 2014 , 15, 91-106 An Automated Approach for Land Cover Classification Based on a Fuzzy Supervised Learning Framework. 2014 , 42, 505-515	132 31 1
1917 1916 1915	Multimodal integration learning of robot behavior using deep neural networks. 2014, 62, 721-736 A deep learning approach to the classification of 3D CAD models. 2014, 15, 91-106 An Automated Approach for Land Cover Classification Based on a Fuzzy Supervised Learning Framework. 2014, 42, 505-515 Bi-firing deep neural networks. 2014, 5, 73-83	132 31 1
1917 1916 1915 1914	Multimodal integration learning of robot behavior using deep neural networks. 2014, 62, 721-736 A deep learning approach to the classification of 3D CAD models. 2014, 15, 91-106 An Automated Approach for Land Cover Classification Based on a Fuzzy Supervised Learning Framework. 2014, 42, 505-515 Bi-firing deep neural networks. 2014, 5, 73-83 Latent Hierarchical Model of Temporal Structure for Complex Activity Classification. 2014, 23, 810-22	132 31 1 11 78

1909 Meta-Learning. 2014 , 233-317	1
1908 A 3D object recognition and pose estimation system using deep learning method. 2014 ,	9
1907 Auto-encoder based bagging architecture for sentiment analysis. 2014 , 25, 840-849	20
1906 Stacked Progressive Auto-Encoders (SPAE) for Face Recognition Across Poses. 2014 ,	137
1905 An Experimental Study on Speech Enhancement Based on Deep Neural Networks. 2014 , 21, 65-68	407
1904 Deep Fisher Kernels End to End Learning of the Fisher Kernel GMM Parameters. 2014 ,	41
1903 Multimodal fusion using dynamic hybrid models. 2014 ,	20
1902 Classemes and Other Classifier-Based Features for Efficient Object Categorization. 2014 , 36, 1988-2001	22
1901 Discriminative Hierarchical Modeling of Spatio-temporally Composable Human Activities. 2014 ,	40
1900 Dynamic boosting in deep learning using reconstruction error. 2014 ,	3
1899 Discriminative Deep Metric Learning for Face Verification in the Wild. 2014 ,	345
Predicting backbone Cangles and dihedrals from protein sequences by stacked sparse auto-encoder deep neural network. 2014 , 35, 2040-6	110
	2
1897 Restricted Boltzmann machine associative memory. 2014 ,	
Restricted Boltzmann machine associative memory. 2014 , 1896 Speech and Computer. 2014 ,	
	4 ² 7
1896 Speech and Computer. 2014 ,	
1896 Speech and Computer. 2014 , 1895 . 2014 , 1-9	427

1891	Single-layer Unsupervised Feature Learning with l2 regularized sparse filtering. 2014 ,	2
1890	Feature ensemble learning based on sparse autoencoders for image classification. 2014,	9
1889	. 2014,	21
1888	Object Learning Through Active Exploration. 2014 , 6, 56-72	38
1887	An expressive deep model for human action parsing from a single image. 2014,	14
1886	Neuroscience-inspired inspired dynamic architectures. 2014 ,	11
1885	Incremental learning by message passing in hierarchical temporal memory. 2014 , 26, 1763-809	4
1884	Deep learning for real-time robust facial expression recognition on a smartphone. 2014 ,	47
1883	Droid-Sec. 2014 ,	105
1882	Supervised deep learning with auxiliary networks. 2014,	8
1881	Intelligent Data Engineering and Automated Learning IIDEAL 2014. 2014 ,	1
1881 1880	Intelligent Data Engineering and Automated Learning IIDEAL 2014. 2014 , An Adaptive Stacked Denoising Auto-Encoder Architecture for Human Action Recognition. 2014 , 631-632, 403-409	1
	An Adaptive Stacked Denoising Auto-Encoder Architecture for Human Action Recognition. 2014 ,	1 1 85
1880	An Adaptive Stacked Denoising Auto-Encoder Architecture for Human Action Recognition. 2014 , 631-632, 403-409 Speech feature denoising and dereverberation via deep autoencoders for noisy reverberant speech	1
1880 1879	An Adaptive Stacked Denoising Auto-Encoder Architecture for Human Action Recognition. 2014, 631-632, 403-409 Speech feature denoising and dereverberation via deep autoencoders for noisy reverberant speech recognition. 2014, Tuning and spontaneous spike time synchrony share a common structure in macaque inferior	1 85
1880 1879 1878	An Adaptive Stacked Denoising Auto-Encoder Architecture for Human Action Recognition. 2014, 631-632, 403-409 Speech feature denoising and dereverberation via deep autoencoders for noisy reverberant speech recognition. 2014, Tuning and spontaneous spike time synchrony share a common structure in macaque inferior temporal cortex. 2014, 112, 856-69	1 85 9
1880 1879 1878	An Adaptive Stacked Denoising Auto-Encoder Architecture for Human Action Recognition. 2014, 631-632, 403-409 Speech feature denoising and dereverberation via deep autoencoders for noisy reverberant speech recognition. 2014, Tuning and spontaneous spike time synchrony share a common structure in macaque inferior temporal cortex. 2014, 112, 856-69 Early diagnosis of Alzheimer's disease with deep learning. 2014, Feature extraction, feature selection and machine learning for image classification: A case study.	1 85 9 160

1873	Classification of non-time-locked rapid serial visual presentation events for brain-computer interaction using deep learning. 2014 ,	8
1872	. 2014,	79
1871	Parallel batch pattern training algorithm for deep neural network. 2014 ,	3
1870	Sparse representation with multi-manifold analysis for texture classification from few training images. 2014 , 32, 835-846	Ο
1869	A novel approach to process mining: Intentional process models discovery. 2014 ,	5
1868	Machine Learning in Wireless Sensor Networks: Algorithms, Strategies, and Applications. 2014 , 16, 1996-2018	494
1867	Genetic algorithms for evolving deep neural networks. 2014 ,	58
1866	Neural networks and neuroscience-inspired computer vision. 2014 , 24, R921-R929	87
1865	Vision-based online recognition of surgical activities. 2014 , 9, 979-86	4
1864	Function determines structure in complex neural networks. 2014 , 111, 8327-8	1
1863	Pattern Recognition. 2014 ,	1
1862	On the complexity of neural network classifiers: a comparison between shallow and deep architectures. 2014 , 25, 1553-65	228
1861	Semi-supervised and unsupervised extreme learning machines. 2014 , 44, 2405-17	506
1860	. 2014 , 2, 514-525	644
1859	SELP: A general-purpose framework for learning the norms from saliencies in spatiotemporal data. 2014 , 138, 41-60	5
1858	An active learning paradigm based on a priori data reduction and organization. 2014 , 41, 6086-6097	9
1857	Data-driven soft sensor development based on deep learning technique. 2014 , 24, 223-233	292
1856	Learning ensemble classifiers via restricted Boltzmann machines. 2014 , 36, 161-170	25

1855 Learning binary factor analysis with automatic model selection. 2014 , 134, 149-158	4
Learning long-term dependencies in segmented-memory recurrent neural networks with backpropagation of error. 2014 , 141, 54-64	6
1853 A comparison of three brain atlases for MCI prediction. 2014 , 221, 139-50	36
1852 The receptive field is dead. Long live the receptive field?. 2014 , 25, ix-xii	18
1851 Can a Single Image Denoising Neural Network Handle All Levels of Gaussian Noise?. 2014 , 21, 1150-1153	16
Incrementally learning objects by touch: online discriminative and generative models for tactile-based recognition. 2014 , 7, 512-25	24
1849 A sparse-response deep belief network based on rate distortion theory. 2014 , 47, 3179-3191	54
1848 Image tag refinement by regularized latent Dirichlet allocation. 2014 , 124, 61-70	27
1847 Deep self-taught learning for facial beauty prediction. 2014 , 144, 295-303	58
Combination of supervised and unsupervised learning for training the activation functions of neural networks. 2014 , 37, 178-191	19
An Associative Memorization Architecture of Extracted Musical Features from Audio Signals by Deep Learning Architecture. 2014 , 36, 515-522	
1844 Hyperspectral classification using stacked autoencoders with deep learning. 2014 ,	11
Improving Performance on Problems with Few Labelled Data by Reusing Stacked Auto-Encoders. 2014 ,	4
Applying Machine Learning Techniques to a Real Cognitive Network: File Transfer ETAs Prediction. 2014 ,	
1841 Stacked convolutional auto-encoders for steganalysis of digital images. 2014 ,	87
1840 Explicit knowledge extraction in information-theoretic supervised multi-layered SOM. 2014 ,	1
1839 Deep Self-taught Hashing for Image Retrieval. 2015 ,	14
1838 Simulated Annealing Algorithm for Deep Learning. 2015 , 72, 137-144	60

1837	Scanning Brain Networks with Micro-CT. 2015 , 23, 12-17	2
1836	Leveraging inter-rater agreement for audio-visual emotion recognition. 2015,	12
1835	A Signal Processing Approach for Cyber Data Classification with Deep Neural Networks. 2015 , 61, 349-354	21
1834	Generic Feature Learning in Computer Vision. 2015 , 58, 202-209	9
1833	Deep learning based primary user classification in Cognitive Radios. 2015,	8
1832	The early-warning model of equipment chain in gas pipeline based on DNN-HMM. 2015 , 27, 1710-1722	19
1831	A probabilistic interpretation for artificial neural network-based voice conversion. 2015,	4
1830	Online marginalized linear stacked denoising autoencoders for learning from big data stream. 2015	1
1829	GA-based input features and learning parameters selection method for decorrelated neural network ensembel model. 2015 ,	
1828	A Configurable Deep Network for high-dimensional clinical trial data. 2015 ,	4
1827	A Hierarchical Deep Neural Network for Fault Diagnosis on Tennessee-Eastman Process. 2015,	10
1826	Representation models in single channel source separation. 2015 ,	2
1825	Leveraging big data for grasp planning. 2015 ,	111
1824	Discriminative concept learning network: Reveal high-level differential concepts from shallow architecture. 2015 ,	1
1823	Improving Spatial Feature Representation from Aerial Scenes by Using Convolutional Networks. 2015 ,	26
1822	Fuzzy Rule Reduction using Sparse Auto-Encoders. 2015 ,	4
1821	Marine life observation using classification algorithms on ocean surface photographs. 2015,	2
1820	Intelligent Vision Systems: Exploring the State-of-the-Art and Opportunities for the Future. 2015 ,	

	Multi-view deep learning for image-based pose recovery. 2015 ,	2
1818	Predicting Students Performance in Educational Data Mining. 2015,	52
1817	Learning Image and User Features for Recommendation in Social Networks. 2015,	86
1816	Hierarchical sparse coding with geometric prior for visual geo-location. 2015 ,	3
1815	A unified speaker-dependent speech separation and enhancement system based on deep neural networks. 2015 ,	2
1814	An unsupervised approach to the semantic description of the sound quality of violins. 2015,	2
1813	Learning Discriminative Reconstructions for Unsupervised Outlier Removal. 2015,	101
1812	Robust Facial Landmark Detection Under Significant Head Poses and Occlusion. 2015,	53
1811	A feature generation framework for Google trace analysis. 2015,	1
1810	. 2015,	4
	. 2015, Data preprocessing methods for Sparse Auto-encoder based fuzzy rule classifier. 2015,	3
1809		
1809 1808	Data preprocessing methods for Sparse Auto-encoder based fuzzy rule classifier. 2015 ,	3
1809 1808 1807	Data preprocessing methods for Sparse Auto-encoder based fuzzy rule classifier. 2015, DeepSat. 2015,	3 86
1809 1808 1807 1806	Data preprocessing methods for Sparse Auto-encoder based fuzzy rule classifier. 2015, DeepSat. 2015, Distributed Data Mining Based on Deep Neural Network for Wireless Sensor Network. 2015, 11, 157453	3 86
1809 1808 1807 1806	Data preprocessing methods for Sparse Auto-encoder based fuzzy rule classifier. 2015, DeepSat. 2015, Distributed Data Mining Based on Deep Neural Network for Wireless Sensor Network. 2015, 11, 157453 Cognitive Sensing in Smart Cities Using Optical Sensors. 2015,	3 86 14
1809 1808 1807 1806 1805	Data preprocessing methods for Sparse Auto-encoder based fuzzy rule classifier. 2015, DeepSat. 2015, Distributed Data Mining Based on Deep Neural Network for Wireless Sensor Network. 2015, 11, 157453 Cognitive Sensing in Smart Cities Using Optical Sensors. 2015, Majorana zero modes and topological quantum computation. 2015, 1,	3 86 14 484

1801	Proteins, physics and probability kinematics: a Bayesian formulation of the protein folding problem. 2015 , 356-376	2
1800	Restricted Boltzmann machine: a non-linear substitute for PCA in spectral processing. 2015 , 576, A96	10
1799	Tagging Personal Photos with Transfer Deep Learning. 2015,	16
1798	GraphBIG. 2015,	69
1797	A unified framework for automatic wound segmentation and analysis with deep convolutional neural networks. 2015 , 2015, 2415-8	23
1796	An Associative Generated Model for Multi-signals Based on Deep Learning. 2015,	
1795	A sparse feature representation for genetic data analysis. 2015 ,	
1794	Simplified and gradual information control for improving generalization performance of multi-layered neural networks. 2015 ,	
1793	Selective ensemble modeling based on nonlinear frequency spectral feature extraction for predicting load parameter in ball mills. 2015 , 23, 2020-2028	3
1792	Projection spectral analysis. 2015 , 13, 1530-1537	2
1791	Speaker Adaptation Using Speaker Similarity Score on DNN Features. 2015,	O
1790	Deep Representation Hierarchies for 3D Active Vision. 2015 , 29, 31-40	
1789	Distributed sparse HMAX model. 2015 ,	
1788	Research on Chinese Micro-Blog Sentiment Analysis Based on Deep Learning. 2015 ,	9
1787	Connectivity-based parcellation: Critique and implications. 2015 , 36, 4771-92	189
1786	DARPA neurocomputing. 2015 ,	2
1785	A deep convolutional neural wavelet network to supervised Arabic letter image classification. 2015,	9
1784	On Deep Learning. 2015 , 33, 92-96	4

1783 Feature Learning Based Human Detection for Omnidirectional Images. 2015 , 27, 813-825	1
$_{1782}$ DASA: Domain adaptation in stacked autoencoders using systematic dropout. 2015 ,	8
1781 Deep hashing for compact binary codes learning. 2015 ,	193
Neural Networks and Particle Swarm Optimization for Function Approximation in Tri-SWACH Hull Design. 2015 ,	О
1779 Hierarchical motion evolution for action recognition. 2015 ,	3
A novel single channel speech enhancement based on joint Deep Neural Network and Wiener Filter. 2015 ,	O
1777 Future of seizure prediction and intervention: closing the loop. 2015 , 32, 194-206	46
Analysis and synthesis of 3D shape families via deep-learned generative models of surfaces. 2015 , 34, 25-38	45
Evidences of Scale-Free Geometry on a Social Economic Environment Using Mobile Application Social2Live-5G. 2015 ,	
1774 Correlated activity supports efficient cortical processing. 2014 , 8, 171	7
Correlated activity supports efficient cortical processing. 2014 , 8, 171 1773 Diversity priors for learning early visual features. 2015 , 9, 104	<i>7</i> 5
Diversity arises for leasting and without for types 2015 0, 104	
Diversity priors for learning early visual features. 2015 , 9, 104 Systems view on spatial planning and perception based on invariants in agent-environment	5
Diversity priors for learning early visual features. 2015 , 9, 104 Systems view on spatial planning and perception based on invariants in agent-environment dynamics. 2014 , 8, 439 Lightweight Adaptation of Classifiers to Users and Contexts: Trends of the Emerging Domain. 2015 ,	5 9
Diversity priors for learning early visual features. 2015 , 9, 104 Systems view on spatial planning and perception based on invariants in agent-environment dynamics. 2014 , 8, 439 Lightweight Adaptation of Classifiers to Users and Contexts: Trends of the Emerging Domain. 2015 , 2015, 434826 Encoding sequential information in semantic space models: comparing holographic reduced	5 9 2
Diversity priors for learning early visual features. 2015, 9, 104 Systems view on spatial planning and perception based on invariants in agent-environment dynamics. 2014, 8, 439 Lightweight Adaptation of Classifiers to Users and Contexts: Trends of the Emerging Domain. 2015, 2015, 434826 Encoding sequential information in semantic space models: comparing holographic reduced representation and random permutation. 2015, 2015, 986574 Topologically Ordered Feature Extraction Based on Sparse Group Restricted Boltzmann Machines.	5 9 2
Diversity priors for learning early visual features. 2015, 9, 104 Systems view on spatial planning and perception based on invariants in agent-environment dynamics. 2014, 8, 439 Lightweight Adaptation of Classifiers to Users and Contexts: Trends of the Emerging Domain. 2015, 2015, 434826 Encoding sequential information in semantic space models: comparing holographic reduced representation and random permutation. 2015, 2015, 986574 Topologically Ordered Feature Extraction Based on Sparse Group Restricted Boltzmann Machines. 2015, 2015, 2015, 1-12	5 9 2 33

1765	Obtaining Cross Modal Similarity Metric with Deep Neural Architecture. 2015 , 2015, 1-9	1
1764	Urban Land Use and Land Cover Classification Using Remotely Sensed SAR Data through Deep Belief Networks. 2015 , 2015, 1-10	63
1763	Abstract Data Machine. 2015 ,	
1762	Deep Belief Network Based 3D Models Classification in Building Information Modeling. 2015 , 11, 57	4
1761	Machine Learning in Automatic Speech Recognition: A Survey. 2015 , 32, 240-251	48
1760	An Image Retrieval Method for Binary Images Based on DBN and Softmax Classifier. 2015 , 32, 294-303	31
1759	Stacked Multilayer Self-Organizing Map for Background Modeling. 2015 , 24, 2841-50	19
1758	On simplicity and complexity in the brave new world of large-scale neuroscience. 2015 , 32, 148-55	191
1757	Many regression algorithms, one unified model: A review. 2015 , 69, 60-79	92
1756	Unsupervised deep learning: A short review. 2015 , 125-142	20
1755	Deep Neural Network Modeling for Big Data Weather Forecasting. 2015 , 389-408	24
733	Deep Neural Network Modeling for Big Data Weather Forecasting. 2015 , 389-408 Brain CT Image Classification with Deep Neural Networks. 2015 , 653-662	
1754		24
1754	Brain CT Image Classification with Deep Neural Networks. 2015 , 653-662	² 4
1754 1753 1752	Brain CT Image Classification with Deep Neural Networks. 2015 , 653-662 Inferentialism and our knowledge of others[minds. 2015 , 172, 1435-1454	24 7 1
1754 1753 1752 1751	Brain CT Image Classification with Deep Neural Networks. 2015, 653-662 Inferentialism and our knowledge of others minds. 2015, 172, 1435-1454 Factored four way conditional restricted Boltzmann machines for activity recognition. 2015, 66, 100-108 The effect of whitening transformation on pooling operations in convolutional autoencoders. 2015,	24 7 1 26
1754 1753 1752 1751 1750	Brain CT Image Classification with Deep Neural Networks. 2015, 653-662 Inferentialism and our knowledge of others[minds. 2015, 172, 1435-1454 Factored four way conditional restricted Boltzmann machines for activity recognition. 2015, 66, 100-108 The effect of whitening transformation on pooling operations in convolutional autoencoders. 2015, 2015,	24 7 1 26

(2015-2015)

1747	Efficient Learning Machines. 2015 ,	163
1746	A handwriting recognition system for the classroom. 2015 ,	6
1745	Big data and deep data in scanning and electron microscopies: deriving functionality from multidimensional data sets. 2015 , 1, 6	63
1744	Neuromorphic semiconductor memory. 2015,	1
1743	FingerNet: Deep learning-based robust finger joint detection from radiographs. 2015,	12
1742	On using heterogeneous data for vehicle-based speech recognition: A DNN-based approach. 2015 ,	6
1741	. 2015,	29
1740	Self-Organized Mutual Information Maximization Learning for Improved Generalization Performance. 2015 ,	1
1739	Gender aware Deep Boltzmann Machines for phone recognition. 2015,	3
1738	Bi-Shifting Auto-Encoder for Unsupervised Domain Adaptation. 2015 ,	26
1737	Deep Learning of Tissue Fate Features in Acute Ischemic Stroke. 2015 , 2015, 1316-1321	32
1736	Deep transfer metric learning. 2015 ,	117
1735	Generalized Learning of Neural Network Based Semantic Similarity Models and Its Application in Movie Search. 2015 ,	1
1734	Learning from Synthetic Data Using a Stacked Multichannel Autoencoder. 2015 ,	10
1733	Does diversity improve deep learning?. 2015 ,	4
1732	Learning relevance from click data via neural network based similarity models. 2015 ,	3
1731	Semantics in Deep Neural-Network Computing. 2015 ,	
1730	Data selection for acoustic emotion recognition: Analyzing and comparing utterance and sub-utterance selection strategies. 2015 ,	9

Study on the Feasibility of Using a Chinese Character Writing Scale to Distinguish Amnestic-MCI. **2015**,

1728	Deep kinship verification. 2015 ,	21
1727	Deep Neural Networks with Parallel Autoencoders for Learning Pairwise Relations: Handwritten Digits Subtraction. 2015 ,	4
1726	A Generation Method of Immunological Memory in Clonal Selection Algorithm by Using Restricted Boltzmann Machines. 2015 ,	
1725	A-Wristocracy: Deep learning on wrist-worn sensing for recognition of user complex activities. 2015	51
1724	Representation Learning via Semi-Supervised Autoencoder for Multi-task Learning. 2015,	10
1723	Tensor object classification via multilinear discriminant analysis network. 2015,	6
1722	A deep neural network based approach to mandarin consonant/vowel separation. 2015,	2
1721	Deep Neural Networks: A Case Study for Music Genre Classification. 2015,	17
1720	A method for finding similarity between multi-layer perceptrons by Forward Bipartite Alignment. 2015 ,	1
1719	A New Method Based on Deep Belief Networks for Learning Features from Symbolic Music. 2015,	
1718	Sound source separation for robot audition using deep learning. 2015,	5
1717	. 2015,	7
1716	On automated Flow Cytometric analysis for MRD estimation of Acute Lymphoblastic Leukaemia: A comparison among different approaches. 2015 ,	5
1715	DeepFinger: A Cascade Convolutional Neuron Network Approach to Finger Key Point Detection in Egocentric Vision with Mobile Camera. 2015 ,	18
1714	Deep neural networks for anatomical brain segmentation. 2015,	126
1713	V4 Neural Network Model for Shape-Based Feature Extraction and Object Discrimination. 2015 , 7, 753-762	10
1712	Deep learning using partitioned data vectors. 2015 ,	О

1711	Classifier adaptation at prediction time. 2015,	20
1710	Deep convolutional network neocognitron: Improved Interpolating-Vector. 2015,	4
1709	Deep Computation Model for Unsupervised Feature Learning on Big Data. 2015, 1-1	51
1708	Improving Monte-Carlo tree search for dots-and-boxes with a novel board representation and artificial neural networks. 2015 ,	2
1707	Unsupervised feature learning for optical character recognition. 2015,	4
1706	Resting State EEG-based biometrics for individual identification using convolutional neural networks. 2015 , 2015, 2848-51	43
1705	Robust Deep Auto-encoder for Occluded Face Recognition. 2015,	15
1704	Machine Learning Approaches for Predicting Radiation Therapy Outcomes: A Clinician's Perspective. 2015 , 93, 1127-35	105
1703	Scene analysis by mid-level attribute learning using 2D LSTM networks and an application to web-image tagging. 2015 , 63, 23-29	11
1702	Localized Deep Extreme Learning Machines for Efficient RGB-D Object Recognition. 2015,	7
1701	Investigating deep learning for fNIRS based BCI. 2015 , 2015, 2844-7	38
1700	A Histopathological Image Feature Representation Method Based on Deep Learning. 2015 ,	1
1699	Towards incorporating affective computing to virtual rehabilitation; surrogating attributed attention from posture for boosting therapy adaptation. 2015 ,	1
1698	Deep Learning for Wind Speed Forecasting in Northeastern Region of Brazil. 2015,	11
1697	Learning Like a Child: Fast Novel Visual Concept Learning from Sentence Descriptions of Images. 2015 ,	63
1696	Fine-grained acronym expansion identification using latent-state neural structured prediction model. 2015 ,	1
1695	Intercell-Interference Cancellation and Neural Network Transmit Power Optimization for MIMO Channels. 2015 ,	16
1694	Manifold Regularized Stacked Autoencoder for Feature Learning. 2015 ,	5

1693 . 2015 ,	62
Image super-resolution reconstruction via RBM-based joint dictionary learning and spa representation. 2015 ,	arse
1691 Audio recapture detection using deep learning. 2015 ,	7
1690 Deep Representations for Software Engineering. 2015 ,	3
1689 Stacked Face De-Noising Auto Encoders for Expression-Robust Face Recognition. 2015	5 , 6
1688 A KALDI-DNN-based ASR system for Italian. 2015 ,	13
The Evolution of Neural Learning Systems: A Novel Architecture Combining the Streng CNNs, and ELMs. 2015 , 1, 17-26	oths of NTs,
Target classification in oceanographic SAR images with deep neural networks: Architection initial results. 2015 ,	cture and 22
1685 Learning to Detect Saliency with Deep Structure. 2015 ,	3
1684 Transfer learning between texture classification tasks using Convolutional Neural Net	works. 2015 , 16
1683 Deepshape: Deep learned shape descriptor for 3D shape matching and retrieval. 2015	, 5
1682 The Appropriate Hidden Layers of Deep Belief Networks for Speech Recognition. 2015	5, 1
1681 Deep learning for credit card data analysis. 2015 ,	6
$_{1680}$ Study on signal recognition and diagnosis for spacecraft based on deep learning methors.	od. 2015, 2
1679 A Deep Neural Network based approach for vocal extraction from songs. 2015 ,	
1678 Representation learning by Denoising Autoencoders for Clustering-based Classificatio	on. 2015 , 4
1677 A restricted Boltzmann machine based two-lead electrocardiography classification. 20	115 , 22
1676 Real-time deep learning of robotic manipulator inverse dynamics. 2015 ,	38

(2015-2015)

1675 A deep framework for bacterial image segmentation and classification. 2015 ,	9
1674 The Tensor Deep Stacking Network Toolkit. 2015 ,	2
Deep neural networks are easily fooled: High confidence predictions for unrecognizable images. 2015 ,	811
Deep neural network based protein-protein interaction extraction from biomedical literature. 2015 ,	
1671 Learning architectures with enhanced capabilities and easier training. 2015 ,	5
1670 Dedicated deep neural network architectures and methods for their training. 2015 ,	4
1669 3D Mesh Labeling via Deep Convolutional Neural Networks. 2015 , 35, 1-12	119
1668 Improving deep neural network ensembles using reconstruction error. 2015 ,	3
1667 Effective handwritten digit recognition based on multi-feature extraction and deep analysis. 2015 ,	1
Sleep spindle detection using deep learning: A validation study based on crowdsourcing. 2015 , 2015, 2828-31	9
Deep learning classifier for fall detection based on IR distance sensor data. 2015 ,	7
1664 References. 2015 , 485-490	
1663 A Deep Learning Neural Network for Number Cognition: A bi-cultural study with the iCub. 2015 ,	15
Deep Neural Networks: A New Framework for Modeling Biological Vision and Brain Information Processing. 2015 , 1, 417-446	436
Automatic classification of respiratory patterns involving missing data imputation techniques. 2015 , 138, 65-76	15
1660 . 2015 ,	1
1659 From knowledge-based to data-driven fuzzy modeling. 2015 , 38, 500-509	8
1658 Towards real-time Speech Emotion Recognition using deep neural networks. 2015 ,	29

1657	Exploratory Visual Analysis and Interactive Pattern Extraction from Semi-Structured Data. 2015, 5, 1-36	6
1656	Multistage committees of deep feedforward convolutional sparse denoise autoencoder for object recognition. 2015 ,	
1655	DeepFont. 2015,	51
1654	Deep Belief Networks Oriented Clustering. 2015,	3
1653	Deep learning in acoustic modeling for Automatic Speech Recognition and Understanding - an overview 2015 ,	5
1652	Deep Learning for Textual Entailment Recognition. 2015,	5
1651	. 2015,	1
1650	Smile recognition based on deep Auto-Encoders. 2015 ,	
1649	A new technique for restricted Boltzmann machine learning. 2015,	5
1648	Constructing long short-term memory based deep recurrent neural networks for large vocabulary speech recognition. 2015 ,	112
, i		38
1647	speech recognition. 2015 ,	
1647	speech recognition. 2015 , . 2015 , 17, 1899-1908	38
1647 1646	speech recognition. 2015, . 2015, 17, 1899-1908 Image recognition based on deep learning. 2015, Comparative Analysis of Artificial Hydrocarbon Networks and Data-Driven Approaches for Human Activity Recognition. 2015, 150-161 Unsupervised hierarchical convolutional sparse auto-encoder for high spatial resolution imagery	38
1647 1646 1645	speech recognition. 2015, . 2015, 17, 1899-1908 Image recognition based on deep learning. 2015, Comparative Analysis of Artificial Hydrocarbon Networks and Data-Driven Approaches for Human Activity Recognition. 2015, 150-161 Unsupervised hierarchical convolutional sparse auto-encoder for high spatial resolution imagery	38 6
1647 1646 1645	. 2015, 17, 1899-1908 Image recognition based on deep learning. 2015, Comparative Analysis of Artificial Hydrocarbon Networks and Data-Driven Approaches for Human Activity Recognition. 2015, 150-161 Unsupervised hierarchical convolutional sparse auto-encoder for high spatial resolution imagery scene classification. 2015, Supervised Image Classification Using Deep Convolutional Wavelets Network. 2015,	38 6 2
1647 1646 1645 1644	. 2015, 17, 1899-1908 Image recognition based on deep learning. 2015, Comparative Analysis of Artificial Hydrocarbon Networks and Data-Driven Approaches for Human Activity Recognition. 2015, 150-161 Unsupervised hierarchical convolutional sparse auto-encoder for high spatial resolution imagery scene classification. 2015, Supervised Image Classification Using Deep Convolutional Wavelets Network. 2015,	38 6 2 0

1	1639	. 2015 , 17, 64-78	90
1	1638	A Regression Approach to Speech Enhancement Based on Deep Neural Networks. 2015 , 23, 7-19	509
1	1637	Learning feature representations with a cost-relevant sparse autoencoder. 2015 , 25, 1450034	15
1	1636	Distributed Feature Representations for Dependency Parsing. 2015 , 23, 451-460	11
1	1635	Spatial-Aware Object-Level Saliency Prediction by Learning Graphlet Hierarchies. 2015, 62, 1301-1308	54
1	1634	Promises and Challenges of Big Data Computing in Health Sciences. 2015 , 2, 2-11	138
1	1633	Enhancing performance of the backpropagation algorithm via sparse response regularization. 2015 , 153, 20-40	14
1	1632	Context Dependent Encoding Using Convolutional Dynamic Networks. 2015 , 26, 1992-2004	6
1	1631	Development of a Novel Adaptive Soft-Sensor Using Variational Bayesian PLS with Accounting for Online Identification of Key Variables. 2015 , 54, 338-350	36
1	1630	Modeling the evolution of complex genetic systems: the gene network family tree. 2015 , 324, 1-12	13
1	1629	. 2015 , 17, 346-358	45
1	1628	Deep and shallow architecture of multilayer neural networks. 2015 , 26, 2477-86	47
1	1627	Boosted Multifeature Learning for Cross-Domain Transfer. 2015 , 11, 1-18	11
1	1626	Extreme learning machines: new trends and applications. 2015 , 58, 1-16	64
1	1625	Exploring the Periphery of Knowledge by Intrinsically Motivated Systems. 2015 , 49-61	
1	1624	Fully Connected Cascade Artificial Neural Network Architecture for Attention Deficit Hyperactivity Disorder Classification From Functional Magnetic Resonance Imaging Data. 2015 , 45, 2668-79	90
1	1623	Human-level control through deep reinforcement learning. 2015 , 518, 529-33	8577
1	1622	Combining Newton interpolation and deep learning for image classification. 2015 , 51, 40-42	4

1621	Handwritten Hangul recognition using deep convolutional neural networks. 2015 , 18, 1-13	53
1620	Spatio-temporal learning with the online finite and infinite echo-state Gaussian processes. 2015 , 26, 522-36	35
1619	. 2015 , 27, 2107-2119	121
1618	Border-sensitive learning in generalized learning vector quantization: an alternative to support vector machines. 2015 , 19, 2423-2434	19
1617	A comparison of models for predicting early hospital readmissions. 2015 , 56, 229-38	149
1616	Realization problem of multi-layer cellular neural networks. 2015 , 70, 9-17	7
1615	High-order neural networks and kernel methods for peptide-MHC binding prediction. 2015 , 31, 3600-7	21
1614	Hierarchical feature extraction by multi-layer non-negative matrix factorization network for classification task. 2015 , 165, 63-74	24
1613	Semi-supervised deep extreme learning machine for Wi-Fi based localization. 2015 , 166, 282-293	64
1612	Exploring multiple feature combination strategies with a recurrent neural network architecture for off-line handwriting recognition. 2015 ,	3
1611	Analysis of Feature Extracting Ability for Cutting State Monitoring Using Deep Belief Networks. 2015 , 31, 29-34	42
1610	Predictive Deep Boltzmann Machine for Multiperiod Wind Speed Forecasting. 2015 , 6, 1416-1425	133
1609	Self-supervised learning model for skin cancer diagnosis. 2015,	27
1608	On combining multiscale deep learning features for the classification of hyperspectral remote sensing imagery. 2015 , 36, 3368-3379	140
1607	Hyperspectral classification via deep networks and superpixel segmentation. 2015 , 36, 3459-3482	57
1606	Pose estimation-dependent identification method for field moth images using deep learning architecture. 2015 , 136, 117-128	32
1605	Deep learning and face recognition: the state of the art. 2015 ,	18
1604	Neural modularity helps organisms evolve to learn new skills without forgetting old skills. 2015 , 11, e1004128	75

1603	Big Data: An Introduction. 2015 , 1-28	6
1602	Bootstrapping bilinear models of Simple Vehicles. 2015 , 34, 1087-1113	3
1601	Deep Belief Network Training Improvement Using Elite Samples Minimizing Free Energy. 2015 , 29, 1551006	12
1600	Video Affective Content Analysis: A Survey of State-of-the-Art Methods. 2015 , 6, 410-430	93
1599	Machine learning: Trends, perspectives, and prospects. 2015 , 349, 255-60	2428
1598	Droid-Sec. 2015 , 44, 371-372	123
1597	Part Detector Discovery in Deep Convolutional Neural Networks. 2015 , 162-177	10
1596	Deep and Modular Neural Networks. 2015 , 473-494	7
1595	Multi-step-ahead host load prediction using autoencoder and echo state networks in cloud computing. 2015 , 71, 3037-3053	30
1594	Situated interpretation in computational creativity. 2015 , 80, 48-57	8
1594 1593	Situated interpretation in computational creativity. 2015 , 80, 48-57 . 2015 , 62, 6519-6529	146
1593		
1593 1592	. 2015 , 62, 6519-6529	146
1593 1592	. 2015 , 62, 6519-6529 Learning Deep Generative Models. 2015 , 2, 361-385	146
1593 1592 1591	. 2015, 62, 6519-6529 Learning Deep Generative Models. 2015, 2, 361-385 . 2015, 10, 18-29 Computationally predicting protein-RNA interactions using only positive and unlabeled examples.	146 129 231
1593 1592 1591 1590	. 2015, 62, 6519-6529 Learning Deep Generative Models. 2015, 2, 361-385 . 2015, 10, 18-29 Computationally predicting protein-RNA interactions using only positive and unlabeled examples. 2015, 13, 1541005 Provable ICA with Unknown Gaussian Noise, and Implications for Gaussian Mixtures and	146 129 231 22
1593 1592 1591 1590	. 2015, 62, 6519-6529 Learning Deep Generative Models. 2015, 2, 361-385 . 2015, 10, 18-29 Computationally predicting protein-RNA interactions using only positive and unlabeled examples. 2015, 13, 1541005 Provable ICA with Unknown Gaussian Noise, and Implications for Gaussian Mixtures and Autoencoders. 2015, 72, 215-236	146 129 231 22

1585	Laplacian Auto-Encoders: An explicit learning of nonlinear data manifold. 2015 , 160, 250-260	47
1584	Fuzzy Restricted Boltzmann Machine for the Enhancement of Deep Learning. 2015 , 23, 2163-2173	132
1583	A Robust Deep Model for Improved Classification of AD/MCI Patients. 2015, 19, 1610-6	160
1582	Human behaviour recognition in data-scarce domains. 2015 , 48, 2377-2393	13
1581	Using Recurrent Neural Networks for Slot Filling in Spoken Language Understanding. 2015 , 23, 530-539	164
1580	Meta-Parameter Free Unsupervised Sparse Feature Learning. 2015 , 37, 1716-22	50
1579	A data-driven two-stage maintenance framework for degradation prediction in semiconductor manufacturing industries. 2015 , 85, 414-422	28
1578	Visual Domain Adaptation: A survey of recent advances. 2015 , 32, 53-69	459
1577	Deep Belief Network-Based Approaches for Link Prediction in Signed Social Networks. 2015 , 17, 2140-2169	40
1576	Learning shared, discriminative, and compact representations for visual recognition. 2015 , 37, 2218-31	12
1575	. 2015 , 17, 816-827	7
1574	Metric Learning. 2015 , 9, 1-151	53
1573	NAULtine del consisso de Control la comina Constituida disconsis e Calebria de 2045	
	Multimodal neuroimaging feature learning for multiclass diagnosis of Alzheimer's disease. 2015 , 62, 1132-40	287
1572		11
1572 1571	62, 1132-40 Human action recognition based on motion capture information using fuzzy convolution neural	·
1571	62, 1132-40 Human action recognition based on motion capture information using fuzzy convolution neural networks. 2015,	11
1571	Human action recognition based on motion capture information using fuzzy convolution neural networks. 2015, Multimedia Retrieval via Deep Learning to Rank. 2015, 22, 1487-1491 Role Discovery in Networks. 2015, 27, 1112-1131	7

1567	Transductive multi-view zero-shot learning. 2015 , 37, 2332-45	238
1566	Unsupervised Multi-modal Learning. 2015 , 343-346	
1565	The effect of different hidden unit number of sparse autoencoder. 2015 ,	8
1564	1000 Fps Highly Accurate Eye Detection with Stacked Denoising Autoencoder. 2015 , 237-246	
1563	. 2015,	7
1562	Reduced reference image quality assessment via Boltzmann Machines. 2015,	8
1561	Lightweight Lossy Compression of Biometric Patterns via Denoising Autoencoders. 2015 , 22, 2304-2308	33
1560	Reducing weight precision of convolutional neural networks towards large-scale on-chip image recognition. 2015 ,	O
1559	DeepSign: Deep learning for automatic malware signature generation and classification. 2015,	85
1558	Multimodal Deep Autoencoder for Human Pose Recovery. 2015 , 24, 5659-70	371
1557	Deep Learning in Diagnosis of Brain Disorders. 2015 , 203-213	24
1556	Denoising hybrid noises in image with stacked autoencoder. 2015 ,	9
1555	Bengali handwritten numeric character recognition using denoising autoencoders. 2015,	5
1554	The identification of cis-regulatory elements: A review from a machine learning perspective. 2015 , 138, 6-17	30
1553	Privacy-Preserving Deep Learning. 2015,	507
1552	Correspondence Autoencoders for Cross-Modal Retrieval. 2015 , 12, 1-22	15
1551	Deep Feature Representation via Multiple Stack Auto-Encoders. 2015 , 275-284	2
1550	Scalable estimation strategies based on stochastic approximations: Classical results and new insights. 2015 , 25, 781-795	14

1549	When Does a Mixture of Products Contain a Product of Mixtures?. 2015 , 29, 321-347	10
1548	. 2015 , 17, 1923-1935	39
1547	Recognizing Depression from Twitter Activity. 2015,	105
1546	Transfer learning method using multi-prediction deep Boltzmann machines for a small scale dataset. 2015 ,	12
1545	. 2015 , 10, 2108-2118	135
1544	A Deep Neural Network for Modeling Music. 2015,	8
1543	Robust Discovery of Temporal Structure in Multi-neuron Recordings Using Hopfield Networks. 2015 , 53, 365-374	3
1542	Semi-Random Projection for Dimensionality Reduction and Extreme Learning Machine in High-Dimensional Space. 2015 , 10, 30-41	16
1541	. 2015 , 17, 2008-2020	80
1540	Deep learning for multi-label land cover classification. 2015,	5
1539	Fast Automatic Vertebrae Detection and Localization in Pathological CT Scans - A Deep Learning Approach. 2015 , 678-686	35
1538	A Sparse Pyramid Pooling Strategy. 2015 , 406-416	
1537	Towards integrated neural symbolic systems for human-level AI: Two research programs helping to bridge the gaps. 2015 , 14, 97-110	11
1536	A fast and efficient pre-training method based on layer-by-layer maximum discrimination for deep neural networks. 2015 , 168, 669-680	20
1535	Comparison of auto-encoders with different sparsity regularizers. 2015,	3
1534	Normal sparse Deep Belief Network. 2015 ,	27
1533	Controlling the hidden layers' output to optimizing the training process in the Deep Neural Network algorithm. 2015 ,	1
1532	Representation Learning for Single-Channel Source Separation and Bandwidth Extension. 2015 , 23, 2398-2409	912

1531 A spectrogram-based voiceprint recognition using deep neural network. 2015 ,	4
1530 Deep Learning for Drug-Induced Liver Injury. 2015 , 55, 2085-93	181
1529 Deep Self-Organizing Map for visual classification. 2015 ,	17
Effective insect recognition using a stacked autoencoder with maximum correntropy criterion. 2015,	1
1527 Optimized deep belief networks on CUDA GPUs. 2015 ,	0
1526 Robust feature learning by improved auto-encoder from non-Gaussian noised images. 2015 ,	1
1525 High-Resolution SAR Image Classification via Deep Convolutional Autoencoders. 2015 , 12, 2351-2355	190
1524 Learning-regulated context relevant topographical map. 2015 , 26, 2323-35	10
1523 Unregistered Multiview Mammogram Analysis with Pre-trained Deep Learning Models. 2015 , 652-660	84
1522 Pattern classification formulated as a missing data task: The audio genre classification case. 2015 ,	
1521 Statistical-Mechanical Analysis of Pre-training and Fine Tuning in Deep Learning. 2015 , 84, 034003	6
1520 Sparse low-rank fusion based deep features for missing modality face recognition. 2015 ,	
Quantifying the Hidden Factors Impacting the Audience of Advertisements Posted on Facebook. 2015 , 263-277	
1518 Hierarchical Image Representation Using Deep Network. 2015 , 66-77	
Feedforward kernel neural networks, generalized least learning machine, and its deep learning with application to image classification. 2015 , 37, 125-141	38
1516 Application of learning to rank to protein remote homology detection. 2015 , 31, 3492-8	70
1515 . 2015 , 17, 1404-1416	63
Speech Separation based on signal-noise-dependent deep neural networks for robust speech recognition. 2015 ,	7

1513	Deep learning and the information bottleneck principle. 2015 ,	226
1512	A Review of Emerging Technologies for the Management of Diabetes Mellitus. 2015 , 62, 2735-49	64
1511	An Embodied Approach for Evolving Robust Visual Classifiers. 2015,	1
1510	Deep neural networks for ultra-short-term wind forecasting. 2015,	43
1509	Natural scene recognition based on Convolutional Neural Networks and Deep Boltzmannn Machines. 2015 ,	7
1508	TrueNorth: Design and Tool Flow of a 65 mW 1 Million Neuron Programmable Neurosynaptic Chip. 2015 , 34, 1537-1557	530
1507	Structured Sparsity: Discrete and Convex Approaches. 2015 , 341-387	7
1506	Recent Advances of Neural Networks Models and Applications: An Introduction. 2015, 3-8	2
1505	The Unsupervised Hierarchical Convolutional Sparse Auto-Encoder for Neuroimaging Data Classification. 2015 , 156-166	12
1504	Haptics-Enabled Surgical Training System with Guidance Using Deep Learning. 2015, 267-278	
1503	. 2015 , 17, 2059-2071	52
1502	A Deep Generative Architecture for Postfiltering in Statistical Parametric Speech Synthesis. 2015 , 23, 2003-2014	21
1501	Head detection based on convolutional neural network with multi-stage weighted feature. 2015,	O
1500	A Framework for Selecting Deep Learning Hyper-parameters. 2015 , 120-132	O
1499	Where Analog Meets Digital: Analog?to?Information Conversion and Beyond. 2015 , 7, 67-80	43
1498	Composite sketch recognition via deep network - a transfer learning approach. 2015,	38
1497	A priori trust inference with context-aware stereotypical deep learning. 2015 , 88, 97-106	19
1496	Pedestrian Classification and Detection in Far Infrared Images. 2015 , 511-522	4

1495	Toward Deep Learning Software Repositories. 2015 ,	92
1494	DeepStealth: Leveraging Deep Learning Models for Stealth Assessment in Game-Based Learning Environments. 2015 , 277-286	11
1493	Multi-Layer and Recursive Neural Networks for Metagenomic Classification. 2015, 14, 608-16	57
1492	Cognition-Based Networks: A New Perspective on Network Optimization Using Learning and Distributed Intelligence. 2015 , 3, 1512-1530	66
1491	Linear and Non-Linear Models for Purchase Prediction. 2015,	2
1490	Hierarchical Sparse Dictionary Learning. 2015 , 687-700	1
1489	Motion Sequence Recognition with Multi-sensors Using Deep Convolutional Neural Network. 2015 , 13-23	3
1488	Multiple Convolutional Neural Network for Feature Extraction. 2015 , 104-114	2
1487	AUTOMATIC MUSCLE PERIMYSIUM ANNOTATION USING DEEP CONVOLUTIONAL NEURAL NETWORK. 2015 , 2015, 205-208	5
1486	Performance Modeling and Scalability Optimization of Distributed Deep Learning Systems. 2015,	31
1485	Data driven injection molding process monitoring using sparse auto encoder technique. 2015 ,	2
1484	Polyphonic sound event detection using multi label deep neural networks. 2015,	79
1483	Weakly-Shared Deep Transfer Networks for Heterogeneous-Domain Knowledge Propagation. 2015 ,	131
1482	. 2015,	7
1481	Stochastic least squares learning for deep architectures. 2015,	
1480	Long-Term Statistical Feature Extraction from Speech Signal and Its Application in Emotion Recognition. 2015 , 173-184	3
1479	Machine Learning in Medicine. 2015 , 132, 1920-30	978
1478	Estimation of daily bicycle traffic volumes using sparse data. 2015 , 54, 195-203	16

1477 Using surfaces and surface relations in an Early Cognitive Vision system. 2015 , 26, 933-954	2
1476 Audio-visual speech recognition using deep learning. 2015 , 42, 722-737	263
An Adaptive Approach of Tamil Character Recognition Using Deep Learning with Big Data-A Survey. 2015 , 557-567	2
1474 3D object retrieval with stacked local convolutional autoencoder. 2015 , 112, 119-128	64
1473 Integrating representation learning and skill learning in a human-like intelligent agent. 2015 , 219, 67	7-91 15
1472 An Overview of Deep Generative Models. 2015 , 32, 131-139	28
1471 Geodesic invariant feature: a local descriptor in depth. 2015 , 24, 236-48	8
1470 Saliency-Guided Deep Framework for Image Quality Assessment. 2015 , 22, 46-55	19
1469 Learning understandable neural networks with nonnegative weight constraints. 2015 , 26, 62-9	73
1468 A 3D model recognition mechanism based on deep Boltzmann machines. 2015 , 151, 593-602	45
1467 Proceedings of ELM-2014 Volume 1. 2015 ,	
1466 Spiking Deep Convolutional Neural Networks for Energy-Efficient Object Recognition. 2015 , 113, 54-	-66 314
1465 A deep HMM model for multiple keywords spotting in handwritten documents. 2015 , 18, 1003-1015	21
1464 Extreme learning machine: algorithm, theory and applications. 2015 , 44, 103-115	267
1463 Latent feature representation with stacked auto-encoder for AD/MCI diagnosis. 2015 , 220, 841-59	313
1462 Blind image quality assessment via deep learning. 2015 , 26, 1275-86	218
1461 Trends in extreme learning machines: a review. 2015 , 61, 32-48	1109
1460 A linear approach for sparse coding by a two-layer neural network. 2015 , 149, 1315-1323	5

1459	Deep unsupervised network for multimodal perception, representation and classification. 2015 , 71, 83-98	34
1458	Learning deep representations via extreme learning machines. 2015 , 149, 308-315	72
1457	Local deep feature learning framework for 3D shape. 2015 , 46, 117-129	18
1456	Achieving a compromise between performance and complexity of structure: An incremental approach. 2015 , 294, 139-151	3
1455	Compressed-Domain Ship Detection on Spaceborne Optical Image Using Deep Neural Network and Extreme Learning Machine. 2015 , 53, 1174-1185	274
1454	Two-layer contractive encodings for learning stable nonlinear features. 2015 , 64, 4-11	19
1453	Neural network for multi-class classification by boosting composite stumps. 2015 , 149, 949-956	10
1452	A deep structure for human pose estimation. 2015 , 108, 36-45	10
1451	Accelerated learning for Restricted Boltzmann Machine with momentum term. 2015 , 187-192	
1450	Deep learning of support vector machines with class probability output networks. 2015 , 64, 19-28	50
1449	Towards large-scale multimedia retrieval enriched by knowledge about human interpretation. 2016 , 75, 297-331	15
1448	Stellar classification from single-band imaging using machine learning. 2016 , 591, A54	13
	Stellar classification from single-band imaging using machine learning. 2016 , 591, A54	13
1447		
1447	. 2016,	12
1447 1446	. 2016, . 2016, Centered Kernel Alignment Enhancing Neural Network Pretraining for MRI-Based Dementia	12
1447 1446 1445	. 2016, Centered Kernel Alignment Enhancing Neural Network Pretraining for MRI-Based Dementia Diagnosis. 2016, 2016, 9523849	12

1441	Cognitive Systems for the Food Water Energy Nexus. 2016, 255-282	2
1440	Neural Network Based Transmit Power Control and Interference Cancellation for MIMO Small Cell Networks. 2016 , E99.B, 1157-1169	6
1439	Aero Engine Component Fault Diagnosis Using Multi-Hidden-Layer Extreme Learning Machine with Optimized Structure. 2016 , 2016, 1-11	13
1438	A Deep Learning Odyssey: An Invitation for Actuaries to Join this Journey 2016,	1
1437	A Cross-Domain Approach to Designing an Unobtrusive System to Assess Human State and Predict Upcoming Performance Deficits. 2016 , 60, 707-711	1
1436	Reverberant speech recognition. 2016 , 203-238	1
1435	Analyzing Brain Functions by Subject Classification of Functional Near-Infrared Spectroscopy Data Using Convolutional Neural Networks Analysis. 2016 , 2016, 1841945	12
1434	Representation Learning from Time Labelled Heterogeneous Data for Mobile Crowdsensing. 2016 , 2016, 1-10	2
1433	Deep Convolutional Extreme Learning Machine and Its Application in Handwritten Digit Classification. 2016 , 2016, 3049632	34
1432	Visibility Enhancement of Scene Images Degraded by Foggy Weather Conditions with Deep Neural Networks. 2016 , 2016, 1-9	9
1431	A Novel Bearing Fault Diagnosis Method Based on Gaussian Restricted Boltzmann Machine. 2016 , 2016, 1-8	25
1430	Segmenting Brain Tissues from Chinese Visible Human Dataset by Deep-Learned Features with Stacked Autoencoder. 2016 , 2016, 5284586	7
1429	A Denoising Based Autoassociative Model for Robust Sensor Monitoring in Nuclear Power Plants. 2016 , 2016, 1-17	8
1428	Multifeatures Fusion and Nonlinear Dimension Reduction for Intelligent Bearing Condition Monitoring. 2016 , 2016, 1-10	49
1427	Deep Network Based on Stacked Orthogonal Convex Incremental ELM Autoencoders. 2016 , 2016, 1-17	2
1426	Bidirectional Nonnegative Deep Model and Its Optimization in Learning. 2016 , 2016, 1-8	5
1425	Ensemble Deep Learning for Biomedical Time Series Classification. 2016 , 2016, 6212684	28
1424	Simplified Information Maximization for Improving Generalization Performance in Multilayered Neural Networks. 2016 , 2016, 1-17	

1423 Metaheuristic Algorithms for Convolution Neural Network. 2016 , 2016, 1537325	49
1422 Big Data Analytics for Social Media. 2016 , 63-94	
Neural Information Processing in Cognition: We Start to Understand the Orchestra, but Where is the Conductor?. 2016 , 10, 3	6
Semantically Controlled Adaptive Equalisation in Reduced Dimensionality Parameter Space. 2016 6, 116	, 4
1419 Maximum Entropy Learning with Deep Belief Networks. 2016 , 18, 251	5
Remote Sensing Image Scene Classification Using Multi-Scale Completed Local Binary Patterns an Fisher Vectors. 2016 , 8, 483	od 98
1417 Fault Diagnosis Based on Chemical Sensor Data with an Active Deep Neural Network. 2016 , 16,	33
1416 3D model identification method based on topographic sparse coding. 2016 ,	
1415 Simplified learning with binary orthogonal constraints. 2016 ,	
1414 An Adaptive Statistical Neural Network Model. 2016 ,	
1413 Analyzing the influence of contrast in large-scale recognition of natural images. 2016 , 23, 221-235	5 11
MetMaxStruct: A Tversky-Similarity-Based Strategy for Analysing the (Sub)Structural Similarities of Drugs and Endogenous Metabolites. 2016 , 7, 266	of 24
1411 A Taxonomy of Deep Convolutional Neural Nets for Computer Vision. 2016 , 2,	84
1410 Using Metafeatures to Increase the Effectiveness of Latent Semantic Models in Web Search. 2016	5, 5
1409 Self-structuring data learning approach. 2016 ,	0
Fish species classification in unconstrained underwater environments based on deep learning. 20^{1408} , 14, 570-585	16 87
1407 DeepProp: Extracting Deep Features from a Single Image for Edit Propagation. 2016 , 35, 189-201	21
1406 Early Prediction of Extreme Rainfall Events: A Deep Learning Approach. 2016 , 154-167	6

1405	Understanding Innovation Engines: Automated Creativity and Improved Stochastic Optimization via Deep Learning. 2016 , 24, 545-72	24
1404	Intelligent Systems for Predictive Modelling in Cheminformatics: QSPR Models for Material Design Using Machine Learning and Visual Analytics Tools. 2016, 3-11	1
1403	Learning Orthographic Structure With Sequential Generative Neural Networks. 2016 , 40, 579-606	13
1402	COBANETS: A new paradigm for cognitive communications systems. 2016 ,	4
1401	Implementation of Artificial Neural Network and Multilevel of Discrete Wavelet Transform for Voice Recognition. 2016 , 15-26	
1400	A Comparison of Traffic Flow Prediction Methods Based on DBN. 2016 ,	22
1399	Detecting predatory conversations in social media by deep Convolutional Neural Networks. 2016 , 18, 33-49	36
1398	Boosting compound-protein interaction prediction by deep learning. 2016 , 110, 64-72	102
1397	Rejoinder to E stimating rates of rare events through a multidimensional dynamic hierarchical Bayesian framework[] 2016 , 32, 357-357	
1396	A joint facial point detection method of deep convolutional network and shape regression. 2016 ,	O
1395	An overview on data representation learning: From traditional feature learning to recent deep learning. 2016 , 2, 265-278	72
1394	An Egocentric Look at Video Photographer Identity. 2016 ,	14
1393	Boltzmann-Machine Learning of Prior Distributions of Binarized Natural Images. 2016 , 85, 114803	3
1392	Barcodes for medical image retrieval using autoencoded Radon transform. 2016 ,	10
1391	Scene text script identification with Convolutional Recurrent Neural Networks. 2016,	4
1390	Crisis analytics: big data-driven crisis response. 2016 , 1,	61
1389	D-LSM: Deep Liquid State Machine with unsupervised recurrent reservoir tuning. 2016 ,	6
1388	Analyzing features learned for Offline Signature Verification using Deep CNNs. 2016 ,	29

A speaker-dependent deep learning approach to joint speech separation and acoustic modeling for multi-talker automatic speech recognition. **2016**,

1386 ERICA. 2016 ,	37
1385 Discovering New Socio-demographic Regional Patterns in Cities. 2016 ,	5
$_{13}8_4$ Discriminant auto encoders for face recognition with expression and pose variations. 2016 ,	1
Feature Fusion Methods for Robust Speech Emotion Recognition Based on Deep Belief Networks. 2016 ,	2
Towards the design of an end-to-end automated system for image and video-based recognition. 2016 ,	4
1381 Structural Knowledge Extraction from Mobility Data. 2016 , 294-307	1
Traffic Sign Recognition Using Kernel Extreme Learning Machines With Deep Perceptual Features. 2016 , 1-7	17
1379 Learning and Reasoning with Logic Tensor Networks. 2016 , 334-348	16
1378 In-bed posture classification using deep autoencoders. 2016 , 2016, 3839-3842	13
DEMV-matchmaker: Emotional temporal course representation and deep similarity matching for automatic music video generation. 2016 ,	8
A deep domain adaption approach for object recognition using Multiple Model Consistency analysis. 2016 ,	1
Towards PLDA-RBM based speaker recognition in mobile environment: Designing stacked/deep PLDA-RBM systems. 2016 ,	2
$_{ m 1374}$ Construction of bottle-body autoencoder and its application to audio signal classification. 2016 ,	1
Deep neural networks with local connectivity and its application to astronomical spectral data. 2016 ,	5
1372 . 2016 , 52, 2861-2872	123
An improving SRL model with word sense information using an improved synergetic neural netwo model. 2016 , 31, 1469-1480	rk 2
1370 Robotic grasp detection using deep learning and geometry model of soft hand. 2016 ,	1

1369 Identifying IT Puro Learning. 2016 ,	chases Anomalies in the Brazilian Government Procurement System Using Deep	5
1368 Studying Very Lov	w Resolution Recognition Using Deep Networks. 2016 ,	107
Deep Learning for Networks. 2016 ,	r solar power forecasting 🖎 approach using AutoEncoder and LSTM Neural	178
1366 Big IoT data minir	ng for real-time energy disaggregation in buildings. 2016 ,	15
1365 A predictive mode	el of gene expression using a deep learning framework. 2016 ,	2
1364 Automated atrial	fibrillation detection based on deep learning network. 2016 ,	10
1363 Deep neural netw	ork driven mixture of PLDA for robust i-vector speaker verification. 2016 ,	2
An adaptive learn 1362 annihilation algor	ing method of Restricted Boltzmann Machine by neuron generation and ithm. 2016 ,	15
1361 QoS prediction of	Web service based on US-AWS. 2016 , 8, 193-205	1
1360 Mining the Opinic Sentiment Analys	onated Web: Classification and Detection of Aspect Contexts for Aspect Based is. 2016 ,	5
1359 A Deep Learning A	Approach for the Prediction of Retail Store Sales. 2016 ,	8
1358 Approximate mes	ssage passing with restricted Boltzmann machine priors. 2016 , 2016, 073401	18
1357 Nonlinear model I	reduction by deep autoencoder of noise response data. 2016 ,	12
1356 A convolutional n	eural network neutrino event classifier. 2016 , 11, P09001-P09001	111
1355 Denoising High Re	esolution Multispectral Images Using Deep Learning Approach. 2016 ,	1
1354 A review on optim	nization algorithm for deep learning method in bioinformatics field. 2016,	6
1353 Price Direction Pr	rediction on High Frequency Data Using Deep Belief Networks. 2016 , 74-83	3
1352 A building block f	or hardware belief networks. 2016 , 6, 29893	45

1351	Towards development of self-learning and self-modification spiking neural network as model of brain. 2016 ,	3
1350	Feature Fusion for Denoising and Sparse Autoencoders: Application to Neuroimaging Data. 2016,	3
1349	Data-driven shape analysis and processing. 2016,	39
1348	Traffic Matrix Prediction and Estimation Based on Deep Learning for Data Center Networks. 2016 ,	20
1347	Budgeted Batch Bayesian Optimization. 2016 ,	13
1346	Subband-based upmixing of stereo to 5.1-channel audio signals using deep neural networks. 2016 ,	1
1345	A Deep Learning Approach to Android Malware Feature Learning and Detection. 2016,	48
1344	Topology Prediction Mechanism for Pocket Switched Network Based on Deep Belief Network. 2016 ,	
1343	On the interplay of network structure and gradient convergence in deep learning. 2016,	1
1342	An adaptive learning method of Deep Belief Network by layer generation algorithm. 2016,	14
1341	Traffic flow prediction with Long Short-Term Memory Networks (LSTMs). 2016,	29
1340	On line emotion detection using retrainable deep neural networks. 2016,	8
1339	Hierarchical decomposition of industrial assembly tasks. 2016,	2
1338	Neighbourhood consistency based deep domain adaption analysis for multi category object detection. 2016 ,	
1337	Constructing a Deep Regression Model Utilizing Cascaded Sparse Autoencoders and Stochastic Gradient Descent. 2016 ,	3
1336	Weakly Supervised Hand Pose Recovery with Domain Adaptation by Low-Rank Alignment. 2016 ,	1
1335	An integrated probabilistic framework for robot perception, learning and memory. 2016,	13
1334	Mapping Mel sub-band energies using Deep belief network for robust speech recognition. 2016 ,	O

1333	Road vehicle detection and classification based on Deep Neural Network. 2016,	3
1332	User-based AutoenCoder for QoS prediction. 2016 ,	
1331	Pinpoint extraction of distant sound source based on DNN mapping from multiple beamforming outputs to prior SNR. 2016 ,	10
1330	Research Update: The materials genome initiative: Data sharing and the impact of collaborative ab initio databases. 2016 , 4, 053102	98
1329	Understanding of Networks In Vitro and/or In Vivo. 2016 , 141-152	
1328	Deep learning-based classification of massive electrocardiography data. 2016 ,	2
1327	Towards vegetation species discrimination by using data-driven descriptors. 2016,	6
1326	. 2016,	3
1325	Research of the properties of receptive field in handwritten Chinese character recognition based on DCNN model. 2016 ,	1
1324	A Neural Click Model for Web Search. 2016 ,	60
1323	Deep learning tracker via SVM ranking vector. 2016 ,	
1322	Automatic modulation classification using stacked sparse auto-encoders. 2016,	18
1321	Deep neural networks for kannada phoneme recognition. 2016,	2
1320	Fuzzy and deep learning approaches for user modeling in wetland design. 2016,	1
1319	Myocardial infarction detection and classification [A new multi-scale deep feature learning approach. 2016 ,	7
1318	Towards robust ego-centric hand gesture analysis for robot control. 2016 ,	2
1317	Sparse Wavelet Auto-Encoders for Image Classification. 2016 ,	1
1316	Artificial neural network implementation in FPGA: A case study. 2016 ,	2

1315	Customer Simulation for Direct Marketing Experiments. 2016 ,	4
1314	A deep learning-based segmentation method for brain tumor in MR images. 2016 ,	11
1313	A regularization framework for stereo matching using IGMRF prior and sparseness learned from autoencoder. 2016 ,	
1312	Deep Dictionary Learning. 2016 , 4, 10096-10109	83
1311	Stable reinforcement learning with autoencoders for tactile and visual data. 2016,	34
1310	Image classification with stacked restricted boltzmann machines and evolutionary function array classification voter. 2016 ,	3
1309	Supervised deep segmentation network for brain extraction. 2016 ,	2
1308	Coupled Autoencoder Network with Joint Regularizations for image super-resolution. 2016,	1
1307	A Cyber-physical System Architecture in Shop Floor for Intelligent Manufacturing. 2016 , 56, 372-377	65
1306	Crossing domains with the inductive transfer encoder: Case study in keystroke biometrics. 2016 ,	2
1305	Facial dynamic modelling using long short-term memory network: Analysis and application to face authentication. 2016 ,	6
1304	Optimized generation of test sequences for high-speed train using deep learning and genetic algorithm. 2016 ,	1
1303	Learning features from vibration signals for induction motor fault diagnosis. 2016,	25
1302	Facial Affect [h-the-Wild[]A Survey and a New Database. 2016 ,	12
1301	Breaking Cryptographic Implementations Using Deep Learning Techniques. 2016 , 3-26	132
1300	The Learning Effect of Different Hidden Layers Stacked Autoencoder. 2016 ,	7
1299	Deep Learning for Classification of Malware System Call Sequences. 2016 , 137-149	149
1298	Using deep belief network modelling to characterize differences in brain morphometry in schizophrenia. 2016 , 6, 38897	91

1297	Survey on Feature Extraction and Applications of Biosignals. 2016 , 161-182	10
1296	Predicting Seizures from Electroencephalography Recordings: A Knowledge Transfer Strategy. 2016 ,	17
1295	A unified approach to inner magnetospheric state prediction. 2016 , 121, 2423-2430	29
1294	Deep neural networks for precipitation estimation from remotely sensed information. 2016,	9
1293	Convolutional Deep Neural Networks for Document-Based Question Answering. 2016, 790-797	4
1292	A Bayesian decision classification method for multiple categories. 2016 ,	
1291	Investigating LSTM for punctuation prediction. 2016 ,	7
1290	A Deep Learning Model for Epigenomic Studies. 2016,	8
1289	A new approach to theoretical investigations of high harmonics generation by means of fs laser interaction with overdense plasma layers. Combining particle-in-cell simulations with machine learning 2016 , 11, C12004-C12004	1
1288	Deep Learning for Intelligent Substation Device Infrared Fault Image Analysis. 2016 , 55, 03007	4
1287	Sparsity-based fusion of multiple sensors and multiple features for acoustic transients classification. 2016 ,	
1286	Study of speaker recognition system based on Feed Forward deep neural networks exploring text-dependent mode. 2016 ,	4
1285	Context Encoders: Feature Learning by Inpainting. 2016,	1605
1284	Deep Learning vs. Wise Learning: A Critical and Challenging Overview. 2016 , 49, 180-189	12
1283	. 2016,	3
1282	A review on Gaussian Process Latent Variable Models. 2016 , 1, 366-376	21
1281	Deep4MalDroid: A Deep Learning Framework for Android Malware Detection Based on Linux Kernel System Call Graphs. 2016 ,	71
1280	A novel modulation classification method in cognitive radios using higher-order cumulants and denoising stacked sparse autoencoder. 2016 ,	6

1279	SAFS: A deep feature selection approach for precision medicine. 2016 ,	19
1278	Layerwise feature selection in Stacked Sparse Auto-Encoder for tumor type prediction. 2016 ,	8
1277	Multimodal architecture for emotion in robots using deep learning. 2016,	7
1276	. 2016,	9
1275	Occlusion-Free Face Alignment: Deep Regression Networks Coupled with De-Corrupt AutoEncoders. 2016 ,	41
1274	. 2016,	2
1273	Hyperspectral image analysis using deep learning 🖪 review. 2016 ,	33
1272	Perspective: Materials informatics and big data: Realization of the fourth paradigmlof science in materials science. 2016 , 4, 053208	412
1271	Partial discharge patterns recognition with deep Convolutional Neural Networks. 2016,	4
1270	A study on sampling of STFT modifications in time and frequency domains for DNN-based speech dereverberation. 2016 ,	2
1269	Random Bits Forest: a Strong Classifier/Regressor for Big Data. 2016 , 6, 30086	13
1268	Deep belief networks for iris recognition based on contour detection. 2016 ,	7
1267	Flow Cytometry based automatic MRD assessment in Acute Lymphoblastic Leukaemia: Longitudinal evaluation of time-specific cell population models. 2016 ,	2
1266	Learned Binary Spectral Shape Descriptor for 3D Shape Correspondence. 2016 ,	14
1265	Indoor Positioning Algorithm Based on Parallel Multilayer Neural Network. 2016,	5
1264	Machine health monitoring with LSTM networks. 2016 ,	69
1263	Improving Deep Belief Networks via Delta Rule for Sentiment Classification. 2016,	4
1262	Single Sample Face Recognition from Video via Stacked Supervised Auto-Encoder. 2016 ,	5

1261	Land-Use Classification with Remote Sensing Image Based on Stacked Autoencoder. 2016,	4
1260	Smoke Detection Based on Deep Convolutional Neural Networks. 2016 ,	42
1259	Single-image splicing localization through autoencoder-based anomaly detection. 2016,	44
1258	Context-dependent social mapping. 2016,	2
1257	. 2016,	2
1256	CLUSTERING-BASED FEATURE LEARNING ON VARIABLE STARS. 2016 , 820, 138	26
1255	Deep Convolutional Neural Network Based Regression Approach for Estimation of Remaining Useful Life. 2016 , 214-228	231
1254	Learning robust uniform features for cross-media social data by using cross autoencoders. 2016 , 102, 64-75	22
1253	Discovery without a logictwould be a miracle. 2016 , 193, 3209-3238	7
1252	Non-Local Auto-Encoder With Collaborative Stabilization for Image Restoration. 2016 , 25, 2117-29	55
1251	Multi-layer local energy patterns for texture representation and classification. 2016, 32, 1633-1644	7
1250	A deep learning approach for relationship extraction from interaction context in social manufacturing paradigm. 2016 , 100, 188-199	90
1249	When are two multi-layer cellular neural networks the same?. 2016 , 79, 12-9	6
1248	Multi-layer neural network for received signal strength-based indoor localisation. 2016 , 10, 717-723	61
1247	Computer aided lung cancer diagnosis with deep learning algorithms. 2016,	57
1246	Detection of lobular structures in normal breast tissue. 2016 , 74, 91-102	17
1245	A Preliminary Study of the Suitability of Deep Learning to Improve LiDAR-Derived Biomass Estimation. 2016 , 588-596	8
1244	Threaded Ensembles of Supervised and Unsupervised Neural Networks for Stream Learning. 2016 , 304-315	3

1243	DeepFood: Deep Learning-Based Food Image Recognition for Computer-Aided Dietary Assessment. 2016 , 37-48	81
1242	DeepMatching: Hierarchical Deformable Dense Matching. 2016 , 120, 300-323	150
1241	Dimension Reduction With Extreme Learning Machine. 2016 , 25, 3906-18	144
1240	Automatically learning semantic features for defect prediction. 2016,	242
1239	Gaussian Neuron in Deep Belief Network for Sentiment Prediction. 2016 , 46-51	
1238	Deep neural networks 🖟 developmental perspective. 2016 , 5,	7
1237	Event-based media processing and analysis: A survey of the literature. 2016 , 53, 3-19	32
1236	Computational aesthetics of photos quality assessment based on improved artificial neural network combined with an autoencoder technique. 2016 , 188, 50-62	13
1235	A computational approach for detecting pigmented skin lesions in macroscopic images. 2016 , 61, 53-63	66
1234	Stacking denoising auto-encoders in a deep network to segment the brainstem on MRI in brain cancer patients: A clinical study. 2016 , 52, 8-18	33
1233	Localization based stereo speech source separation using probabilistic time-frequency masking and deep neural networks. 2016 , 2016,	25
1232	Sea Ice Concentration Estimation During Melt From Dual-Pol SAR Scenes Using Deep Convolutional Neural Networks: A Case Study. 2016 , 54, 4524-4533	105
1231	Flexible Multilayer Sparse Approximations of Matrices and Applications. 2016 , 10, 688-700	24
1230	Learning Mutual Visibility Relationship for Pedestrian Detection with a Deep Model. 2016 , 120, 14-27	34
1229	Unsupervised Deep Learning Applied to Breast Density Segmentation and Mammographic Risk Scoring. 2016 , 35, 1322-1331	269
1228	Switching EEG Headsets Made Easy: Reducing Offline Calibration Effort Using Active Weighted Adaptation Regularization. 2016 , 24, 1125-1137	42
1227	Noise Robust Speech Recognition Using Deep Belief Networks. 2016 , 15, 1650005	4
1226	Learning matrix quantization and relevance learning based on Schatten-p-norms. 2016 , 192, 104-114	3

1225	Deep Neural Network for Short-Text Sentiment Classification. 2016 , 168-175	5
1224	High-dimensional and large-scale anomaly detection using a linear one-class SVM with deep learning. 2016 , 58, 121-134	491
1223	Content Based Image Retrieval system using Wavelet Transformation and multiple input multiple task Deep Autoencoder. 2016 ,	2
1222	Integrated Software Fingerprinting via Neural-Network-Based Control Flow Obfuscation. 2016 , 11, 2322-2337	' 6
1221	Uniforming the dimensionality of data with neural networks for materials informatics. 2016 , 46, 17-25	8
1220	Big Data Analytic Paradigms: From Principle Component Analysis to Deep Learning. 2016 , 79-95	
1219	State-of-the-Art Approaches for Image Classification. 2016 , 41-52	1
1218	Computational Methods for Integrating Vision and Language. 2016 , 6, 1-227	
1217	Large patch convolutional neural networks for the scene classification of high spatial resolution imagery. 2016 , 10, 025006	82
1216	Deep belief network based statistical feature learning for fingerprint liveness detection. 2016 , 77, 58-65	46
1215	A Regression Approach to Single-Channel Speech Separation Via High-Resolution Deep Neural Networks. 2016 , 24, 1424-1437	53
1214	An Automatic Design of Factors in a Human-Pose Estimation System Using Neural Networks. 2016 , 46, 875-887	10
1213	A random forest guided tour. 2016 , 25, 197-227	653
1212	The changing fortunes of pattern recognition and computer vision. 2016 , 55, 3-5	10
1211	Detection of Co-salient Objects by Looking Deep and Wide. 2016 , 120, 215-232	232
121 0	Rainfall Prediction: A Deep Learning Approach. 2016 , 151-162	36
1209	Change detection based on deep feature representation and mapping transformation for multi-spatial-resolution remote sensing images. 2016 , 116, 24-41	175
1208	Dual autoencoders features for imbalance classification problem. 2016 , 60, 875-889	58

1207	Deep learning code fragments for code clone detection. 2016 ,	209
1206	Sparse Neural Network Models of Antimicrobial Peptide-Activity Relationships. 2016 , 35, 606-614	12
1205	Fine-tuning deep convolutional neural networks for distinguishing illustrations from photographs. 2016 , 66, 295-301	28
1204	Risk and Vulnerability Analysis of Critical Infrastructure. 2016 , 54-66	
1203	Measuring the Local Non-alignment Between Objects: Applications to Different Domains. 2016 , 96, 838-847	
1202	Unsupervised Feature Learning for Objects of Interest Detection in Cluttered Construction Roof Site Images. 2016 , 145, 428-435	13
1201	Deep Robust Encoder Through Locality Preserving Low-Rank Dictionary. 2016 , 567-582	23
1200	Fault diagnosis network design for vehicle on-board equipments of high-speed railway: A deep learning approach. 2016 , 56, 250-259	87
1199	A Study on the Efficient Estimation of the Payment Intention in the Mail Order Industry. 2016 , 96, 1122-1128	О
1198	iHear Food: Eating Detection Using Commodity Bluetooth Headsets. 2016 ,	24
1197	Notice of Removal: Target retrieval in large-scale and high-resolution synthetic aperture radar imagery based on deep learning and multi-scale saliency. 2016 ,	
1196	Training Maxout Neural Networks for Speech Recognition Tasks. 2016 , 443-451	1
1195	Fault diagnosis based on deep learning. 2016,	59
1194	Face Recognition Using a Unified 3D Morphable Model. 2016 , 73-89	22
1193	Human face recognition based on adaptive deep Convolution Neural Network. 2016,	6
1192	Towards Realizing Sign Language-to-Speech Conversion by Combining Deep Learning and Statistical Parametric Speech Synthesis. 2016 , 678-690	2
1191	Application of alternating deep belief network in image classification. 2016,	
1190	Semi Supervised Autoencoder. 2016 , 82-89	11

1189	Sparse Auto-encoder with Smoothed (l_1) Regularization. 2016 , 555-563	1
1188	Exploring the complementarity of THz pulse imaging and DCE-MRIs: Toward a unified multi-channel classification and a deep learning framework. 2016 , 137, 87-114	11
1187	Hybrid neuromorphic system for automatic speech recognition. 2016 , 52, 1428-1430	8
1186	The nature of unsupervised learning in deep neural networks: A new understanding and novel approach. 2016 , 25, 127-141	11
1185	. 2016,	2
1184	Spatio-temporal representation for face authentication by using multi-task learning with human attributes. 2016 ,	5
1183	Using Machine Learning Techniques to Recover Prismatic Cirrus Ice Crystal Size from 2-Dimensional Light Scattering Patterns. 2016 , 372-379	
1182	Estimating direct-to-reverberant ratio mapped from power spectral density using deep neural network. 2016 ,	1
1181	. 2016 , 8, 237-255	44
1180	Deep Feature Learning Architectures for Daily Reservoir Inflow Forecasting. 2016 , 30, 5145-5161	30
1179	Chinese text categorization based on deep belief networks. 2016,	6
1178	Demand forecasting at low aggregation levels using Factored Conditional Restricted Boltzmann Machine. 2016 ,	11
1177	Improving Deep Learning Accuracy with Noisy Autoencoders Embedded Perturbative Layers. 2016 , 229-238	1
1176	Visualization of a Multidimensional Descriptor Space. 2016 , 243-267	4
1175	Detect the emotions of the public based on cascade neural network model. 2016 ,	1
1174	Data Visualization. 2016 , 37-58	1
1173	Regression. 2016 , 67-83	0
1172	Deep learning-based soft-sensing method for operation optimization of coke dry quenching process. 2016 ,	1

1171	Emotion recognition from face dataset using deep neural nets. 2016 ,	4
1170	Car parking occupancy detection using smart camera networks and Deep Learning. 2016,	50
1169	Very high resolution images classification by fine tuning deep convolutional neural networks. 2016,	3
1168	Global and Regional Features. 2016 , 75-114	1
1167	Interest Point Detector and Feature Descriptor Survey. 2016 , 187-246	14
1166	. 2016 , 24, 2301-2312	9
1165	One-shot deep neural network for pose and illumination normalization face recognition. 2016,	14
1164	A novel feature extraction method for scene recognition based on Centered Convolutional Restricted Boltzmann Machines. 2016 , 214, 708-717	26
1163	Ensembles of Deep Learning Architectures for the Early Diagnosis of the Alzheimer's Disease. 2016 , 26, 1650025	188
1162	Pedestrian Behavior Modeling From Stationary Crowds With Applications to Intelligent Surveillance. 2016 , 25, 4354-4368	38
1161	ODROID XU4 based implementation of decision level fusion approach for matching computer generated sketches. 2016 , 16, 217-224	15
1160	ECG assessment based on neural networks with pretraining. 2016 , 49, 399-406	26
1159	Improved deep belief networks and multi-feature fusion for leaf identification. 2016 , 216, 460-467	35
1158	Deep Learning in Drug Discovery. 2016 , 35, 3-14	360
1157	Deep belief network based deterministic and probabilistic wind speed forecasting approach. 2016 , 182, 80-93	295
1156	Deep belief network-based post-filtering for statistical parametric speech synthesis. 2016,	5
1155	A comparison of deep multilayer networks and Markov random field matching models for face recognition in the wild. 2016 , 10, 466-474	4
1154	Exploiting low-dimensional structures to enhance DNN based acoustic modeling in speech recognition. 2016 ,	7

1153	Multi-feature fusion deep networks. 2016 , 218, 164-171	24
1152	Statistical physics of inference: thresholds and algorithms. 2016 , 65, 453-552	130
1151	Thermal face recognition using convolutional neural network. 2016 ,	8
1150	A deep learning approach for VM workload prediction in the cloud. 2016 ,	39
1149	Structural Deep Network Embedding. 2016 ,	1001
1148	Classification of Epileptic EEG Signals with Stacked Sparse Autoencoder Based on Deep Learning. 2016 , 802-810	26
1147	A topological insight into restricted Boltzmann machines. 2016 , 104, 243-270	32
1146	Analysis of instance selection algorithms on large datasets with Deep Convolutional Neural Networks. 2016 ,	4
1145	Domain adaptation for speech emotion recognition by sharing priors between related source and target classes. 2016 ,	14
1144	Computational Creativity Based Video Recommendation. 2016,	5
1144	Computational Creativity Based Video Recommendation. 2016, A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse autoencoder. 2016,	5
1143	A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse	
1143	A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse autoencoder. 2016 , Color image classification via quaternion principal component analysis network. 2016 , 216, 416-428	5
1143 1142 1141	A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse autoencoder. 2016 , Color image classification via quaternion principal component analysis network. 2016 , 216, 416-428	5
1143 1142 1141	A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse autoencoder. 2016, Color image classification via quaternion principal component analysis network. 2016, 216, 416-428 Convolutional Neural Network for 3D object recognition using volumetric representation. 2016,	5 4 ² 5
1143 1142 1141 1140 1139	A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse autoencoder. 2016, Color image classification via quaternion principal component analysis network. 2016, 216, 416-428 Convolutional Neural Network for 3D object recognition using volumetric representation. 2016, A comparison between deep neural nets and kernel acoustic models for speech recognition. 2016,	5 4 ² 5
1143 1142 1141 1140 1139	A hierarchical feature learning for isolated Farsi handwritten digit recognition using sparse autoencoder. 2016, Color image classification via quaternion principal component analysis network. 2016, 216, 416-428 Convolutional Neural Network for 3D object recognition using volumetric representation. 2016, A comparison between deep neural nets and kernel acoustic models for speech recognition. 2016, Terrain classification with Polarimetric SAR based on Deep Sparse Filtering Network. 2016,	5 4 ² 5

Node label matching improves classification performance in Deep Belief Networks. 2016, 1133 . 2016. 1134 Experiments in combining boosting and deep stacked networks. 2016, 1137 . 2016. 1139 Joint modulation format/bit-rate classification and signal-to-noise ratio estimation in multipath fading channels using deep machine learning. 2016. 52, 1272-1274 1129 Fault analysis of High Speed Train with DBN hierarchical ensemble. 2016, 1128 Abnormality Detecting Deep Belief Network. 2016, 1129 Classification Experiments of DNA Sequences by Using a Deep Neural Network and Chaos Game Representation. 2016. 1120 Gesture recognition by instantaneous surface EMG images. 2016, 6, 36571 1121 Exploring the online underground marketplaces through topic-based social network and clustering. 2016. 1122 Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, 1123 A Context-aware Time Model for Web Search. 2016, 1124 Infinite Ensemble for Image Clustering. 2016, 1125 Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, 1130 Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, 1131 S. 2016, 13, 1359-1363	135	Clustering of receptive fields in Autoencoders. 2016 ,	7
2016, 2016,	134	Node label matching improves classification performance in Deep Belief Networks. 2016,	
Joint modulation format/bit-rate classification and signal-to-noise ratio estimation in multipath fading channels using deep machine learning. 2016, 52, 1272-1274 1129 Fault analysis of High Speed Train with DBN hierarchical ensemble. 2016, 1128 Abnormality Detecting Deep Belief Network. 2016, 1129 Classification Experiments of DNA Sequences by Using a Deep Neural Network and Chaos Game Representation. 2016, 1120 Gesture recognition by instantaneous surface EMG images. 2016, 6, 36571 1121 Exploring the online underground marketplaces through topic-based social network and clustering. 2016, 1122 Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, 1123 A Context-aware Time Model for Web Search. 2016, 1124 Infinite Ensemble for Image Clustering. 2016, 1125 Infinite Ensemble for Image Clustering. 2016, 1126 Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, 1130 Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	133	. 2016,	3
Joint modulation format/bit-rate classification and signal-to-noise ratio estimation in multipath fading channels using deep machine learning. 2016, 52, 1272-1274 1129 Fault analysis of High Speed Train with DBN hierarchical ensemble. 2016, 1128 Abnormality Detecting Deep Belief Network. 2016, 1127 Classification Experiments of DNA Sequences by Using a Deep Neural Network and Chaos Game Representation. 2016, 1128 Exploring the online underground marketplaces through topic-based social network and clustering. 1129 Exploring the online underground marketplaces through topic-based social network and clustering. 1120 Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, 1121 Infinite Ensemble for Image Clustering. 2016, 1122 Infinite Ensemble for Image Clustering. 2016, 1123 Deep learning neural network for power system fault diagnosis. 2016, 1124 Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, 1129 Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	132	Experiments in combining boosting and deep stacked networks. 2016,	O
Fault analysis of High Speed Train with DBN hierarchical ensemble. 2016, Fault analysis of High Speed Train with DBN hierarchical ensemble. 2016, Abnormality Detecting Deep Belief Network. 2016, Classification Experiments of DNA Sequences by Using a Deep Neural Network and Chaos Game Representation. 2016, Exploring the conline underground marketplaces through topic-based social network and clustering. 2016, Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, A Context-aware Time Model for Web Search. 2016, Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	131	. 2016,	1
Abnormality Detecting Deep Belief Network. 2016, Classification Experiments of DNA Sequences by Using a Deep Neural Network and Chaos Game Representation. 2016, Exploring the contine underground marketplaces through topic-based social network and clustering. 2016, Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, A Context-aware Time Model for Web Search. 2016, Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,			20
Classification Experiments of DNA Sequences by Using a Deep Neural Network and Chaos Game Representation. 2016, Gesture recognition by instantaneous surface EMG images. 2016, 6, 36571 Exploring the online underground marketplaces through topic-based social network and clustering. 2016, Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, A Context-aware Time Model for Web Search. 2016, Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	129	Fault analysis of High Speed Train with DBN hierarchical ensemble. 2016 ,	11
Representation. 2016, Gesture recognition by instantaneous surface EMG images. 2016, 6, 36571 Exploring the online underground marketplaces through topic-based social network and clustering. 2016, Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, A Context-aware Time Model for Web Search. 2016, Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	128	Abnormality Detecting Deep Belief Network. 2016,	5
Exploring the online underground marketplaces through topic-based social network and clustering. 1124 Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, 1123 A Context-aware Time Model for Web Search. 2016, 1124 Infinite Ensemble for Image Clustering. 2016, 1125 Deep learning neural network for power system fault diagnosis. 2016, 1126 Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, 1139 Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,			11
Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016, A Context-aware Time Model for Web Search. 2016, Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	126	Gesture recognition by instantaneous surface EMG images. 2016 , 6, 36571	238
A Context-aware Time Model for Web Search. 2016, Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,			7
Infinite Ensemble for Image Clustering. 2016, Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	124	Towards smarter cities: A self-healing resilient Microgrid Social Network. 2016 ,	
Deep learning neural network for power system fault diagnosis. 2016, Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	123	A Context-aware Time Model for Web Search. 2016 ,	23
Improving Tuberculosis Diagnostics Using Deep Learning and Mobile Health Technologies among Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	122	Infinite Ensemble for Image Clustering. 2016,	41
Resource-Poor and Marginalized Communities. 2016, Estimation of effective temperatures in quantum annealers for sampling applications: A case study with possible applications in deep learning. 2016, 94,	121	Deep learning neural network for power system fault diagnosis. 2016,	24
with possible applications in deep learning. 2016 , 94,			41
1118 . 2016 , 13, 1359-1363			98
	118	. 2016 , 13, 1359-1363	80

1117	A deep learning approach to fetal-ECG signal reconstruction. 2016 ,	15
1116	NeRD: A Neural Response Divergence Approach to Visual Saliency Detection. 2016 , 23, 1404-1408	
1115	Extracting Muscle Synergy Patterns from EMG Data Using Autoencoders. 2016 , 47-54	4
1114	Local Feature Design Concepts. 2016 , 115-166	
1113	Feature Learning Architecture Taxonomy and Neuroscience Background. 2016, 319-374	1
1112	A Data Grouping CNN Algorithm for Short-Term Traffic Flow Forecasting. 2016 , 92-103	11
1111	Geological Disaster Recognition on Optical Remote Sensing Images Using Deep Learning. 2016 , 91, 566-575	74
1110	Detection of Rogue Certificates from Trusted Certificate Authorities Using Deep Neural Networks. 2016 , 19, 1-31	12
1109	Robot navigation in large-scale social maps: An action recognition approach. 2016 , 66, 261-273	37
1108	3D Human pose estimation: A review of the literature and analysis of covariates. 2016 , 152, 1-20	132
	3D Human pose estimation: A review of the literature and analysis of covariates. 2016 , 152, 1-20 A scalable GPU-enabled framework for training deep neural networks. 2016 ,	132 3
1107		
1107	A scalable GPU-enabled framework for training deep neural networks. 2016 ,	3
1107 1106 1105	A scalable GPU-enabled framework for training deep neural networks. 2016, A fingerprinting indoor localization algorithm based deep learning. 2016,	3
1107 1106 1105	A scalable GPU-enabled framework for training deep neural networks. 2016, A fingerprinting indoor localization algorithm based deep learning. 2016, Feature Learning and Deep Learning Architecture Survey. 2016, 375-514 Rejecting Character Recognition Errors Using CNN Based Confidence Estimation. 2016, 25, 520-526	3 42 11
1107 1106 1105 1104 1103	A scalable GPU-enabled framework for training deep neural networks. 2016, A fingerprinting indoor localization algorithm based deep learning. 2016, Feature Learning and Deep Learning Architecture Survey. 2016, 375-514 Rejecting Character Recognition Errors Using CNN Based Confidence Estimation. 2016, 25, 520-526	3 42 11 12
1107 1106 1105 1104 1103	A scalable GPU-enabled framework for training deep neural networks. 2016, A fingerprinting indoor localization algorithm based deep learning. 2016, Feature Learning and Deep Learning Architecture Survey. 2016, 375-514 Rejecting Character Recognition Errors Using CNN Based Confidence Estimation. 2016, 25, 520-526 Self CNN-based time series stream forecasting. 2016, 52, 1857-1858	3 42 11 12 5

1099 Linear readout of object manifolds. 2016 , 93, 060301	11
Rapid Adiabatic Preparation of Injective Projected Entangled Pair States and Gibbs States. 2016 , 116, 080503	24
1097 Automatic Chord estimation on seventhsbass Chord vocabulary using deep neural network. 2016 ,	2
1096 Big data for development: applications and techniques. 2016 , 1,	66
Hierarchical adaptive deep convolution neural network and its application to bearing fault diagnosis. 2016 , 93, 490-502	419
Learning to Respond with Deep Neural Networks for Retrieval-Based Human-Computer Conversation System. 2016 ,	108
1093 More Semantics More Robust. 2016 ,	11
1092 Classification of ships using real and simulated data in a convolutional neural network. 2016 ,	11
Some Notes on Computational and Theoretical Issues in Artificial Intelligence and Machine Learning. 2016 , 3-12	1
1090 High-Frequency Trading Strategy Based on Deep Neural Networks. 2016 , 424-436	26
1089 Action Recognition Using Convolutional Restricted Boltzmann Machines. 2016 ,	2
$_{f 1088}$ DropConnect Regularization Method with Sparsity Constraint for Neural Networks. 2016 , 25, 152-158	15
1088 DropConnect Regularization Method with Sparsity Constraint for Neural Networks. 2016 , 25, 152-158 1087 Motion background modeling based on context-encoder. 2016 ,	15 5
Motion background modeling based on context-encoder. 2016 , Combining deep learning with rough set analysis: A model of cyberspace situational awareness.	5
Motion background modeling based on context-encoder. 2016 , Combining deep learning with rough set analysis: A model of cyberspace situational awareness. 2016 ,	5 3
Motion background modeling based on context-encoder. 2016, Combining deep learning with rough set analysis: A model of cyberspace situational awareness. 2016, Deep neural networks for head pose classification. 2016,	5 3 3

DroidDelver: An Android Malware Detection System Using Deep Belief Network Based on AP Blocks. 2016 , 54-66	ri Call 37
1080 Deep learning architecture for air quality predictions. 2016 , 23, 22408-22417	149
1079 Semi-supervised learning of the electronic health record for phenotype stratification. 2016 , 6	54, 168-178 92
1078 Clothes classification based on deep belief network. 2016 ,	
Ensemble-Average Representation of Pt Clusters in Conditions of Catalysis Accessed through Accelerated Deep Neural Network Fitting Global Optimization. 2016 , 12, 6213-6226	n GPU 81
Detecting multiple changes from multi-temporal images by using stacked denosing autoenco based change vector analysis. 2016 ,	oder 7
Writer-independent feature learning for Offline Signature Verification using Deep Convolution Neural Networks. 2016 ,	onal 52
1074 Filterbank learning for deep neural network based polyphonic sound event detection. 2016 ,	13
1073 Semi-supervised auto-encoder based on manifold learning. 2016 ,	1
Generalized Deep Transfer Networks for Knowledge Propagation in Heterogeneous Domains , 12, 1-22 $$	s. 2016 94
A pseudoinverse incremental algorithm for fast training deep neural networks with application spectra pattern recognition. 2016 ,	on to 10
1070 Emotion in Context. 2016,	16
1069 Lifelong Machine Learning. 2016 , 10, 1-145	114
1068 Matrix Variate Restricted Boltzmann Machine. 2016,	1
1067 Training deep neural networks with gradual deconvexification. 2016 ,	
1066 Assessing diffusion of spatial features in Deep Belief Networks. 2016 ,	1
1065 . 2016 ,	
1064 . 2016 ,	2

1063 Designing reconfigurable large-scale deep learning systems using stochastic computing. 2016 ,	20
1062 Insight and Intelligence. 2016 , 51-108	
1061 Multi-layer Representation Learning for Medical Concepts. 2016 ,	164
1060 A direct fingerprint minutiae extraction approach based on convolutional neural networks. 2016 ,	21
1059 Deep sparse rectifier neural networks for speech denoising. 2016 ,	16
1058 Deep subspace mapping in hyperspectral imaging. 2016 ,	
1057 Simple Evolutionary Optimization Can Rival Stochastic Gradient Descent in Neural Networks. 2016 ,	49
Model-based high-precision tuning of NOR flash memory cells for analog computing applications. 2016 ,	16
1055 Localization-based visual tracking with convolutional neural networks. 2016 ,	
1054 Boosting Docking-Based Virtual Screening with Deep Learning. 2016 , 56, 2495-2506	175
Boosting Docking-Based Virtual Screening with Deep Learning. 2016, 56, 2495-2506 Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks. 2016,	175
Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks.	
Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks. 2016 ,	1
Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks. 2016, Collective contextual anomaly detection framework for smart buildings. 2016,	1 16
Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks. 2016, Collective contextual anomaly detection framework for smart buildings. 2016, Generalized correntropy induced loss function for deep learning. 2016,	1 16 2
Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks. 2016, Collective contextual anomaly detection framework for smart buildings. 2016, Generalized correntropy induced loss function for deep learning. 2016, Dynamical Spectrum Sharing and Medium Access Control for Heterogeneous Cognitive Radio	1 16 2 5
Low level visual feature extraction by learning of multiple tasks for Convolutional Neural Networks. 2016, Collective contextual anomaly detection framework for smart buildings. 2016, Generalized correntropy induced loss function for deep learning. 2016, 2016, Dynamical Spectrum Sharing and Medium Access Control for Heterogeneous Cognitive Radio Networks. 2016, 12, 3630593 Traffic matrix prediction and estimation based on deep learning in large-scale IP backbone	1 16 2 5 2

1045 The effects of deep network topology on mortality prediction. 2016 , 2016, 2602-2605	7
1044 FPGA Implementation of Autoencoders Having Shared Synapse Architecture. 2016 , 231-239	1
1043 . 2016 ,	106
1042 Using a Distributed Representation of Words in Localizing Relevant Files for Bug Reports. 2016 ,	7
1041 Convolutional Neural Networks for Steady Flow Approximation. 2016 ,	133
Prediction of Filamentous Sludge Bulking using a State-based Gaussian Processes Regression Model. 2016 , 6, 31303	14
A deep learning-based cyber-physical strategy to mitigate false data injection attack in smart grids. 2016 ,	31
1038 A Novel Deep Learning Network Architecture with Cross-Layer Neurons. 2016 ,	
1037 Connected and Automated Vehicles. 2016 , 138, S5-S11	4
Modeling Joint Representation with Tri-Modal Deep Belief Networks for Query and Question Matching. 2016 , E99.D, 927-935	
1035 Head Pose Estimation Based on Robust Convolutional Neural Network. 2016 , 16, 133-145	8
1034 Greedy deep dictionary learning for hyperspectral image classification. 2016 ,	3
1033 Generalization ability of majority vote point classifiers for motor fault diagnosis. 2016 ,	1
1032 Loss Functions for Top-k Error: Analysis and Insights. 2016 ,	18
1031 . 2016,	
Benchmarking Deep Networks for Predicting Residue-Specific Quality of Individual Protein Models in CASP11. 2016 , 6, 19301	19
1029 Comparing object recognition from binary and bipolar edge images for visual prostheses. 2016 , 25,	1
1028 Combining normal sparse into discriminative deep belief networks. 2016 ,	

Revealing Fundamental Physics from the Daya Bay Neutrino Experiment Using Deep Neural Networks. 2016 ,	6
Anti-synchronization control for delayed memristor-based distributed parameter NNs with mixed boundary conditions. 2016 , 2016,	3
Identification of protein-ligand binding site using multi-clustering and Support Vector Machine. 2016 ,	0
Speaker similarity score based fast phoneme classification by using neighborhood components analysis. 2016 ,	
1023 Faster training of very deep networks via p-norm gates. 2016 ,	6
1022 Dense disparity estimation based on feature matching and IGMRF regularization. 2016 ,	O
Investigation of Using Continuous Representation of Various Linguistic Units in Neural Network Based Text-to-Speech Synthesis. 2016 , E99.D, 2471-2480	1
1020 Smart memory: A neuromorphic semiconductor memory. 2016 ,	
1019 Virtual Screening: A Challenge for Deep Learning. 2016 , 13-22	5
Name I a de contra de cont	
Neural networks: An overview of early research, current frameworks and new challenges. 2016 , 214, 242-268	144
	144 4
¹⁰¹⁸ 214, 242-268	
214, 242-268 1017 Introduction to Medical Image Recognition, Segmentation, and Parsing. 2016 , 1-21	4
214, 242-268 1017 Introduction to Medical Image Recognition, Segmentation, and Parsing. 2016, 1-21 1016 . 2016, 18, 1855-1868 Modeling spectral envelopes using deep conditional restricted Boltzmann machines for statistical	4
Introduction to Medical Image Recognition, Segmentation, and Parsing. 2016, 1-21 1016 . 2016, 18, 1855-1868 Modeling spectral envelopes using deep conditional restricted Boltzmann machines for statistical parametric speech synthesis. 2016,	4 4
Introduction to Medical Image Recognition, Segmentation, and Parsing. 2016, 1-21 1016 . 2016, 18, 1855-1868 Modeling spectral envelopes using deep conditional restricted Boltzmann machines for statistical parametric speech synthesis. 2016, Multimodal emotion recognition using deep learning architectures. 2016, Prediction of residue-residue contact matrix for protein-protein interaction with Fisher score	4 4 0
Introduction to Medical Image Recognition, Segmentation, and Parsing. 2016, 1-21 1016 . 2016, 18, 1855-1868 1015 Modeling spectral envelopes using deep conditional restricted Boltzmann machines for statistical parametric speech synthesis. 2016, 1014 Multimodal emotion recognition using deep learning architectures. 2016, 1013 Prediction of residue-residue contact matrix for protein-protein interaction with Fisher score features and deep learning. 2016, 110, 97-105	4 4 0 73 28

1009	Neuromorphic architectures with electronic synapses. 2016 ,	22
1008	Machine Learning. 2016 , 35-43	1
1007	MST Fitness Index and implicit data narratives: A comparative test on alternative unsupervised algorithms. 2016 , 461, 726-746	13
1006	Object Detection and Tracking. 2016 , 97-156	
1005	Combining non-negative matrix factorization and deep neural networks for speech enhancement and automatic speech recognition. 2016 ,	6
1004	Clustering the seoul metropolitan area by travel patterns based on a deep belief network. 2016 ,	5
1003	TEMPORARY REMOVAL: Big Data analytics: Computational intelligence techniques and application areas. 2016 ,	14
1002	Bio-inspired feedback-circuit implementation of discrete, free energy optimizing, winner-take-all computations. 2016 , 110, 135-50	2
1001	A highly scalable modular bottleneck neural network for image dimensionality reduction and image transformation. 2016 , 44, 557-610	7
1000	Double articulation analyzer with deep sparse autoencoder for unsupervised word discovery from speech signals. 2016 , 30, 770-783	12
999	Hypergraph regularized autoencoder for image-based 3D human pose recovery. 2016 , 124, 132-140	33
998	When Ensemble Learning Meets Deep Learning: a New Deep Support Vector Machine for Classification. 2016 , 107, 54-60	42
997	Clustering of cell populations in flow cytometry data using a combination of Gaussian mixtures. 2016 , 60, 1029-1040	13
996	EEG-based prediction of driver's cognitive performance by deep convolutional neural network. 2016 , 47, 549-555	112
995	Memristive Boltzmann machine: A hardware accelerator for combinatorial optimization and deep learning. 2016 ,	102
994	A survey of machine learning for big data processing. 2016 , 2016,	247
993	An imbalanced data classification algorithm of improved autoencoder neural network. 2016 ,	11
992	Object Classification and Grasp Planning Using Visual and Tactile Sensing. 2016 , 46, 969-979	42

991	Modulation Format Identification in Coherent Receivers Using Deep Machine Learning. 2016 , 28, 1886-1889	100
990	. 2016 , 4, 22-40	1111
989	A renaissance of neural networks in drug discovery. 2016 , 11, 785-95	127
988	The Limitations of Deep Learning in Adversarial Settings. 2016 ,	985
987	Learning contentBocial influential features for influence analysis. 2016 , 5, 137-149	8
986	Learning abstract snippet detectors with Temporal embedding in convolutional neural Networks. 2016 ,	
985	Visualizing Natural Language Descriptions. 2016 , 49, 1-34	383
984	The Spatial Complexity of Inhomogeneous Multi-layer Neural Networks. 2016 , 43, 31-47	1
983	On-line deep learning method for action recognition. 2016 , 19, 337-354	26
982	Difference representation learning using stacked restricted Boltzmann machines for change detection in SAR images. 2016 , 20, 4645-4657	34
981	DEFEATnet Deep Conventional Image Representation for Image Classification. 2016, 26, 494-505	21
980	Extreme Learning Machine for Multilayer Perceptron. 2016 , 27, 809-21	783
979	Stacked Autoencoders Using Low-Power Accelerated Architectures for Object Recognition in Autonomous Systems. 2016 , 43, 445-458	25
978	Face recognition from a single image per person using deep architecture neural networks. 2016 , 19, 73-77	9
977	Ensemble Classification and Regression-Recent Developments, Applications and Future Directions [Review Article]. 2016 , 11, 41-53	304
976	Deep Fusion of Multiple Semantic Cues for Complex Event Recognition. 2016 , 25, 1033-46	48
975	Human action recognition using genetic algorithms and convolutional neural networks. 2016 , 59, 199-212	104
974	High-Content Analysis of Breast Cancer Using Single-Cell Deep Transfer Learning. 2016 , 21, 252-9	49

973	Contractive ML-ELM for Invariance Robust Feature Extraction. 2016 , 203-208	1
972	Towards Deep Developmental Learning. 2016 , 8, 99-114	28
971	. 2016 , 18, 64-75	43
970	A hierarchal BoW for image retrieval by enhancing feature salience. 2016 , 175, 146-154	15
969	Day-Ahead Prediction of Wind Speed with Deep Feature Learning. 2016 , 30, 1650011	25
968	Machine-to-Machine (M2M) communications: A survey. 2016 , 66, 83-105	100
967	Enhancing Retrieval and Ranking Performance for Media Search Engine by Deep Learning. 2016,	3
966	Comparison between multi-class classifiers and deep learning with focus on industry 4.0. 2016 ,	13
965	Segmenting Retinal Blood Vessels With Deep Neural Networks. 2016 , 35, 2369-2380	507
964	MapReduce based distributed learning algorithm for Restricted Boltzmann Machine. 2016 , 198, 4-11	21
963	Application of Neural Network for Human Actions Recognition. 2016 , 183-191	
962	Pedestrian Detection with Spatially Pooled Features and Structured Ensemble Learning. 2016 , 38, 1243-57	76
961	Gene expression inference with deep learning. 2016 , 32, 1832-9	235
960	. 2016 , 26, 2123-2137	35
959	Multi-layer Online Sequential Extreme Learning Machine for Image Classification. 2016, 39-49	8
958	Learning Informative Features from Restricted Boltzmann Machines. 2016 , 44, 735-750	10
957	A picture tells a thousand wordsAbout you! User interest profiling from user generated visual content. 2016 , 124, 45-53	27
956	Using goal-driven deep learning models to understand sensory cortex. 2016 , 19, 356-65	655

955	Scene parsing using inference Embedded Deep Networks. 2016 , 59, 188-198	19
954	A combined deep-learning and deformable-model approach to fully automatic segmentation of the left ventricle in cardiac MRI. 2016 , 30, 108-119	368
953	Learning semantic representation with neural networks for community question answering retrieval. 2016 , 93, 75-83	50
952	CURL: Image Classification using co-training and Unsupervised Representation Learning. 2016 , 145, 15-29	4
951	Learning a good representation with unsymmetrical auto-encoder. 2016 , 27, 1361-1367	11
950	Cluster-Based Outlier Detection Using Unsupervised Extreme Learning Machines. 2016 , 135-146	1
949	Deep Learning of Part-Based Representation of Data Using Sparse Autoencoders With Nonnegativity Constraints. 2016 , 27, 2486-2498	133
948	Bottom-Up Visual Saliency Estimation With Deep Autoencoder-Based Sparse Reconstruction. 2016 , 27, 1227-40	43
947	A Note on the Size of Denoising Neural Networks. 2016 , 9, 275-286	2
946	A Deep Neural Network Modeling Framework to Reduce Bias in Satellite Precipitation Products. 2016 , 17, 931-945	73
945	A novel path planning method for biomimetic robot based on deep learning. 2016 , 36, 186-191	11
944	Unsupervised energy prediction in a Smart Grid context using reinforcement cross-building transfer learning. 2016 , 116, 646-655	80
943	Toward a Blind Deep Quality Evaluator for Stereoscopic Images Based on Monocular and Binocular Interactions. 2016 , 25, 2059-74	59
942	Learning Invariant Color Features for Person Reidentification. 2016 , 25, 3395-3410	45
941	Deep learning for estimating building energy consumption. 2016 , 6, 91-99	294
940	Modeling of nonlinear system based on deep learning framework. 2016 , 84, 1327-1340	82
939	3D Object Recognition Using Convolutional Neural Networks with Transfer Learning Between Input Channels. 2016 , 889-898	28
938	The Radon Cumulative Distribution Transform and Its Application to Image Classification. 2016 , 25, 920-34	35

The Distance-Based Representative Skyline Calculation Using Unsupervised Extreme Learning Machines. **2016**, 107-119

936	Auto-encoder based dimensionality reduction. 2016 , 184, 232-242	267
935	Exploring Representation Learning With CNNs for Frame-to-Frame Ego-Motion Estimation. 2016 , 1, 18-25	103
934	Scalable Object Retrieval with Compact Image Representation from Generic Object Regions. 2016 , 12, 1-21	15
933	Deep learning for visual understanding: A review. 2016 , 187, 27-48	1072
932	De´novo identification of replication-timing domains in the human genome by deep learning. 2016 , 32, 641-9	35
931	How do we train a stone to think? A review of machine intelligence and its implications. 2016 , 17, 211-238	1
930	Change Detection in Synthetic Aperture Radar Images Based on Deep Neural Networks. 2016 , 27, 125-38	339
929	Two-Stage Learning to Predict Human Eye Fixations via SDAEs. 2016 , 46, 487-98	96
928	Understanding Short Texts through Semantic Enrichment and Hashing. 2016 , 28, 566-579	31
927	Iterative deep learning for image set based face and object recognition. 2016, 174, 866-874	50
926	Data Center Energy Consumption Modeling: A Survey. 2016 , 18, 732-794	414
925	Recognition of geochemical anomalies using a deep autoencoder network. 2016 , 86, 75-82	113
924	Fine-tuning Deep Belief Networks using Harmony Search. 2016 , 46, 875-885	59
923	Graph-induced restricted Boltzmann machines for document modeling. 2016 , 328, 60-75	6
922	Prediction of NOx Emissions from a Biomass Fired Combustion Process Based on Flame Radical Imaging and Deep Learning Techniques. 2016 , 188, 233-246	28
921	A tutorial on task-parameterized movement learning and retrieval. 2016 , 9, 1-29	167
920	Deep Metric Learning for Visual Tracking. 2016 , 26, 2056-2068	51

(2017-2016)

919	A deep learning framework for modeling structural features of RNA-binding protein targets. 2016 , 44, e32	152
918	Machine Learning Models and Algorithms for Big Data Classification. 2016 ,	95
917	A Comparison of Algorithms for Learning Hidden Variables in Bayesian Factor Graphs in Reduced Normal Form. 2016 , 27, 2242-2255	5
916	Automatic Sleep Stage Scoring Using Time-Frequency Analysis and Stacked Sparse Autoencoders. 2016 , 44, 1587-97	153
915	Building feature space of extreme learning machine with sparse denoising stacked-autoencoder. 2016 , 174, 60-71	33
914	3D object understanding with 3D Convolutional Neural Networks. 2016 , 366, 188-201	35
913	Deep extreme learning machines: supervised autoencoding architecture for classification. 2016 , 174, 42-49	79
912	Multi-manifold Sparse Graph Embedding for Multi-modal Image Classification. 2016 , 173, 501-510	24
911	The minority report: some common assumptions to reconsider in the modelling of the brain and behaviour. 2016 , 28, 751-776	15
910	Model complexities of shallow networks representing highly varying functions. 2016 , 171, 598-604	22
909	Transfer learning for short-term wind speed prediction with deep neural networks. 2016 , 85, 83-95	256
908	One Shot Detection with Laplacian Object and Fast Matrix Cosine Similarity. 2016 , 38, 546-62	23
907	A multimodal feature learning approach for sentiment analysis of social network multimedia. 2016 , 75, 2507-2525	42
906	Efficient and robust deep learning with Correntropy-induced loss function. 2016 , 27, 1019-1031	50
905	HSR: L 1/2-regularized sparse representation for fast face recognition using hierarchical feature selection. 2016 , 27, 305-320	4
904	Coupled Deep Autoencoder for Single Image Super-Resolution. 2017 , 47, 27-37	124
903	. 2017 , 8, 3-14	71
902	Deep Direct Reinforcement Learning for Financial Signal Representation and Trading. 2017 , 28, 653-664	248

901	Three-dimensional image-based human pose recovery with hypergraph regularized autoencoders. 2017 , 76, 10919-10937	2
900	Hybrid Network Model for "Deep Learning" of Chemical Data: Application to Antimicrobial Peptides. 2017 , 36, 1600011	31
899	A Hierarchical Fused Fuzzy Deep Neural Network for Data Classification. 2017 , 25, 1006-1012	182
898	Improving the performance of pedestrian detectors using convolutional learning. 2017, 61, 641-649	22
897	Encrypted image classification based on multilayer extreme learning machine. 2017, 28, 851-865	19
896	Artificial neural networks and their potentialities in analyzing budget health data: an application for Italy of what-if theory. 2017 , 51, 1261-1276	2
895	Multimodal deep learning for solar radio burst classification. 2017 , 61, 573-582	19
894	S1 and S2 Heart Sound Recognition Using Deep Neural Networks. 2017 , 64, 372-380	90
893	Personalization and Context-awareness in Social Local Search: State-of-the-art and Future Research Challenges. 2017 , 38, 446-473	19
892	Face Verification via Class Sparsity Based Supervised Encoding. 2017 , 39, 1273-1280	35
891	Explicit guiding auto-encoders for learning meaningful representation. 2017 , 28, 429-436	10
890	Learning Invariant Features Using Subspace Restricted Boltzmann Machine. 2017 , 45, 173-182	11
889	Denoising deep extreme learning machine for sparse representation. 2017 , 9, 199-212	13
888	An intelligent cloud-based data processing broker for mobile e-health multimedia applications. 2017 , 66, 71-86	30
887	Stain Normalization using Sparse AutoEncoders (StaNoSA): Application to digital pathology. 2017 , 57, 50-61	101
886	Stacked Convolutional Denoising Auto-Encoders for Feature Representation. 2017 , 47, 1017-1027	254
885	Deep Neural Network for Structural Prediction and Lane Detection in Traffic Scene. 2017 , 28, 690-703	212
884	Sparseness Analysis in the Pretraining of Deep Neural Networks. 2017 , 28, 1425-1438	41

883	AL-DDCNN: a distributed crossing semantic gap learning for person re-identification. 2017 , 29, e3766	6
882	Resolution of Singularities Introduced by Hierarchical Structure in Deep Neural Networks. 2017 , 28, 2282-229	9311
881	Towards better exploiting convolutional neural networks for remote sensing scene classification. 2017 , 61, 539-556	521
880	Data-Driven Shape Analysis and Processing. 2017 , 36, 101-132	25
879	Visually Grounded Meaning Representations. 2017 , 39, 2284-2297	14
878	Deep Learning with Dynamic Spiking Neurons and Fixed Feedback Weights. 2017 , 29, 578-602	29
877	Quantum Robotics: A Primer on Current Science and Future Perspectives. 2017 , 6, 1-149	4
876	Detection and Labeling of Vertebrae in MR Images Using Deep Learning with Clinical Annotations as Training Data. 2017 , 30, 406-412	57
875	. 2017 , 24, 259-263	137
874	Diversity Regularized Latent Semantic Match for Hashing. 2017 , 230, 77-87	3
873	A new automated spectral feature extraction method and its application in spectral classification and defective spectra recovery. 2017 , 465, 4311-4324	23
872	Diagnosis of Focal Liver Diseases Based on Deep Learning Technique for Ultrasound Images. 2017 , 42, 3127-3140	45
871	A historical survey of algorithms and hardware architectures for neural-inspired and neuromorphic computing applications. 2017 , 19, 49-64	29
870	Deep learning and mapping based ternary change detection for information unbalanced images. 2017 , 66, 213-228	29
869	Progressive Shape-Distribution-Encoder for Learning 3D Shape Representation. 2017 , 26, 1231-1242	11
868	Using deep learning to investigate the neuroimaging correlates of psychiatric and neurological disorders: Methods and applications. 2017 , 74, 58-75	305
867	Dimension of Marginals of Kronecker Product Models. 2017 , 1, 126-151	1
866	Group sparse autoencoder. 2017 , 60, 64-74	33

865	Empirical Mode Decomposition based ensemble deep learning for load demand time series forecasting. 2017 , 54, 246-255	245
864	Enhancing deep learning sentiment analysis with ensemble techniques in social applications. 2017 , 77, 236-246	267
863	Visualization of Driving Behavior Based on Hidden Feature Extraction by Using Deep Learning. 2017 , 18, 2477-2489	79
862	Exploiting geometrical structures using Autoencoders and click data for image re-ranking. 2017 , 235, 157-163	1
861	Situating Machine Intelligence Within the Cognitive Ecology of the Internet. 2017 , 27, 357-380	7
860	A methodology based on Deep Learning for advert value calculation in CPM, CPC and CPA networks. 2017 , 21, 651-665	14
859	Automatic segmentation of the right ventricle from cardiac MRI using a learning-based approach. 2017 , 78, 2439-2448	80
858	Discriminative locally document embedding: Learning a smooth affine map by approximation of the probabilistic generative structure of subspace. 2017 , 121, 41-57	4
857	A classification method for moving targets in the wild based on microphone array and linear sparse auto-encoder. 2017 , 241, 28-37	5
856	Learning 3D faces from 2D images via Stacked Contractive Autoencoder. 2017 , 257, 67-78	23
855	Precipitation Identification with Bispectral Satellite Information Using Deep Learning Approaches. 2017 , 18, 1271-1283	37
854	Event Classification in Microblogs via Social Tracking. 2017 , 8, 1-14	17
853	Discussion of D eep learning for finance: deep portfolios 2017 , 33, 16-18	7
852	Extreme Value Theory-Based Methods for Visual Recognition. 2017 , 7, 1-131	2
851	The cascading neural network: building the Internet of Smart Things. 2017 , 52, 791-814	25
850	A texture-Based Video Processing Methodology Using Bayesian Data Fusion for Autonomous Crack Detection on Metallic Surfaces. 2017 , 32, 271-287	77
849	Low-power image recognition challenge. 2017,	18
848	Towards acceleration of deep convolutional neural networks using stochastic computing. 2017,	31

(2017-2017)

847	Convolutional neural network approach for enhanced capture of breast parenchymal complexity patterns associated with breast cancer risk. 2017 ,	1
846	Deep learning architecture for iris recognition based on optimal Gabor filters and deep belief network. 2017 , 26, 023005	23
845	Temporal city modeling using street level imagery. 2017 , 157, 55-71	2
844	Environmental Sensors-Based Occupancy Estimation in Buildings via IHMM-MLR. 2017 , 13, 2184-2193	24
843	Hierarchical semi-Markov conditional random fields for deep recursive sequential data. 2017 , 246, 53-85	2
842	3D shape recognition and retrieval based on multi-modality deep learning. 2017 , 259, 183-193	29
841	Cell segmentation in histopathological images with deep learning algorithms by utilizing spatial relationships. 2017 , 55, 1829-1848	41
840	Automated detection of coarctation of aorta in neonates from two-dimensional echocardiograms. 2017 , 4, 014502	14
839	DEFIne. 2017 ,	0
838	A comparative study on phenomenon and deep belief network models for hot deformation behavior of an Alৰ্থিnMgtu alloy. 2017 , 123, 1	38
837	Deep Hashing for Scalable Image Search. 2017 , 26, 2352-2367	79
836	An Introduction to Neural Networks and Deep Learning. 2017 , 3-24	15
835	An Introduction to Deep Convolutional Neural Nets for Computer Vision. 2017 , 25-52	12
834	Learning network representations. 2017 , 226, 499-518	15
833	Efficient 3D morphable face model fitting. 2017 , 67, 366-379	23
832	Deep Learning for Hot Topic Extraction from Social Streams. 2017 , 186-197	1
831	Deep Pain: Exploiting Long Short-Term Memory Networks for Facial Expression Classification. 2017,	111
830	Energy-Efficient and Improved Image Recognition with Conditional Deep Learning. 2017 , 13, 1-21	17

829	Passenger flow estimation based on convolutional neural network in public transportation system. 2017 , 123, 102-115	37
828	Representation Learning with Pair-wise Constraints for Collaborative Ranking. 2017,	11
827	DeepCpG: accurate prediction of single-cell DNA methylation states using deep learning. 2017, 18, 67	226
826	Deep learning: an overview and main paradigms. 2017 , 26, 1-17	21
825	A Deep Learning Network for Exploiting Positional Information in Nucleosome Related Sequences. 2017 , 524-533	6
824	A Hierarchical Predictive Coding Model of Object Recognition in Natural Images. 2017 , 9, 151-167	32
823	Effective sparsity control in deep belief networks using normal regularization term. 2017, 53, 533-550	4
822	Improving tuberculosis diagnostics using deep learning and mobile health technologies among resource-poor communities in Per[1 2017 , 1-2, 66-76	19
821	Joint noise and mask aware training for DNN-based speech enhancement with SUB-band features. 2017 ,	9
820	Single Image Super-Resolution Reconstruction Based on Edge-Preserving with External and Internal Gradient Prior Knowledge. 2017 , 191-205	3
819	LexToMap: lexical-based topological mapping. 2017 , 31, 268-281	6
818	A De-Identification Pipeline for Ultrasound Medical Images in DICOM Format. 2017 , 41, 89	11
817	Automatic feature learning using multichannel ROI based on deep structured algorithms for computerized lung cancer diagnosis. 2017 , 89, 530-539	104
816	Deep learning analytics for diagnostic support of breast cancer disease management. 2017,	5
815	Deep Learning in Mammography: Diagnostic Accuracy of a Multipurpose Image Analysis Software in the Detection of Breast Cancer. 2017 , 52, 434-440	201
814	Accelerating Convolutional Neural Networks Using Fine-Tuned Backpropagation Progress. 2017 , 256-266	1
813	Accurate and reproducible invasive breast cancer detection in whole-slide images: A Deep Learning approach for quantifying tumor extent. 2017 , 7, 46450	233
812	Cost-sensitive sequential three-way decision modeling using a deep neural network. 2017 , 85, 68-78	135

(2017-2017)

811	Superpixel-Based Multiple Local CNN for Panchromatic and Multispectral Image Classification. 2017 , 55, 4141-4156	81
810	Real time coarse orientation detection in MR scans using multi-planar deep convolutional neural networks. 2017 ,	
809	Multispectral signal processing of synthetic aperture acoustics for side attack explosive ballistic detection. 2017 ,	
808	Multimodal Deep Learning Approach for Joint EEG-EMG Data Compression and Classification. 2017,	13
807	Parallel Sparse Subspace Clustering via Joint Sample and Parameter Blockwise Partition. 2017 , 16, 1-17	2
806	Post-stroke discharge disposition prediction using deep learning. 2017,	3
805	Learning features for offline handwritten signature verification using deep convolutional neural networks. 2017 , 70, 163-176	142
804	Deep learning over diurnal and other environmental effects. 2017,	
803	Deep learning for SAR image formation. 2017 ,	2
802	Scene Categorization Through Using Objects Represented by Deep Features. 2017, 31, 1755013	10
801	Echo State Property of Deep Reservoir Computing Networks. 2017 , 9, 337-350	54
800	A hybrid system for forecasting 24-h power load profile for Polish electric grid. 2017 , 58, 527-539	16
799	A Novel Deep Neural Network that Uses Space-Time Features for Tracking and Recognizing a Moving Object. 2017 , 7, 125-136	37
798	Distance measures in author profiling. 2017 , 53, 1103-1119	32
797	Denoising Autoencoder as an Effective Dimensionality Reduction and Clustering of Text Data. 2017 , 801-813	7
796	Deep reservoir computing: A critical experimental analysis. 2017 , 268, 87-99	147
795	On the Evaluation of Energy-Efficient Deep Learning Using Stacked Autoencoders on Mobile GPUs. 2017 ,	2
794	Dynamic Delay Predictions for Large-Scale Railway Networks: Deep and Shallow Extreme Learning Machines Tuned via Thresholdout. 2017 , 47, 2754-2767	44

793	. 2017 , 19, 2463-2474	34
792	A Deep Learning Based Artificial Neural Network Approach for Intrusion Detection. 2017, 44-53	54
791	Probabilistic lower bounds for approximation by shallow perceptron networks. 2017 , 91, 34-41	23
790	Data Fusion and IoT for Smart Ubiquitous Environments: A Survey. 2017 , 5, 9533-9554	214
789	GPU-Accelerated Parallel Hierarchical Extreme Learning Machine on Flink for Big Data. 2017, 47, 2740-2753	62
788	Pareto-optimal multi-objective dimensionality reduction deep auto-encoder for mammography classification. 2017 , 145, 85-93	20
787	Modulation classification for cognitive radios using stacked denoising autoencoders. 2017, 35, 517-531	7
786	A method for regularization of evolutionary polynomial regression. 2017 , 59, 223-228	8
7 ⁸ 5	. 2017 , 55, 5274-5283	38
784	Deep Restricted Kernel Machines Using Conjugate Feature Duality. 2017 , 29, 2123-2163	21
783	Two-Stage Single-Channel Audio Source Separation Using Deep Neural Networks. 2017 , 25, 1773-1783	22
782	. 2017 , 64, 9549-9559	33
781	A survey of neural network accelerators. 2017 , 11, 746-761	17
780	Estimating 3D trajectories from 2D projections via disjunctive factored four-way conditional restricted Boltzmann machines. 2017 , 69, 325-335	8
779	Deep Models for Engagement Assessment With Scarce Label Information. 2017, 47, 598-605	13
778	Deep learning for biological image classification. 2017 , 85, 114-122	102
777	Machine Learning of Mineralization-Related Geochemical Anomalies: A Review of Potential Methods. 2017 , 26, 457-464	90
776	Quality assessment of building footprint data using a deep autoencoder network. 2017 , 31, 1929-1951	29

775	Multilayer sensor network for information privacy. 2017 ,	9
774	. 2017,	4
773	Deep greedy learning under thermal variability in full diurnal cycles. 2017 , 56, 081809	О
772	Deep neural mapping support vector machines. 2017 , 93, 185-194	18
771	Training data reduction in deep neural networks with partial mutual information based feature selection and correlation matching based active learning. 2017 ,	6
770	Non-blind image deconvolution using deep dual-pathway rectifier neural network. 2017,	1
769	Discriminative Deep Metric Learning for Face and Kinship Verification. 2017 , 26, 4269-4282	156
768	Seismic Lithofacies Computation Method Based on Deep Learning. 2017,	1
767	A learned sparseness and IGMRF-based regularization framework for dense disparity estimation using unsupervised feature learning. 2017 , 9,	5
766	Towards the Revival of Interpretable QSAR Models. 2017 , 3-55	10
765	Simultaneous extraction of roads and buildings in remote sensing imagery with convolutional neural networks. 2017 , 130, 139-149	221
764	Deep Convolutional Neural Networks for Image Classification: A Comprehensive Review. 2017 , 29, 2352-2449	1215
763	Real-Time Detection of Cyber-Physical Attacks on Water Distribution Systems Using Deep Learning. 2017 ,	8
762	State-of-the-Art Deep Learning: Evolving Machine Intelligence Toward Tomorrow Intelligent Network Traffic Control Systems. 2017 , 19, 2432-2455	459
761	A MRT Daily Passenger Flow Prediction Model with Different Combinations of Influential Factors. 2017 ,	5
760	Deep belief echo-state network and its application to time series prediction. 2017 , 130, 17-29	56
759	Neighborhood-Based Stopping Criterion for Contrastive Divergence. 2018 , 29, 2695-2704	4
758	Deep learning algorithms for discriminant autoencoding. 2017 , 266, 325-335	16

757	Stacked Multilevel-Denoising Autoencoders: A New Representation Learning Approach for Wind Turbine Gearbox Fault Diagnosis. 2017 , 66, 2391-2402	165
756	Robust Large Margin Deep Neural Networks. 2017 , 65, 4265-4280	48
755	A multi-scale deep quad tree based feature extraction method for the recognition of isolated handwritten characters of popular indic scripts. 2017 , 71, 78-93	57
754	Deep Belief Networks Ensemble for Blood Pressure Estimation. 2017 , 5, 9962-9972	22
753	A multi-pattern deep fusion model for short-term bus passenger flow forecasting. 2017 , 58, 669-680	57
75 ²	Comparing compositional multivariate outliers with autoencoder networks in anomaly detection at Hamich exploration area, east of Iran. 2017 , 180, 15-23	21
751	A Big Data Analysis Approach for Rail Failure Risk Assessment. 2017 , 37, 1495-1507	57
750	A new item-based deep network structure using a restricted Boltzmann machine for collaborative filtering. 2017 , 18, 658-666	10
749	Facial recognition using histogram of gradients and support vector machines. 2017,	10
748	Predicting protein-protein interactions from protein sequences by a stacked sparse autoencoder deep neural network. 2017 , 13, 1336-1344	86
747	Classifying Radio Galaxies with the Convolutional Neural Network. 2017 , 230, 20	68
746	A deep learning ensemble approach for crude oil price forecasting. 2017 , 66, 9-16	165
745	Object-Based Convolutional Neural Network for High-Resolution Imagery Classification. 2017 , 10, 3386-3396	132
744	Cognitive Applications and Their Supporting Architecture for Smart Cities. 2017, 167-185	1
743	Deep Learning for Human Activity Recognition. 2017 , 186-204	10
742	Generative classification model for categorical data based on latent Gaussian process. 2017 , 92, 56-61	3
741	Deep SOMs for automated feature extraction and classification from big data streaming. 2017,	2
740	Deep neural networks-based rolling bearing fault diagnosis. 2017 , 75, 327-333	135

739	A Study on the Virtuous Circle Self-Learning Methods for Knowledge Enhancement. 2017,	
738	Applying a deep learning based CAD scheme to segment and quantify visceral and subcutaneous fat areas from CT images. 2017 ,	
737	Grounding the Meaning of Words with Visual Attributes. 2017, 331-362	1
736	Deep Learning for Quality Assessment in Live Video Streaming. 2017 , 24, 736-740	34
735	Transformer Fault Diagnosis Using Restricted Boltzmann Machines. 2017,	
734	Lighting-aware face frontalization for unconstrained face recognition. 2017 , 68, 260-271	16
733	Imitation Learning. 2017 , 50, 1-35	193
732	Comparison of Auto-CM to Various Other Data Understanding Approaches. 2018, 121-146	
731	Kognitive Systeme und Robotik. 2018 , 239-260	1
730	Data Reconstruction Based on Supervised Deep Auto-Encoder. 2018 , 869-879	O
729	Square Neurons, Power Neurons, and Their Learning Algorithms. 2018, 08, 296-313	
728	Supervised and Unsupervised Neural Networks: Experimental Study for Anomaly Detection in Electrical Consumption. 2018 , 98-109	1
727	Enhancing Human Decision Making for Workforce Optimisation Using a Stacked Auto Encoder Based Hybrid Genetic Algorithm. 2018 , 63-75	
726	RETRACTED CHAPTER: Cryptocurrencies. 2018 , 249-261	
725	Deep Self-Taught Learning for Detecting Drug Abuse Risk Behavior in Tweets. 2018 , 330-342	8
724	Conclusion. 2018 , 185-187	
723	An Overview of Different Neural Network Architectures. 2018, 175-183	0
722	Deep Neural Network Based Recognition and Classification of Bengali Phonemes: A Case Study of Bengali Unconstrained Speech. 2018 , 750-760	1

721	Auto-CM as a Dynamic Associative Memory. 2018 , 147-179
720	Adaptive Intrusion Recognition for Ultraweak FBG Signals of Perimeter Monitoring Based on Convolutional Neural Networks. 2018 , 359-369
719	Deep Learning Neural Networks as a Model of Saccadic Generation.
718	. 2018 , 107, 19-23
717	Intelligent Speech Features Mining for Robust Synthesis System Evaluation. 2018, 3-18
716	New Default Box Strategy of SSD for Small Target Detection. 2018 , 416-425
715	Study on Data Anonymization for Deep Learning. 2018 , 762-767
7 ¹ 4	An Insight Into Deep Learning Architectures. 2018 , 4528-4534
713	HAVAE: Learning Prosodic-Enhanced Representations of Rap Lyrics. 2018 , 1-15
712	Completeness Problem of the Deep Neural Networks. 2018 , 08, 184-196
711	Deep Auto-Encoder Based on Supervised Learning for Damaged Face Reconstruction. 2018 , 290-299
710	Advances, the K-Contractive Map: A Supervised Version of Auto-CM. 2018 , 105-119
709	Adaptive Structural Learning Method of Recurrent Deep Belief Network for Time Series Analysis. 2018 , 54, 628-639
708	Using the Encoder Embedded Framework of Dimensionality Reduction Based on Multiple Drugs Properties for Drug Recommendation. 2018 , 258-266
707	Automatic Cloud Detection Based on Deep Learning from AVHRR Data. 2018, 127-138
706	A Deep Clustering Algorithm Based on Self-organizing Map Neural Network. 2018 , 182-192
705	A deep (learning) dive into visual search behaviour of breast radiologists. 2018,
704	DECODER: A probabilistic approach to integrate big data reveals mitochondrial Complex I as a potential therapeutic target for Alzheimer disease.

703	Speaker emotion recognition: from classical classifiers to deep neural networks. 2018,	
702	Semi-supervised Encoding for Outlier Detection in Clinical Observation Data.	1
701	Through Wall Human Being Detection Based on Stacked Denoising Auto-encoder Algorithm. 2019 , 2205-2212	
700	Time-Dependent Reliability Analysis in Operation: Prognostics and Health Management. 2019 , 233-301	2
699	Identification of Abnormal Weather Radar Echo Images Based on Stacked Auto-Encoders. 2019 , 2305-2312	
698	Convolutional Neural Networks for the Identification of Filaments from Fast Visual Imaging Cameras in Tokamak Reactors. 2019 , 167-177	
697	A New Triaxial Apparatus Imposing Nonuniform Shearing for Deep Learning of Soil Behavior. 2019 , 42, 20170331	
696	KlanmBoltzmann Makinesi Ve FarklBēlandēlarla Oluturulan Sēlandēma IHatlarēlē Balīrēnēlē Delīrlendirilmesi. 2018 , 11,	1
695	Intelligent Identifications and Filtering of Unconventional Images Based on Deep Neural Networks. 2018 , 15, 55-68	
694	The Multiple Classification Method of Signal Recognition for Spacecraft Based on SAE Network. 2019 , 679-689	
693	Autoencoder and Optimal Transport to Infer Single-Cell Trajectories of Biological Processes.	3
692	Research on Visual Speech Recognition Based on Local Binary Pattern and Stacked Sparse Autoencoder. 2019 , 1082-1087	2
691	Hindi Speech Synthesis Using Paralinguistic Content Expression. 2019 , 91-105	
690	Design of CNN with MLP Layer. 2018 , 20, 776-782	
689	Hyper-parameter Analysis of the Improved Deep Embedding Clustering Model. 2018,	O
688	Seismic Lithofacies Computation Method Based on Deep Learning. 2018,	2
687	Machine Learning in Wireless Communication. 2019 , 141-161	1
686	Deep Learning. 2019 , 717-736	

Deeply Coupled Graph Structured Autoencoder for Domain Adaptation. 2019, 685 The Semaphore Identification and Fault Troubleshooting Modus for Spacecraft Originating from 684 Deep Learning and RF Method. 2019, 208-219 Pattern Matching in Sequential Data Using Reservoir Projections. 2019, 173-183 683 Deep Learning: New Engine for the Study of Material Microstructures and Physical Properties. 2019 682 , 09, 263-276 Big Data, Real-World Data, and Machine Learning. 2019, 167-195 681 Safety and Robustness of Deep Neural Networks Object Recognition Under Generic Attacks. 2019, 274-286 680 6 An Insight Into Deep Learning Architectures. 2019, 295-302 679 678 Application of Artificial Intelligence on the Image Identification of Icing Weather Phenomena. 2019, 559-569 o Research on Pipeline Fault Diagnosis Technology Based on Automatic Encoder. 2019, 327-339 677 Encyclopedia of Big Data Technologies. 2019, 648-648 676 Compressed Sensing and Dictionary Learning. 2019, 525-547 675 1 Neural Ordinary Differential Equations with Envolutionary Weights. 2019, 598-610 674 Integrating Deep Learning and Bayesian Reasoning. 2019, 119-130 673 Cognitive Business: A New Frontier of Business Revolution and E-Business Research. 2019, 08, 86-105 Document Representation for Text Analytics in Finance. 2019, 131-145 671 Implantable Device Positioning based on Magnetic Field Detection using Genetic Algorithm in Body 670 Area Biosensor Networks. 2019, 13, 11-20 669 Face pose estimation with ensemble multi-scale representations. 2019, 668 Option Pricing With Machine Learning.

667	On Handling Missing Values in Data Stream Mining Algorithms Based on the Restricted Boltzmann Machine. 2019 , 347-354	2
666	On the Bounds of Function Approximations. 2019 , 401-417	1
665	Boltzmann Machines. 2019 , 699-715	
664	Machine Learning in Biomedical Informatics. 2019 , 389-399	
663	An efficient test method for noise robustness of deep neural networks. 2019 , 10, 221-235	
662	Applications of Artificial Intelligence in the Realm of Business Intelligence. 2019 , 1-38	
661	Deep Embedding Sentiment Analysis on Product Reviews Using Naive Bayesian Classifier. 2019 , 858-864	
660	A Preliminary Approach to Using PRNU Based Transfer Learning for Camera Identification. 2020 , 246-255	1
659	Fusion of underwater object classification methods in sonar images. 2019,	1
658	Adapted deep convnets technology for robust iris recognition. 2019 , 28, 1	1
657	Convergence analysis of the CNN algorithm in target recognition using SAR images. 2019,	1
656	Predicting the Prognosis of Non-Small Cell Lung Cancer by Integrating Microarray and Clinical Data with Deep Learning.	О
655	Video Classification Using Deep Autoencoder Network. 2020 , 508-518	
654	Derin Benme Modelleri ve Uygulama Alanlarfia 🕅 lin Bir Derleme. 2019 , 10, 409-445	4
653	Performance comparison of various deep neural network architectures using Merlin toolkit for a Korean TTS system*. 2019 , 11, 57-64	
652	Accurate detection of non-proliferative diabetic retinopathy in optical coherence tomography images using convolutional neural networks.	
651	Key Constraint Variable Identification, Transient Stability Assessment and Feasible Region Generation of Power Grid Operation Based on Machine Learning Method. 2020 , 603-612	О
650	Training Encrypted Models with Privacy-preserved Data on Blockchain. 2019,	O

649	A Novel Hybrid Model of Wind Speed Forecasting Based on EWT, BiLSTM, SVR Optimized by BOA in Inner Mongolia, China. 2020 , 183-191	1
648	The Convolution Neural Network Combined with the HT Person Fit Statistic to Develop an APP for Detecting Dengue Fever in Children: Development and Usability Study (Preprint).	
647	Tool to Integrate Optimized Hardware and Extensive Software into Its Database to Endure Big Data Challenges. 2019 , 272-279	2
646	The Image Classification of Workstation Instructions Using Convolutional Neural Networks. 2020 , 300-309	
645	Remote Sensing Classification Under Deep Learning: A Review. 2020 , 813-823	
644	Deep learning for detecting Android malwares. 2019,	
643	An App for Detecting Bullying of Nurses Using Convolutional Neural Networks and Web-Based Computerized Adaptive Testing: Development and Usability Study (Preprint).	О
642	An App Developed for Detecting Nurse Burnouts Using the Convolutional Neural Networks in Microsoft Excel: Population-Based Questionnaire Study (Preprint).	
641	Heartbeat Classification Using 1D Convolutional Neural Networks. 2020 , 502-511	3
640	Recommendation System Based on Deep Learning. 2020 , 535-543	1
639	Misfire Detection of Automotive Engines with Convolutional Neural Network. 2020 , 121-131	2
638	Application of Deep Architecture in Bioinformatics. 2020 , 167-186	
637	Categorized Representations and General Learning. 2020 , 93-100	3
636	A Comprehensive Study on Deep Image Classification with Small Datasets. 2020 , 93-106	3
635	Urbanised Real-time Parking Detection System using Deep Learning. 2019,	1
634	YĪ TANIMA SĒTEMLERNDE DORULUK PERFORMANSLARININ DEĒRLENDRŪMES□ 2019 , 7, 835-842	1
633	Classifiers ensemble of transfer learning for improved drill wear classification using convolutional neural network. 2019 , 28, 13-23	6
632	Data augmentation techniques for transfer learning improvement in drill wear classification using convolutional neural network. 2019 , 28, 3-12	6

(2020-2019)

631	Performance Analysis of Deep Autoencoder and NCA Dimensionality Reduction Techniques with KNN, ENN and SVM Classifiers. 2019 ,	2
630	Predicting Breast Cancer in Chinese Women Using Machine Learning Techniques: Algorithm Development (Preprint).	
629	Some Families of FSP Functions and Their Properties. 2020 , 89-150	
628	Representation Learning Techniques: An Overview. 2020 , 89-104	О
627	Face Recognition with Explanation by Fuzzy Rules and Linguistic Description. 2020, 338-350	2
626	A deep learning unsupervised approach for fault diagnosis of household appliances. 2020 , 53, 10749-10754	1
625	Large-Scale Graph Processing Systems. 2020 , 59-93	
624	Deep Learning Models with Applications to Brain Image Analysis. 2020 , 433-462	
623	Conclusion. 2020 , 251-253	
622	Exploring Blockchain in Speech Recognition. 2020 , 211-220	
621	Advanced Models for Stylometric Applications. 2020 , 153-187	
620	Introduction to Stylistic Models and Applications. 2020 , 3-17	
619	Conclusions and Outlook. 2020 , 127-133	
618	An Improved Adversarial Neural Network Encryption Algorithm Against the Chosen-Cipher Text Attack (CCA). 2020 , 1336-1343	
617	A Comparative Study on Machine Learning Techniques for Intense Convective Rainfall Events Forecasting. 2020 , 305-317	2
616	Artificial Intelligence Aided Electronic Warfare Systems- Recent Trends and Evolving Applications. 2020 , 8, 224761-224780	8
615	A Journey From Neural Networks to Deep Networks. 2020 , 31-62	
614	A Holistic and Local Feature Learning Method for Machine Health Monitoring with Convolutional Bi-directional LSTM Networks. 2020 , 382-388	1

613	The Application of Deep Learning in Automated Essay Evaluation. 2020 , 310-318	
612	IDC Breast Cancer Detection Using Deep Learning Schemes. 2020 , 12, 2041002	2
611	Identifying Explosive Epidemiological Cases with Unsupervised Machine Learning.	
610	CUE: CpG impUtation Ensemble for DNA Methylation Levels Across the Human Methylation450 (HM450) and EPIC (HM850) BeadChip Platforms.	
609	Recognition recipes with deep machine learning. 2020 , 177-186	
608	Associations Between Substance Use and Instagram Participation to Inform Social Network B ased Screening Models: Multimodal Cross-Sectional Study (Preprint).	
607	The Study of Defects Auto-Classification System in Semiconductor Manufacturing. 2020,	1
606	Intrusion Detection System Using Deep Learning and Its Application to Wi-Fi Network. 2020 , E103.D, 1433-1447	2
605	Features Reweighting and Selection in ligand-based Virtual Screening for Molecular Similarity Searching Based on Deep Belief Networks. 2020 , 12, 2050009	1
604	Retrieval of Videos of Flowers Using Deep Features. 2021 , 605-614	
603	On Unsupervised Categorization in Deep Autoencoder Models. 2021 , 255-265	
602	Fine-Grained Sentiment Rating of Online Reviews with Deep-RNN. 2021, 687-700	1
601	Combining texture analysis and deep learning in renal tumour classification task. 2020,	
600	Predicting a live birth by artificial intelligence incorporating both the blastocyst image and conventional embryo evaluation parameters. 2020 , 1, 87-93	
599	A video inpainting method for unmanned vehicle based on fusion of time series optical flow information and spatial information. 2021 , 18, 172988142110531	
598	Development of Deep Learning Neural Network for Estimating Pile Bearing Capacity. 2022 , 1815-1823	
597	Parallel training models of deep belief network using MapReduce for the classifications of emotions. 1	0
596	Improved Environment-Aware-Based Noise Reduction System for Cochlear Implant Users Based on a Knowledge Transfer Approach: Development and Usability Study. 2021 , 23, e25460	

595	Analytics and Big Data in the Health Domain. 2022, 73-102	1
594	A semantic parsing pipeline for context-dependent question answering over temporally structured data. 1-25	
593	A Hybrid Modeling Method Based on Linear AR and Nonlinear DBN-AR Model for Time Series Forecasting. 1	3
592	Speech Paralinguistic Approach for Detecting Dementia Using Gated Convolutional Neural Network. 2021 , E104.D, 1930-1940	1
591	Object Detection and Voice Guidance for the Visually Impaired Using a Smart App. 2022 , 133-144	О
590	Hand Gesture Recognition Based on Saliency and Foveation Features Using Convolutional Neural Network. 2020 , 753-761	
589	Elena Ferrante: A Case Study in Authorship Attribution. 2020 , 191-210	1
588	A Shallow Introduction to Deep Neural Networks. 2020 , 35-63	0
587	Improved Collaborative Filtering Algorithm Based on Stacked Denoising AutoEncoders. 2020, 165-176	
586	Cardiac Arrhythmia Detection in an ECG Beat Signal Using 1D Convolution Neural Network. 2020,	0
585	Cost-Sensitive Deep Learning with Layer-Wise Cost Estimation. 2020,	
584	Deep Learning Opportunities for Resource Management in Cognitive Radio Networks. 2022 , 189-207	
583	State Action Separable Reinforcement Learning. 2020,	
582	Introduction to IoT With Swarm Intelligence. 2020 , 21-39	
581	DATA AUGMENTATION FOR A LEARNING-BASED VEHICLE MAKE-MODEL AND LICENSE PLATE MATCHING SYSTEM. 331-339	О
580	. 2020,	1
579	Data Management and Mining Technologies to Manage and Analyze Data in IoT. 2020, 165-187	
578	Swarm Intelligence for Data Management and Mining Technologies to Manage and Analyze Data in IoT. 2020 , 189-205	

577	DeepQuake IAn application of CNN for seismo-acoustic event classification in The Netherlands.
576	Siamese Network for Single Image Rain Removal. 2020 ,
575	Implementing Vertical Federated Learning Using Autoencoders: Practical Application, Generalizability, and Utility Study (Preprint).
574	Using Capsule Networks for Android Malware Detection Through Orientation-Based Features. 2022 , 70, 5345-5362
573	A Survey of Big Data Analytics Using Machine Learning Algorithms. 2022 , 655-677
572	A Survey on Deep Learning for Human Activity Recognition. 2022 , 54, 1-34
57 ¹	Distance-Based Approaches. 2020 , 33-51
57°	On a Streaming Approach for Training Denoising Auto-encoders. 2020 , 315-324
569	Artificial Neural Network What-If Theory. 2020 , 1-29
568	An Early Rico Retrospective: Three Years of Uses for a Mobile App Dataset. 2021 , 229-256
567	Prediction of dissolved gas concentration in power transformer oil based on the multivariate ReLu deep belief networks model. 2019 , 493-501
566	Regression. 2020 , 69-87
565	Regularization Methods in Deep Learning. 2020 , 10, 1224-1233
564	More Intelligence and Less Clouds in Our Smart Homes. 2020 , 123-136
563	Large-Scale Machine/Deep Learning Frameworks. 2020 , 117-126
562	Large-Scale Stream Processing Systems. 2020, 95-115
561	General-Purpose Big Data Processing Systems. 2020 , 17-43
560	Optimal Deep Neural Networks by Maximization of the Approximation Power. 1

559 RECOGNITION.. 2020, 9, 179-189 Applications to Political Speeches. 2020, 229-249 558 Improved Classification Based on Deep Belief Networks. 2020, 541-552 557 1 Primary Emotions and Recognition of Their Intensities. 556 HAVA KALĪĪESĪPARAMETRELERĪNĪN TAHMĪNĪVE MEKANSAL DAĪLIMI ĪN MAKĪNE BENMESĪ 555 1 YNTEMLERNN KULLANILMASI. Deep Learning in Engineering Education. 2020, 187-218 554 Spam Detection on Social Media Using Semantic Convolutional Neural Network. 2020, 704-719 1 553 A Network Intrusion Detection Approach Based on Asymmetric Convolutional Autoencoder. 2020, 126-140 552 Learning Algorithms for Emergency Management. 2020, 31-74 551 Features Identification and Selection. 2020, 83-108 550 Neuro-Symbolic Artificial Intelligence: Application for Control the Quality of Product Labeling. 2020 549 ,81-101 Stereoscopic Image Quality Assessment Based on Human Visual System Properties. 2020, 97-133 548 A Novel Location Privacy Protection Scheme with Generative Adversarial Network. 2020, 17-27 547 O Hyperspectral Multispectral Image Fusion Enhancement Based on Deep Learning. 2020, 407-433 546 Large-Scale Processing Systems of Structured Data. 2020, 45-58 545 An App for Classifying Personal Mental Illness at Workplace Using Fit Statistics and Convolutional 544 Neural Networks: Survey-Based Quantitative Study (Preprint). Classifying inpatient perception of hospitalization experience across the US 50 states using the 543 convolutional neural networks. Artificial Intelligence Based Blood Pressure Estimation From Auscultatory and Oscillometric 542 Waveforms: A Methodological Review. 2020, PP,

STRUCTURE OPTIMIZATION OF DEEP BELIEF NETS IN THE APPLICATIONS OF IMAGE

541	Guided Layer-Wise Learning for Deep Models Using Side Information. 2020 , 50-61	
540	The Effect of Integration Stage on Multimodal Deep Learning in Genomic Studies. 2020 , 330-338	
539	Neural-Network-Based Feature Learning: Auto-Encoder. 2020 , 195-217	
538	Node Classification in Complex Social Graphs via Knowledge-Graph Embeddings and Convolutional Neural Network. 2020 , 183-198	2
537	Deep Learning for Hyperspectral Image Analysis, Part I: Theory and Algorithms. 2020, 37-68	1
536	Unsupervised Representation Learning Based on Generative Adversarial Networks. 2020, 65-78	
535	Limitations of Shallow Networks. 2020 , 129-154	
534	Basic Lexical Concepts and Measurements. 2020 , 19-32	
533	Classification of Actors in Social Networks Using RLVECO. 2020 , 905-922	
532	A Recognition Method of Hand Gesture Based on Dual-SDAE. 2020 , 180-192	
531	Generative Fourier-Based Auto-encoders: Preliminary Results. 2020 , 12-15	
530	Cyber Threat Prediction with Machine Learning. 2020 , 47, 203-220	
529	Evaluation Methodology and Test Corpora. 2020 , 55-81	
528	Recognition Recipes with Deep Machine Learning. 2020 , 615-622	
527	Deep K-Means: A Simple and Effective Method for Data Clustering. 2020 , 272-283	1
526	Combination of Convolutional and Recurrent Neural Networks for Heartbeat Classification. 2020 , 362-371	2
525	Deep Learning Network. 2020 , 1-30	3
524	Extending and Analyzing Self-supervised Learning Across Domains. 2020 , 717-734	7

(2020-2020)

523	Neural Networks. 2020 , 441-615	
522	Machine Learning Models. 2020 , 1-20	
521	Denoising Images with Varying Noises Using Autoencoders. 2020 , 3-14	
520	Introduction. 2020, 1-16	
519	Forecasting the Short-term Price Trend of Taiwan Stocks with Deep Neural Network. 2020,	1
518	Music and Artificial Intelligence. 2020 , 503-529	2
517	Intuition Learning. 2020 , 111-127	
516	FASTHash: FPGA-Based High Throughput Parallel Hash Table. 2020 , 3-22	1
515	Discovering Functional Brain Networks with 3D Residual Autoencoder (ResAE). 2020 , 498-507	1
514	Machine Learning Models. 2020 , 109-151	
513	Author Profiling of Tweets. 2020 , 211-227	
512	Soft-Root-Sign: A New Bounded Neural Activation Function. 2020 , 310-319	
511	Automated Machine Learning: Techniques and Frameworks. 2020 , 40-69	2
510	The Significance of the Study of the Brain's Hippocampus for the Progress of Biologically-Inspired Computational Systems. 2020 , 63-79	
509	Energy-Based Dropout in Restricted Boltzmann Machines: Why Not Go Random. 2020, 1-11	3
508	Concept Drift Detection Using Autoencoders in Data Streams Processing. 2020 , 124-133	1
507	Urban built-up areas extraction by the multiscale stacked denoising autoencoder technique. 2020 , 14, 1	
506	Real-time Transportation Prediction Correction using Reconstruction Error in Deep Learning. 2020 , 14, 1-20	О

505	Deep Learning Algorithms and Their Applications in the Perception Problem. 2020,	
504	A Generic Edge-Empowered Graph Convolutional Network via Node-Edge Mutual Enhancement. 2020 ,	O
503	An Overview Studying of Deep Learning. 2020 , 394-398	
502	Development of Automatic Classification Deep Learning System for Shine-muscat and Green-grape. 2021 , 22, 1637-1644	
501	Deep long short-term memory based model for agricultural price forecasting. 1	2
500	Classification of Variable Stars Light Curves Using Long Short Term Memory Network. 2021 , 8,	O
499	Wearable Assistance Device for the Visually Impaired. 2021 , 667-676	1
498	Node Classification and Link Prediction in Social Graphs using RLVECN. 2020,	1
497	The Recognition and Information Extraction of Grid Wiring Diagram Based on Convolutional Neural Network. 2020 ,	O
496	A Proficient Model to Classify Bangladeshi Bank Notes for Automatic Vending Machine Using a Tay Dataset with One-Shot Learning & Siamese Networks. 2020 ,	1
495	Computational Intelligence Paradigms. 15-41	
494	Automated Identification of Child Abuse in Chat Rooms by Using Data Mining. 245-274	
493	Detecting and Measuring the Exposure of Children and Adolescents to Inappropriate Comments in YouTube. 2020 ,	3
492	A Comprehensive Study of Deep Neural Networks for Unsupervised Deep Learning. 2021 , 101-126	O
491	An Overview of Deep Learning Techniques for Biometric Systems. 2021 , 127-170	2
490	Sales Forecast by Using Deep Rectifier Network. 2021 , 378-389	O
489	Use of Deep Learning Approaches in Cancer Diagnosis. 2021 , 249-267	2
488	Deep Learning Approach of Sparse Autoencoders with Lp/L2 Regularization. 2020 ,	

(2021-2020)

487	Application of Potentiometric Ion-Breakthrough to Assess Individual Diffusion Coefficients of Ions in Ion-Selective Membranes. 2020 , 167, 147506	2
486	Tactile Sketch Saliency. 2020 ,	2
485	Deep Learning for Cover Song Apperception. 2021 , 89-99	
484	Face Recognition Using Siamese Network. 2021 , 369-376	2
483	Dimensionality reduction for EEG-based sleep stage detection: comparison of autoencoders, principal component analysis and factor analysis. 2021 , 66, 125-136	1
482	Time-Series Momentum in Credit: Machine Learning Approach. 2020 , 273-296	
481	Face Recognition from Depth Images with Convolutional Neural Network. 2020,	
480	Interdependences of Products in Market Baskets: Comparing the Conditional Restricted Boltzmann Machine to the Multivariate Logit Model. 2021 , 19, 33-51	
479	Crystallographic Groups Prediction from Chemical Composition via Deep Learning.	
478	A novel active shape model-based DeepNeural network for age invariance face recognition. 2022 , 82, 103393	0
477	An analytic layer-wise deep learning framework with applications to robotics. 2022, 135, 110007	5
476	DeepQuake IAn application of CNN for seismo-acoustic event classification in The Netherlands. 2022 , 159, 104980	3
475	Information Technology in the Study and Practice of Aerobics in Colleges and Universities. 2021,	
474	Automatic Extraction of Road Networks from Satellite Images by using Adaptive Structural Deep Belief Network. 2021 ,	
473	Towards Autonomous Industrial Warehouse Inspection. 2021,	1
472	Ultramarathon Result and Injury Prediction using PyTorch. 2021,	
471	Unsupervised Clustering in Epidemiological Factor Analysis. 2021 , 14, 63-72	1
470	Research on quick judgment of power system stability using grid hierarchy net. 2021 , 7, 25-32	O

469	Against generalisation: Data-driven decisions need context to be human-compatible. 026638212110619	
468	Progress of Human Action Recognition Research in the Last Ten Years: A Comprehensive Survey. 1	1
467	In silico Methods for Identification of Potential Therapeutic Targets. 2021 , 1	1
466	An Approach to Growth Delimitation of Straight Line Segment Classifiers Based on a Minimum Bounding Box. 2021 , 23,	
465	The unreasonable effectiveness of machine learning in Moldavian versus Romanian dialect identification.	
464	The Progress of Medical Image Semantic Segmentation Methods for Application in COVID-19 Detection. 2021 , 2021, 7265644	1
463	Prediction of Merchandise Sales on E-Commerce Platforms Based on Data Mining and Deep Learning. 2021 , 2021, 1-9	1
462	An efficient strategy for predicting river dissolved oxygen concentration: application of deep recurrent neural network model. 2021 , 193, 798	6
461	A Generalizable Sample Resolution Augmentation Method for Mechanical Fault Diagnosis Based on ESPCN. 2021 , 2021, 1-11	O
460	Efficient modeling of trivializing maps for lattice ?4 theory using normalizing flows: A first look at scalability. 2021 , 104,	1
459	Machine learning approach for the search of resonances with topological features at the Large Hadron Collider.	O
458	Developing a novel framework for forecasting groundwater level fluctuations using Bi-directional Long Short-Term Memory (BiLSTM) deep neural network. 2021 , 191, 106568	3
457	Comparison of Cognitive Differences of Artworks between Artist and Artistic Style Transfer.	
456	Neural Networks and Deep Learning: A Paradigm Shift in Information Processing, Machine Learning, and Artificial Intelligence. 2021 , 589-654	
455	Automatic Identification of Bottleneck Tasks for Business Process Management using Fusion-based Text Clustering. 2021 , 54, 1200-1205	0
454	A Survey of Al-Based Facial Emotion Recognition: Features, ML & DL Techniques, Age-Wise Datasets and Future Directions. 2021 , 9, 165806-165840	5
453	Advances in AI and Machine Learning for Education Research. 2021 , 195-208	1
452	Survey of RPAS Autonomous Control Systems Using Artificial Intelligence. 2021 , 9, 167580-167591	1

451	Research on fault diagnosis of automobile engines based on the deep learning 1D-CNN method.	2
450	Explainable machine learning using real, synthetic and augmented fire tests to predict fire resistance and spalling of RC columns. 2022 , 253, 113824	6
449	Automatic electrocardiogram detection and classification using bidirectional long short-term memory network improved by Bayesian optimization. 2022 , 73, 103424	0
448	A novel in-depth analysis approach for domain-specific problems based on multidomain data. 2022 , 588, 142-158	
447	A bibliometric analysis of off-line handwritten document analysis literature (1990🛭 020). 2022 , 125, 108513	0
446	Recognition of Real-World Texture Images Under Challenging Conditions With Deep Learning. 2018 , 122-126	3
445	Link Prediction in Social Graphs using Representation Learning via Knowledge-Graph Embeddings and ConvNet (RLVECN). 2020 ,	
444	Utilization Of Deep Learning For Wear Analysis Of Mechanical Components Using Self-Oscillating Vibroacoustic Systems. 2020 ,	
443	An Intelligent Agent Playing Generic Action Games based on Deep Reinforcement Learning with Memory Restrictions. 2020 ,	
442	Robotic Grasping Based on Fully Convolutional Network Using Full-Scale Skip Connection. 2020 ,	O
441	Optimizing Convolutional Neural Networks to Identify Distorted M-ary CPFSK Signals with RRC Pulse Shaped Instantaneous Frequency. 2020 ,	
440	A hierarchical stacking extreme learning machine for multi-classification. 2020,	
439	Quality Prediction Based on Convolutional Neural Network. 2020 ,	1
438	A Deep Learning Co-training Framework for e-book Classification. 2020 ,	O
437	Fishing and Military Ship Recognition using Parameters of Convolutional Neural Network. 2020,	О
436	Evolving Gaussian Processes and Kernel Observers for Learning and Control in Spatiotemporally Varying Domains: With Applications in Agriculture, Weather Monitoring, and Fluid Dynamics. 2021 , 41, 30-69	3
435	Prediction performance advantages of deep machine learning algorithms for two-phase flow rates through wellhead chokes. 2021 , 11, 1233-1261	8
434	Towards Model-informed Precision Dosing with Expert-in-the-loop Machine Learning. 2021,	1

433	Classification of COVID-19 Patients Using Deep Learning Architecture of InceptionV3 and ResNet50. 2021 ,	O
432	Analysis of MIA GMDH as a self-organizing deep neural network. 2021 ,	O
431	Analysing and Predicting the maneuver behaviors of aircraft with Box-Jenkins ARIMA model. 2021,	
430	A Deep Learning Model for Anomalous Wireless Link Detection. 2021,	O
429	Research on prediction of epileptic EEG signal based on Randomly-Distributed-Embedding Model. 2021 ,	
428	Radar Plot Classification Based on Machine Learning. 2021 ,	
427	Review of violent extremism detection techniques on social media. 2021,	
426	Learning via Denoising Autoencoder on 5G NR Phase Noise Estimation. 2021 ,	
425	Research on Teaching Practice of Blended Higher Education Based on Deep Learning Route 2022 , 2022, 5906335	2
424	Variational Autoencoders for Assessing Sustainability. 2022 , 47-62	
423	Farkl⊞k Tflerini Derin fenme Yfltemi le Tan l na. 2022 , 24, 55-64	0
422	Deep Learning and Earth Observation to Support the Sustainable Development Goals: Current Approaches, Open Challenges, and Future Opportunities. 2022 , 2-30	8
421	Detection and Management of P2P Traffic in Networks using Artificial Neural Networksa. 2022 , 30, 1	0
420	The Design of Adolescents' Physical Health Prediction System Based on Deep Reinforcement Learning 2022 , 2022, 4946009	O
419	Building extraction from remote sensing images using deep residual U-Net. 2022 , 55, 71-85	11
418	A structural damage detection algorithm based on discrete wavelet transform and ensemble pattern recognition models. 1	3
417	Human Activity Recognition Using an Ensemble Learning Algorithm with Smartphone Sensor Data.	7
	2022 , 11, 322	/

415	Robust Network Intrusion Detection System Based on Machine-Learning With Early Classification. 2022 , 10, 10754-10767	2
414	2.5-D Deep Learning Inversion of LWD and Deep-Sensing EM Measurements Across Formations With Dipping Faults. 2022 , 19, 1-5	2
413	Effective scheduling algorithm for load balancing in fog environment using CNN and MPSO. 2022 , 64, 773	3
412	Feature Extraction-Based Deep Self-Organizing Map. 1	О
411	Predicting the airborne microbial transmission via human breath particles using a gated recurrent units neural network. 2022 , ahead-of-print,	
410	Long-term corrosion monitoring of carbon steels and environmental correlation analysis via the random forest method. 2022 , 6,	8
409	Quality-relevant feature extraction method based on teacher-student uncertainty autoencoder and its application to soft sensors. 2022 , 592, 320-339	О
408	A Q-matrix Model Based on Binarized Neural Network. 2022 , 2171, 012037	
407	Satellite Image Compression and Denoising With Neural Networks. 2022 , 19, 1-5	O
406	A deep learning method for the recognition of solar radio burst spectrum 2022, 8, e855	O
405	A deep learning-based method for the diagnosis of vertebral fractures on spine MRI: retrospective training and validation of ResNet 2022 , 1	О
404	Analysis of Neural Network based Proportional Myoelectric Hand Prosthesis Control 2022, PP,	1
403	Model Optimisation Techniques for Convolutional Neural Networks. 2022 , 269-298	0
402	Effective prediction and resource allocation method (EPRAM) in fog computing environment for smart healthcare system. 2022 , 81, 8235	1
401	A perceptual computer for hierarchical portfolio selection based on interval type-2 fuzzy sets. 1	1
400	Unscrambling spectral interference and matrix effects in Vitis vinifera Vis-NIR spectroscopy: Towards analytical grade Ih vivoßugars and acids quantification. 2022 , 194, 106710	1
399	Biomass fast pyrolysis prediction model through data-based prediction models coupling with CPFD simulation. 2022 , 162, 105448	О
398	Rigorous modeling of frictional pressure loss in inclined annuli using artificial intelligence methods. 2022 , 211, 110203	4

397	A Deep Learning Approach for Basal Cell Carcinomas and Bowen Disease Recognition in Dermatopathology Image. 2022 , 12, 879-887	
396	Estimation of ethylene/1-butene copolymerization conditions using the autoencoder model. 2022 , 2175, 012028	
395	Disruption prediction at JET through Deep Convolutional Neural Networks using spatiotemporal information from plasma profiles.	1
394	Using a multi-convolutional neural network to automatically identify small-sample tea leaf diseases. 2022 , 100696	1
393	Application of a Neural Network to Store and Compute the Optical Properties of Non-Spherical Particles. 1	1
392	Artificial Intelligence based Modern Approaches to Diagnose Alzheimer s. 2022 , 2, 1-14	
391	Machine Learning for Building Energy Modeling. 2021 , 1-22	
390	Prognostic Kalman Filter Based Bayesian Learning Model for Data Accuracy Prediction. 2022 , 72, 243-259	Ο
389	DEEP LEARNING IN HEAT TRANSFER. 2022,	
388	Random Fourier Feature Based Deep Learning for Wireless Communications. 2022, 1-1	2
387	Synchronized Conceptual Representations in Unsupervised Generative Learning. 2022 , 23-32	
386	A Management Technology of Electrical User Data Label Based on Artificial Intelligence Identification. 2022 ,	
385	A Review of Generative Adversarial-Based Networks of Machine Learning/Artificial Intelligence in Healthcare. 2022 , 37-56	
384	Generalizing Supervised Learning for Intrusion Detection in IoT Mesh Networks. 2022 , 214-228	4
383	Automated Diagnosis of Diseases Using Integrated Machine Learning Approaches. 2022, 195-204	
382	Alzheimer disease detection using artificial intelligence. 2022 , 53-74	Ο
381	Deep holography. 2022 , 3, 1	1
380	Target Sentiment Analysis Ensemble for Product Review Classification. 2022 , 15, 0-0	

379 Intelligent Transportation Systems [Models, Challenges, Security Aspects. **2022**, 56-82

378	Introduction to machine learning techniques: An optical communication's perspective. 2022 , 1-42	
377	A Malware Detection Approach Using Autoencoder in Deep Learning. 2022, 10, 25696-25706	3
376	Learning Hierarchical Variational Autoencoders with Mutual Information Maximization for Autoregressive Sequence Modeling 2022 , PP,	1
375	Learning from Noisy Data: An Unsupervised Random Denoising Method for Seismic Data using Model-based Deep Learning. 2022 , 1-1	2
374	KalmanNet: Neural Network Aided Kalman Filtering for Partially Known Dynamics. 2022 , 70, 1532-1547	5
373	One Possibility of a Neuro-Symbolic Integration. 2022 , 428-437	
372	Hybrid Restricted Boltzmann MachinelConvolutional Neural Network Model for Image Recognition. 2022 , 10, 24985-24994	0
371	Predicting the Reader's English Level from Reading Fixation Patterns Using the Siamese Convolutional Neural Network 2022 , PP,	
370	Artificial intelligence in mammographic phenotyping of breast cancer risk: a narrative review 2022 , 24, 14	3
369	Derin Benme ile GEBtlerde GELTAzaltma Berine Kapsamlæir Bceleme.	0
368	Hourly Electricity Price Prediction for Electricity Market with High Proportion of Wind and Solar Power. 2022 , 15, 1345	1
367	AdaptKT: A Domain Adaptable Method for Knowledge Tracing. 2022,	0
366	Deep Learning in Human Activity Recognition with Wearable Sensors: A Review on Advances 2022 , 22,	16
365	TRSD: A Time-Varying and Region-Changed Speech Database for Speaker Recognition. 1	0
364	Inversion Attacks against CNN Models Based on Timing Attack. 2022 , 2022, 1-11	
363	Computational Intelligence Approaches in Developing Cyberattack Detection System 2022 , 2022, 4705325	0
362	Using Deep Siamese networks for trajectory analysis to extract motion patterns in videos.	

361	Survey of Deep Learning Paradigms for Speech Processing. 1	4
3 60	Zero-day Ransomware Attack Detection using Deep Contractive Autoencoder and Voting based Ensemble Classifier. 1	О
359	Intrusion Detection System on IoT with 5G Network Using Deep Learning. 2022, 2022, 1-13	6
358	Non destructive Eddy Currents inversion using Artificial Neural Networks and data augmentation. 2022 , 102635	1
357	Blockchain-Enabled Federated Learning: A Survey.	1
356	Automatic Traffic State Recognition Based on Video Features Extracted by an Autoencoder. 2022 , 2022, 1-13	o
355	Automatic Detection of Avionics Electrical Connector Pins. 2022, 2218, 012048	
354	Wavelet network-based deep learning system for image classification. 2022,	
353	A rare failure detection model for aircraft predictive maintenance using a deep hybrid learning approach. 1	
352	A Conspectus of Deep Learning Techniques for Single-Image Super-Resolution. 2022 , 32, 11-32	O
351	Intelligent reconstruction of the flow field in a supersonic combustor based on deep learning. 2022 , 34, 035128	5
350	A Novel Empirical and Deep Ensemble Super Learning Approach in Predicting Reservoir Wettability via Well Logs. 2022 , 12, 2942	o
349	Progressive trends on the application of artificial neural networks in animal sciences IA review. 2022 , 67, 219-230	
348	Effective Safety Message Dissemination with Vehicle Trajectory Predictions in V2X Networks 2022 , 22,	O
347	Deep autoencoder based domain adaptation for transfer learning 2022, 1-27	0
346	Empirical Analysis of Machine Learning Algorithms for Multiclass Prediction. 2022 , 2022, 1-12	O
345	Predicting Citywide Crowd Dynamics at Big Events: A Deep Learning System. 2022 , 13, 1-24	
344	Prescribed performance control with input indicator for robot system based on spectral normalized neural networks. 2022 ,	

343	A multifhodal unsupervised fault detection system based on power signals and thermal imaging via deep AutoEncoder neural network. 2022 , 110, 104729	О
342	From Pigments to Pixels: A Comparison of Human and AI Painting. 2022 , 12, 3724	O
341	Toward smarter management and recovery of municipal solid waste: A critical review on deep learning approaches. 2022 , 346, 130943	5
340	Forest Road Extraction from Orthophoto Images by Convolutional Neural Networks. 1-14	O
339	Model-Driven Approach to Fading-Aware Wireless Network Planning Leveraging Multiobjective Optimization and Deep Learning. 2022 , 2022, 1-23	0
338	Deep adversarial transition learning using cross-grafted generative stacks 2022 , 149, 172-183	O
337	A class-specific mean vector-based weighted competitive and collaborative representation method for classification 2022 , 150, 12-27	O
336	Real-time network intrusion detection using deferred decision and hybrid classifier. 2022, 132, 51-66	O
335	Deep Learning-based Decision-Making Model for the Submarine Evade Movement. 2021,	1
334	GridToPix: Training Embodied Agents with Minimal Supervision. 2021,	O
333	CIraCLoss: Intra-class Distance Loss Makes CNN Robust. 2021 ,	
332	Underwater Acoustic Communication Channel Modeling using Deep Learning. 2021,	4
331	Speech Command Recognition System using Deep Recurrent Neural Networks. 2021,	
330	Human-Computer Interaction Data Network Analysis of Language Online Learning under the Network Background. 2021 ,	
329	Heart Failure diagnosis based on deep learning techniques. 2021 , 2021, 1757-1760	O
328	Comparison Analysis for Pruning Algorithms of Neural Networks. 2021,	
327	Deep Learning on Histopathology Images for Breast Cancer Classification: A Bibliometric Analysis 2021 , 10,	2
326	Improving Deep Forest by Exploiting High-order Interactions. 2021,	3

325 LSTM-CNN-Based Transient Stability Assessment. 2021,

324	Empirical Study of Predicting Critical Temperature of a Superconductor Using Regression Techniques. 2022 , 395-405	
323	Comparative Features of MIA GMDH and Deep Feed-Forward Neural Networks. 2021, 2021, 5-16	1
322	A Predictive Method for the Frequency Nadir Based on Convolutional Neural Network. 2021 ,	
321	A Tree Based Machine Learning and Deep Learning Classification for Network Intrusion Detection.	
320	Application of Deep Learning in Cloud Security. 2022 , 189-205	
319	Learnable Linear Phase FIR Filter Designs Using a Generative Adversarial Network. 2021 ,	О
318	Characterization based machine learning modeling for the prediction of the rheological properties of water-based drilling mud: an experimental study on grass as an environmental friendly additive. 1	1
317	Comprehensive evaluation of voltage sag severity level based on DBN. 2021,	O
316	Assessment of Risk Impact on Road Project Using Deep Neural Network. 2022 , 26, 1014-1023	1
315	A Review of Image Denoising With Deep Learning. 2021 ,	
314	Leveraging sEMG gesture recognition training on edge devices. 2021,	
313	Graph Convolutional Networks for Categorizing Online Harassment on Twitter. 2021,	
312	Lateral and Longitudinal Driving Behavior Prediction Based on Improved Deep Belief Network 2021 , 21,	2
311	Deep Learning Algorithms are used to Automatically Detection Invasive Ducal Carcinoma in Whole Slide Images. 2021 ,	8
310	Change Detection for Heterogeneous Remote Sensing Images with Improved Training of Hierarchical Extreme Learning Machine (HELM). 2021 , 13, 4918	3
309	HActivityNet: A Deep Convolutional Neural Network for Human Activity Recognition. 2021 , 9, 357-376	O
308	Citation entity recognition method using multi-feature semantic fusion based on deep learning. 2022 , 34,	1

307	Researches advanced in Generative Adversarial Networks. 2021,	
306	Dynamic Prediction of Chilo suppressalis Occurrence in Rice Based on Deep Learning. 2021 , 9, 2166	1
305	A Survey on Traffic Prediction Techniques Using Artificial Intelligence for Communication Networks. 2021 , 2, 518-535	2
304	Autoencoder: Issues, Challenges and Future Prospect. 2022 , 257-266	
303	Kurum 🖾 Tanelerinin S 🖽 and 🖽 mas 🚻 Hibrit Bir Yakla 🖶 .	1
302	Tree Based Approaches for Predicting Concrete Carbonation Coefficient. 2022 , 12, 3874	Ο
301	DataSheet_1.doc. 2019 ,	
300	fdata-01-00002.xml. 2018 ,	
299	fdata-01-00002-g0001.tif. 2018 ,	
298	fdata-01-00002-g0002.tif. 2018 ,	
297	fdata-02-00002.xml. 2019 ,	
296	fdata-02-00002-g0001.tif. 2019 ,	
295	fdata-02-00002-g0002.tif. 2019 ,	
294	fdata-02-00002-g0003.tif. 2019 ,	
293	fdata-02-00002-g0004.tif. 2019 ,	
292	Image_1.pdf. 2020 ,	
291	Table_1.docx. 2020 ,	
290	Table_1.DOCX. 2019 ,	

289	Data_Sheet_1.docx. 2019 ,	
288	Data_Sheet_1.pdf. 2019 ,	
287	Data_Sheet_1.pdf. 2020 ,	
286	DataSheet_1.docx. 2020 ,	
285	Comparative Analysis of Different Machine Learning Algorithms in Classification. 2022,	
284	Deep Learning-Based Upscaling for In Situ Volume Visualization. 2022 , 331-352	O
283	DNA Methylation Imputation Across Platforms 2022, 2432, 137-151	
282	HINNPerf: Hierarchical Interaction Neural Network for Performance Prediction of Configurable Systems.	O
281	A Systematic Review on Breast Cancer Detection Using Deep Learning Techniques. 1	1
280	Design and Application of a Fault Diagnosis and Monitoring System for Electric Vehicle Charging Equipment Based on Improved Deep Belief Network. 2022 , 20, 1544-1560	1
279	Multichannel DenseNet Architecture for Classification of Mammographic Breast Density for Breast Cancer Detection 2022 , 10, 885212	O
278	Hourly and Daily PM2.5 Estimations using MERRA-2: A Machine Learning Approach.	
277	Prediction of Machine Failure in Industry 4.0: A Hybrid CNN-LSTM Framework. 2022, 12, 4221	2
276	Behavioral Change Prediction from Physiological Signals Using Deep Learned Features 2022 , 22,	
275	Hierarchical semantic-aware neural code representation. 2022 , 111355	1
274	A three-methylation-driven genes based deep learning model for tuberculosis diagnosis in people with and without human immunodeficiency virus co-infection 2022 ,	
273	RTSNet: Deep Learning Aided Kalman Smoothing. 2022 ,	О
272	An approach to enhance performance of age invariant face recognition. 2022 , 1-16	1

271	Automatic sleep stage classification: From classical machine learning methods to deep learning. 2022 , 77, 103751	3
270	Representation learning with deep sparse auto-encoder for multi-task learning. 2022, 129, 108742	1
269	Impact of Temperature to Predict Covid-19 Transmission in Bangladesh: A Comparative Study by Using Deep Learning. 2021 ,	
268	Construction of transformer substation fault knowledge graph based on a depth learning algorithm.	
267	Stacked Auto-encoder Based Feature Transfer Learning and Optimized LSSVM-PSO Classifier in Bearing Fault Diagnosis. 2022 , 22, 177-186	1
266	Deep Learning on Edge. 2022 , 115-135	
265	Underwater Acoustic Communication Channel Modeling using Reservoir Computing. 2022, 1-1	O
264	EEG-Based Biometric Close-Set Identification Using CNN-ECOC-SVM. 2022 , 723-732	O
263	Introduction. 2022 , 1-6	
262	A Novel Classification of Cancer Based on Tumor RNA-Sequence (RNA-Seq) Gene Expression. 2022 , 547-560	
261	Unsupervised pseudoinverse hashing learning model for rare astronomical object retrieval.	O
260	Time-based self-supervised learning for Wireless Capsule Endoscopy. 2022 , 146, 105631	1
259	Modeling and Learning of Hierarchical Decision Models: The Case of the Choquet Integral. 2022 , 101-120	
258	A New Fuzzy Convolutional Neural Network for Face Recognition.	
257	Hierarchical Graph Augmented Deep Collaborative Dictionary Learning for Classification. 2022, 1-15	O
256	Deep Graph Gaussian Processes for Short-Term Traffic Flow Forecasting From Spatiotemporal	1
Ĭ	Data. 2022 , 1-10	1
255		

253	An informal reconstruction of the free-energy framework, examining the conceptual problems that arise. 2022 , 108281	
252	Multi-task convolutional neural networks for predicting in vitro clearance endpoints from molecular images.	1
251	How to keep text private? A systematic review of deep learning methods for privacy-preserving natural language processing.	1
250	Comparison of Cognitive Differences of Artworks between Artist and Artistic Style Transfer. 2022 , 12, 5525	
249	A Review on Fault Diagnosis Technology of Key Components in Cold Ironing System. 2022, 14, 6197	0
248	Neuroscience: Reliable and refined motion computations in the retina. 2022 , 32, R474-R476	1
247	Representation Learning: Recommendation With Knowledge Graph via Triple-Autoencoder. 13,	Ο
246	Fast Predictions of Aircraft Aerodynamics Using Deep-Learning Techniques. 1-13	О
245	Copper price movement prediction using recurrent neural networks and ensemble averaging.	1
244	Large Language Models are Not Models of Natural Language: They are Corpus Models. 2022 , 10, 61970-6197	9
243	Aesthetic Evaluation System Based on Geometric Theorems. 2022 , 201-203	
242	An Hybrid Deep Learning Approach for Prediction and Binary Classification of Student⊠ Stress. 2022 , 315-326	
241	The Agent-Based Business Process Simulation Approach. 2022 , 105-128	
240	Customer behaviour forecast using deep learning networks. 2022,	
239	Computational Intelligence Driven Prognostics for Remaining Service Life of Power Equipment. 2022 ,	
238	A Big Wave of Deep Learning in Medical Imaging - Analysis of Theory and Applications. 2022,	О
237	Residual stacked gated recurrent unit with encoderdecoder architecture and an attention mechanism for temporal traffic prediction.	
236	Soft sensor with deep feature extraction for a sugarcane milling system.	О

235	Learning deep domain-agnostic features from synthetic renders for industrial visual inspection. 2022 , 31,	
234	SVF-Net: spatial and visual feature enhancement network for brain structure segmentation.	
233	FIBRE-OPTIC SENSOR AND DEEP LEARNING-BASED STRUCTURAL HEALTH MONITORING SYSTEMS FOR CIVIL STRUCTURES: A REVIEW. 2022 , 111543	2
232	DLACEP: A Deep-Learning Based Framework for Approximate Complex Event Processing. 2022,	
231	A Real-Time Parking Space Occupancy Detection Using Deep Learning Model. 2022,	
230	Unsupervised contrastive learning for few-shot TOC prediction and application. 2022 , 259, 104046	1
229	Deep learning forecasting for electric demand applications of cooling systems in buildings. 2022 , 53, 101674	Ο
228	Instinctive Data Analysis in Machine Learning and Summary Exhibitor. 2022 , 156-165	
227	Regularizing disentangled representations with anatomical temporal consistency. 2022, 325-346	1
226	On the use of Deep Learning and Scattering Transform for Pathological voices recognition. 2022 ,	
225	Assessing and Comparing Data Imputation Techniques for Item Nonresponse in Household Travel Surveys. 036119812211048	
224	Intelligence based Accurate Medium and Long Term Load Forecasting System. 2022, 36,	Ο
223	ROOTECTOR: Robust Android Rooting Detection Framework Using Machine Learning Algorithms.	
222	Full Waveform Prediction of Blasting Vibration Using Deep Learning. 2022 , 14, 8200	2
221	The Deep Convolutional Neural Network Role in the Autonomous Navigation of Mobile Robots (SROBO). 2022 , 14, 3324	1
220	Aerial Footage Analysis Using Computer Vision for Efficient Detection of Points of Interest near Railway Tracks. 2022 , 9, 370	1
219	Towards constraining soil and vegetation dynamics in land surface models: Modeling ASCAT backscatter incidence-angle dependence with a Deep Neural Network. 2022 , 279, 113116	1
218	Network intrusion detection system: A survey on artificial intelligence-based techniques.	1

217	Design of Human Resource Management System Based on Deep Learning. 2022, 2022, 1-9	
216	Artificial neural network and spatial distribution of soil attributes for farming management in Western Desert, Egypt. 2022 , 15,	
215	Credit Card Fraud Detection Using Deep Learning Approach (LSTM) Under IoT Environment. 2022 , 12, 1-20	
214	Deep Learning Based Successive Interference Cancellation for the Non-Orthogonal Downlink. 2022 , 1-13	1
213	A Novel Deep Learning Approach of BH & Data. 2022,	
212	Cross-Domain Unseen Activity Recognition Using Transfer Learning. 2022,	
211	DeepNP: Deep Learning-Based Noise Prediction for Ultra-Reliable Low-Latency Communications. 2022 ,	
210	CityCross: Transferring Attention-based Knowledge for Location-based Advertising Recommendation. 2022 ,	
209	SymDNN: Simple & Diffective Adversarial Robustness for Embedded Systems. 2022,	
208	Understanding the vaccine stance of Italian tweets and addressing language changes through the COVID-19 pandemic: Development and validation of a machine learning model. 10,	Ο
207	Deep Dictionary Learning with an Intra-Class Constraint. 2022 ,	
206	Potato diseases detection and classification using deep learning methods.	Ο
205	Neurochemical Concentration Prediction Using Deep Learning vs Principal Component Regression in Fast Scan Cyclic Voltammetry: A Comparison Study. 2022 , 13, 2288-2297	
204	Composite error-based intelligent smooth sliding mode control of a dual parallel robot for automobile electro-coating conveying. 002029402211181	
203	CTSC-Net: an effectual CT slice classification network to categorize organ and non-organ slices from a 3-D CT image.	
202	How do we choose the appropriate deep learning method for our case? A systematic literature review.	
201	An effective behavior recognition method in the video session using convolutional neural network. 2022 , 17, e0266734	
200	Missing well logs prediction using deep learning integrated neural network with the self-attention mechanism. 2022 , 125270	O

199	Geospatial Intelligence and Artificial Intelligence for Detecting Potential Coca Paste Production Infrastructure in the Border Region of Venezuela and Colombia. 1-51	
198	Learnability of the Boolean Innerproduct in Deep Neural Networks. 2022 , 24, 1117	
197	Context-aware ranking refinement with attentive semi-supervised autoencoders.	
196	Potato late blight (Phytophthora infestans) disease forecasting using an auto-encoded long short-term memory recurrent neural networks in North-Western Algeria. 1-16	
195	Application of Artificial Intelligence Methods for Imaging of Spinal Metastasis. 2022, 14, 4025	1
194	ABC: Artificial Intelligence for Bladder Cancer grading system. 2022 , 9, 100387	
193	Efficient learning of robust quadruped bounding using pretrained neural networks.	Ο
192	Personalized Therapy Using Deep Learning Advances. 2022 , 171-197	O
191	Dual adversarial model: Exploring low-dimensional space features for point clouds generating and completing. 2022 , 223, 103551	О
190	Handling class imbalance in COVID-19 chest X-ray images classification: Using SMOTE and weighted loss. 2022 , 129, 109588	O
189	Data-driven technique estimates skin factor and average pressure during oil-flowing periods. 2022 , 219, 111061	О
188	Deep learning for air pollutant concentration prediction: A review. 2022 , 290, 119347	1
187	Virtual Metrology in Semiconductor Fabrication Foundry Using Deep Learning Neural Networks. 2022 , 10, 81960-81973	O
186	A Rapid Semi-automated Literature Review on Legal Precedents Retrieval. 2022 , 53-65	O
185	A survey on deep learning techniques in real-time applications. 2022 , 9, 33	0
184	A Comparative Study on Classification Methods for Renal Cell and Lung Cancers Using RNA-Seq Data. 2022 , 1-1	O
183	Deep Learning in Biomedical Devices: Perspectives, Applications, and Challenges. 2022 , 13-35	O
182	Deep Learning on Big Data. 2022 , 1-10	O

181	Natural language processing in-and-for design research. 2022 , 8,	4
180	Signature-Aware RF Exploitation (SNARE) Fingerprinting using Deep Learning to identify UAVs. 2022 ,	O
179	New trends in deep learning for neuroimaging analysis and disease prediction. 2023, 275-287	O
178	Autoencoder-Based Signal Modulation and Demodulation Methods for Sonobuoy Signal Transmission and Reception. 2022 , 22, 6510	O
177	Character-based Joint Word Segmentation and Part-of-Speech Tagging for Tibetan Based on Deep Learning.	O
176	Multi-User Joint Detection Using Bi-Directional Deep Neural Network Framework in NOMA-OFDM System. 2022 , 22, 6994	O
175	A Deep Learning Model for Air Quality Forecasting Based on 1D Convolution and BiLSTM. 2023, 209-221	O
174	Machine Learning Optimization of Quantum Circuit Layouts.	O
173	Deep Learning Techniques for the Effective Prediction of Alzheimer Disease: A Comprehensive Review. 2022 , 10, 1842	O
172	Convolutional Neural Network for Closed-Set Identification from Resting State Electroencephalography. 2022 , 10, 3442	2
171	Use of AI methods for handling multi-dimensionality and missing values in biomedical data. 2022,	O
170	Evaluation of Private Enterprises Based on Deep Learning. 2022 , 2022, 1-9	O
169	Stacked Denoising Sparse Autoencoder-Based Fuzzy Rule Classifiers. 2023, 113-147	O
168	Fully hyperbolic convolutional neural networks. 2022 , 9,	O
167	A speech enhancement algorithm based on a non-negative hidden Markov model and Kullback-Leibler divergence. 2022 , 2022,	0
166	Methods Used to Improve Generalization Performance. 2023 , 11-21	O
165	Introduction. 2023 , 1-9	O
164	Deep learning models for disease-associated circRNA prediction: a review.	1

163	Review of Short-Term Load Forecasting for Smart Grids Using Deep Neural Networks and Metaheuristic Methods. 2022 , 2022, 1-14	О
162	Design and Optimization of CNN Architecture to Identify the Types of Damage Imagery. 2022 , 10, 3483	O
161	3D Neural Network Inversion of Field Geoelectric Data with Calculating Posterior Estimates. 2022 , 58, 605-614	О
160	Artificial Intelligence in Breast Ultrasound: The Emerging Future of Modern Medicine. 2022,	O
159	Radar Target Detection Algorithm Using Convolutional Neural Network to Process Graphically Expressed Range Time Series Signals. 2022 , 22, 6868	О
158	Skin lesion detection using an ensemble of deep models: SLDED.	O
157	Petrophysical Regression regarding Porosity, Permeability, and Water Saturation Driven by Logging-Based Ensemble and Transfer Learnings: A Case Study of Sandy-Mud Reservoirs. 2022 , 2022, 1-31	О
156	A DNN-based approach to predict dynamic mooring tensions for semi-submersible platform under a mooring line failure condition. 2022 , 112767	О
155	Improving InsurersLoss Reserve Error Prediction: Adopting Combined Unsupervised-Supervised Machine Learning Techniques in Risk Management. 2022 ,	О
154	Natural Reweighted WakeBleep. 2022 , 155, 574-591	O
153	Urban land use and land cover classification with interpretable machine learning 🖪 case study using Sentinel-2 and auxiliary data. 2022 , 28, 100843	0
152	Adaptive Structural Learning of Deep Belief Network and Its Application to Real Time Crack Detection of Concrete Structure Using Drone. 2022 , 187-206	Ο
151	Machine learning in electron microscopy for advanced nanocharacterization: current developments, available tools and future outlook.	1
150	Terrain Image Recognition with Unsupervised Generative Representations: the Effect of Anomalies. 2022 ,	Ο
149	CalcGraph: taming the high costs of deep learning using models.	0
148	Discriminative and Geometry-Preserving Adaptive Graph Embedding for dimensionality reduction. 2022 ,	0
147	A High-Precision Method for Evaluating Sector Capacity in Bad Weather Based on an Improved WITI Model. 2022 , 12, 10114	О
146	Induction motors fault diagnosis using a stacked sparse auto-encoder deep neural network. 0959651822112	

145	Guided Filtered Sparse Auto-Encoder for Accurate Crop Mapping from Multitemporal and Multispectral Imagery. 2022 , 12, 2615	0
144	Deep Convolutional Neural Network for Nasopharyngeal Carcinoma Discrimination on MRI by Comparison of Hierarchical and Simple Layered Convolutional Neural Networks. 2022 , 12, 2478	1
143	Developing Data-driven Artificial Neural Network for a High Throughput Retrieval of Aerosol Optical Depth and Surface Temperature of Mars. 2022 , 3, 230	0
142	Optimal Cluster Head Selection Using Vortex Search Algorithm with Deep Learning-Based Multipath Routing in MANET. 2023 , 81-98	O
141	Identification of the Angle Errors of the LED Parallel-Light Module in PCB Exposure Device by Using Neural Network Learning Algorithms. 2022 , 12, 1619	0
140	An Agenda for Land Data Assimilation Priorities: Realizing the Promise of Terrestrial Water, Energy, and Vegetation Observations From Space. 2022 , 14,	O
139	PSO + GWO: a hybrid particle swarm optimization and Grey Wolf optimization based Algorithm for fine-tuning hyper-parameters of convolutional neural networks for Cardiovascular Disease Detection.	O
138	A survey of visual neural networks: current trends, challenges and opportunities.	O
137	Post-Stimulus Encoding of Decision Confidence in EEG: Toward a Brain-Computer Interface for Decision Making.	O
136	An image enhancement approach for coral reef fish detection in underwater videos. 2022 , 72, 101862	O
135	Predictive models for concrete properties using machine learning and deep learning approaches: A review. 2023 , 63, 105444	1
134	Building 3-D Human Data Based on Handed Measurement and CNN. 2023 , 74, 2431-2441	O
133	Transfer learning based fault diagnosis of automobile dry clutch system. 2023, 117, 105522	О
132	Early Detection of Network Intrusions using a GAN-based One-Class Classifier. 2022, 1-1	O
131	Model-Based Deep Learning: On the Intersection of Deep Learning and Optimization. 2022, 10, 115384-115	3981
130	A Fast Accurate Deep Learning Framework for Prediction of all Cancer Types. 2022 , 1-1	O
129	Mind the gap Bafely incorporating deep learning models into the actuarial toolkit. 2022, 27,	0
128	Dual Stream Spatio-Temporal Motion Fusion With Self-Attention For Action Recognition. 2019 ,	O

127	Visible and Infrared Image Fusion Framework based on RetinaNet for Marine Environment. 2019,	2
126	Research on the Deep Learning Technology in the Hull Form Optimization Problem. 2022, 10, 1735	1
125	Review of Deep Learning: A New Era. 2023 , 311-319	0
124	Diabetes Twitter Classification Using Hybrid GSA. 2023 , 195-219	O
123	A deterministic gradient-based approach to avoid saddle points. 1-20	0
122	LSTM Derin Benme Yakla Hava Kalitesi Verilerinin Tahmini: Sakarya Bnell 2022 , 5, 477-484	O
121	Experimental and Theoretical Study on CHF of a Ultra-Supercritical Circulating Fluidized Bed Boiler Water-Wall Tube at Near-Critical Pressures.	0
120	Deep Neural Networks. 2023 , 9-30	О
119	Architecture Design for Stacked AEs and DBNs. 2023 , 39-59	О
118	1D-DGAN-PHM: A 1-D denoising GAN for Prognostics and Health Management with an application to turbofan. 2022 , 131, 109785	О
117	Zoom-In Neural Network Deep-Learning Model for Alzheimer Disease Assessments. 2022 , 22, 8887	0
116	Understanding of Networks In Vitro and/or In Vivo. 2016 , 344-355	O
115	Deep Learning-Based Virtual Trajectory Generation Scheme. 2022 , 167-182	0
114	A deep learning approach to data-driven model-free pricing and to martingale optimal transport. 2022 , 1-1	1
113	Deep learning-assisted analysis of automobiles handling performances. 2022 , 13, 78-95	0
112	Efficient Hardware Architectures for Accelerating Deep Neural Networks: Survey. 2022 , 10, 131788-131828	O
111	The research progress and prospect of data mining methods on corrosion prediction of oil and gas pipelines. 2023 , 144, 106951	0
110	Deep learning method based on autoencoder neural network applied to faults detection and diagnosis of photovoltaic system. 2023 , 123, 102704	O

109	A comprehensive survey on deep learning based malware detection techniques. 2023, 47, 100529	2
108	A DEEP LEARNING MODEL FOR ELECTRICITY DEMAND FORECASTING BASED ON A TROPICAL DATA. 2020 , 16, 5-17	1
107	X-ray Computed Tomography Image Processing & Segmentation: A Case Study Applying Machine Learning and Deep Learning-Based Strategies. 2022 , 57-80	0
106	Applicability of machine learning models using a neural network for predicting the parameters of the development of food markets. 2022 , 10, 93-105	O
105	AI/ML for Quantification and Calibration of Property Uncertainty in Composites. 2022, 45-76	0
104	AN OVERVIEW OF DEEP LEARNING TECHNIQUES FOR SHORT-TERM ELECTRICITY LOAD FORECASTING. 2019 , 15, 75-92	O
103	Time-coherent embeddings for Wireless Capsule Endoscopy. 2022,	0
102	Identification of Bioluminescent Deep Ocean Macro Organisms Using Computer Vision. 2022,	О
101	Multi-feature Machine Learning with Quantum Superposition. 2022,	0
100	Small-scale Data Underwater Acoustic Target Recognition with Deep Forest Model. 2022 ,	О
99	Automation of legal precedents retrieval: findings from a rapid literature review.	0
98	EEG-Based Mental Tasks Recognition via a Deep Learning-Driven Anomaly Detector. 2022 , 12, 2984	1
97	Deep learning-driven automatic detection of mucilage event in the Sea of Marmara, Turkey.	0
96	Deep Learning in Diverse Intelligent Sensor Based Systems. 2023 , 23, 62	1
95	Self-Supervised Learning for Solar Radio Spectrum Classification. 2022 , 8, 656	0
94	Environmental Noise Reduction based on Deep Denoising Autoencoder. 2022 , 12, 9532-9535	О
93	Perceptron: Learning, Generalization, Model Selection, Fault Tolerance, and Role in the Deep Learning Era. 2022 , 10, 4730	2
92	Algorithm for orthogonal matrix nearness and its application to feature representation. 2022,	O

91	Scaling Up Bayesian Uncertainty Quantification for Inverse Problems Using Deep Neural Networks. 2022 , 10, 1684-1713	O
90	An Evolutionary Sequential Transfer Optimization Algorithm for Well Placement Optimization Based on Task Characteristics. 2022 , 1-21	O
89	Determination of cell voltage and current efficiency in a chlor-alkali membrane cell based on machine learning approach. 1-13	O
88	Heart sound classification based on improved mel-frequency spectral coefficients and deep residual learning. 13,	O
87	Abstraction of reward context facilitates relative reward coding in dorsal and ventral anterior cingulate cortex.	O
86	Network intrusion detection system for DDoS attacks in ICS using deep autoencoders.	O
85	Deep Learning and Embedding Based Latent Factor Model for Collaborative Recommender Systems. 2023 , 13, 726	1
84	Using Deep Learning Techniques to Evaluate Lung Cancer Using CT Images. 2023, 4,	O
83	Differential diagnosis of prostate cancer and benign prostatic hyperplasia based on DCE-MRI using bi-directional CLSTM deep learning and radiomics.	0
82	Enhancing the predictive performance of remote sensing for ecological variables of tidal flats using encoded features from a deep learning model. 2023 , 60,	O
81	Hybrid CNN and LSTM Network For Heart Disease Prediction. 2023 , 4,	1
80	An Intelligent Optimization Algorithm for Scheduling the Required SIL Using Neural Network.	O
79	Modeling Performance and Uncertainty of Construction Planning under Deep Uncertainty: A Prediction Interval Approach. 2023 , 13, 254	O
78	Application of Artificial Intelligent Approach to Predict the Normal Boiling Point of Refrigerants. 2023 , 2023, 1-9	O
77	NEFM: Neural embedding based factorization machines for user response prediction. 2023 , 216, 119433	0
76	Determining the fullness of garbage containers by deep learning. 2023 , 217, 119544	O
75	Aircraft Maneuver Intelligent Recognition: An End-to-end Regularized Autoencoder and SVM Approach. 2022 ,	O
74	A COUGH-BASED COVID-19 DETECTION SYSTEM USING PCA AND MACHINE LEARNING CLASSIFIERS. 2023 , 18, 96-115	O

73	State-of-the-art video recognition of human action under natural scenes. 2022,	Ο
7 ²	Low Power and Efficient Re-Configurable Multiplier for Accelerator. 2022 , 4, 1-11	Ο
71	Depth-Adaptive Deep Neural Network Based on Learning Layer Relevance Weights. 2023 , 13, 398	О
70	Single Snapshot DOA Estimation Based on Learned Modified Smoothed LO Algorithm. 2021,	O
69	Application of Energy Consumption Model and Energy Conservation Technology in New Infrastructure. 2022 ,	0
68	Epigenetics Analysis Using Artificial Intelligence in the Era of Precision Oncology. 2023 , 117-137	Ο
67	Artificial intelligence based Alzheimer disease detection using deep feature extraction. 2023, 333-355	0
66	Structural and Functional Data Processing in Bio-Computing and Deep Learning. 2023, 198-215	Ο
65	Detailed Analysis of Aircraft Fuel Flow Using Data from Flight Data Recorder. 036119812211504	0
64	Conditional autoencoder pre-training and optimization algorithms for personalized care of hemophiliac patients. 6,	Ο
63	A Named Entity Recognition Method for Cigarette Production Process Standard Based on BERT-BiLSTM-CRF Model. 2023 , 765-776	0
62	A review of Deep Learning based methods for Affect Analysis using Physiological Signals.	1
61	An Automatic ECG Signal Quality Assessment Method Based on Resnet and Self-Attention. 2023 , 13, 1313	0
60	Load Forecasting Models in Smart Grid Using Smart Meter Information: A Review. 2023 , 16, 1404	4
59	Machine understanding and deep learning representation. 2023, 201,	0
58	Exploiting the Self-Attention Mechanism in Gas Sensor Array (GSA) Data with Neural Networks. 2023 , 1-1	Ο
57	Multi-Swarm Genetic Gray Wolf Optimizer with Embedded Autoencoders for High-Dimensional Expensive Problems.	0
56	Lightweight and Energy-Efficient Deep Learning Accelerator for Real-Time Object Detection on Edge Devices. 2023 , 23, 1185	O

55	Techniques for automatic landmark detection of human tissue. 2023, 107-119	O
54	Introduction to Voice Presentation Attack Detection and Recent Advances. 2023, 339-385	O
53	Probing the Purview of Neural Networks via Gradient Analysis. 2023, 11, 32716-32732	Ο
52	Machine Learning Techniques Applied of Land Use l land Cover (LULC) Image Classification: Research Avenues Challenges with Issues. 2023 , 281-296	O
51	Twisting Theory: A New Artificial Adaptive System for Landslide Prediction. 2023, 13, 115	О
50	The coming of age of interpretable and explainable machine learning models. 2023 , 535, 25-39	1
49	CNN disruption predictor at JET: Early versus late data fusion approach. 2023 , 193, 113668	О
48	A sequential deep learning algorithm for sampled mixed-integer optimisation problems. 2023 , 634, 73-84	O
47	Graph neural networks for the prediction of aircraft surface pressure distributions. 2023, 137, 108268	О
46	Auditing the fairness of place-based crime prediction models implemented with deep learning approaches. 2023 , 102, 101967	O
45	Extracting interpretable features for time series analysis: A Bag-of-Functions approach. 2023, 221, 119787	О
44	Error Analysis of Free Space Communication System Using Machine Learning. 2023, 11, 7195-7207	O
43	Prediction of Visual Impairment in Epiretinal Membrane and Feature Analysis: A Deep Learning Approach Using Optical Coherence Tomography. 2023 , 12, 21-28	Ο
42	Optical Neural Network Architecture for Deep Learning with Temporal Synthetic Dimension. 2023 , 40, 034201	Ο
41	Jaya-Mutated Leader Algorithm Based Deep Feed Forward Neural Network for Intrusion Detection Using Cloud Computing. 1-25	Ο
40	Development of Techniques for Speech Emotion Recognition (SER) In the Context of Deep Learning. 2022 ,	0
39	Artificial Intelligence and Machine Learning-Based New Drug Discovery Process with Molecular Modelling. 2023 , 19-35	0
38	A Machine Learning Approach for Identification of Low-Head Dams. 2023 , 15, 676	O

37	Demagnetization fault detection of permanent magnet synchronous motor with convolutional neural network.	O
36	Content-based and Knowledge-enriched Representations for Classification Across Modalities: a Survey.	O
35	Deep Neural Network Architectures for Momentary Forecasting in Dry Bulk Markets: Robustness to the Impact of COVID-19. 2023 , 11, 15419-15448	O
34	Classification of Slow and Fast Learners Using Deep Learning Model. 2023, 461-472	O
33	Population cause of death estimation using verbal autopsy methods in large-scale field trials of maternal and child health: lessons learned from a 20-year research collaboration in Central Ghana. 2023 , 20,	О
32	Prediction of Accuracy and Performance of Crop Production by Using Machine Learning Algorithm. 2023 , 261-281	Ο
31	Unsupervised Learning of Disentangled Representation via Auto-Encoding: A Survey. 2023, 23, 2362	O
30	A comparative case study between shallow and deep neural networks in induction motor's fault diagnosis.	O
29	Review on Recent Advances in Hearing Aids: A Signal Processing Perspective. 2023, 225-240	1
28	Filter Design for Image Decomposition and Applications to Forensics. 2023 , 1155-1182	O
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24	Gene based Disease Prediction and Medicine Providence Through Consortium Reliant Visage Prognostication Model for lot Health Monitoring.	O
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22	PolSAR Image Building Extraction with G0 Statistical Texture Using Convolutional Neural Network and Superpixel. 2023 , 15, 1451	O
21	A Federated Learning-Inspired Evolutionary Algorithm: Application to Glucose Prediction. 2023 , 23, 2957	O
20	Machine Learning-Based Improvement of Aerosol Optical Depth from CHIMERE Simulations Using MODIS Satellite Observations. 2023 , 15, 1510	O

19	Video summarization using deep learning techniques: a detailed analysis and investigation.	О
18	Deep learning-based methods in structural reliability analysis: a review. 2023 , 34, 072001	O
17	Stretching Deep Architectures: A Deep Learning Method without Back-Propagation Optimization. 2023 , 12, 1537	O
16	Comparison of Performance of GLM, RF and DL Models in Estimation of Reference Evapotranspiration in Zabol Synoptic Station. 2020 , 11, 210-219	O
15	Accuracy and Architecture Studies of Residual Neural Network Method for Ordinary Differential Equations. 2023 , 95,	О
14	Survey on Decoding Schemes of the Polar Code Using the Deep Learning. 2023 , 152-157	O
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12	Utilizing Variable Auto Encoder-based TDO Optimization Algorithm for Predicting Loneliness from Electrocardiogram Signals.	O
11	A deep neural network framework to derive interpretable decision rules for accurate traumatic brain injury identification of infants. 2023 , 23,	O
10	Auto-Encoders in Deep Learning A Review with New Perspectives. 2023, 11, 1777	O
9	Classification of potato diseases using deep learning apprach. 2023,	O
8	Multimodal Fusion with Dual-Attention Based on Textual Double-Embedding Networks for Rumor Detection. 2023 , 13, 4886	O
7	Mapping Tree Species Using CNN from Bi-Seasonal High-Resolution Drone Optic and LiDAR Data. 2023 , 15, 2140	O
6	IoT-Enabled Potato Diseases Prediction using Deep Learning. 2023,	O
5	Statistical Machine Learning. 2023, 865-886	O
4	Multimodal medical tensor fusion network-based DL framework for abnormality prediction from the radiology CXRs and clinical text reports.	O
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2	Improving video surveillance systems in banks using deep learning techniques. 2023 , 13,	O

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