

# CITATION REPORT

List of articles citing

## A Deep Learning Approach to on-Node Sensor Data Analytics for Mobile or Wearable Devices

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#	Paper	IF	Citations
291	Learning Deep and Shallow Features for Human Activity Recognition. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 469-482	0.9	13
290	Toward Accurate and Efficient Feature Selection for Speaker Recognition on Wearables. <b>2017</b> ,		3
289	. <b>2017</b> , 17, 29-63		44
288	Inertial-Vision: Cross-Domain Knowledge Transfer for Wearable Sensors. <b>2017</b> ,		8
287	Deep Recurrent Neural Networks for Human Activity Recognition. <i>Sensors</i> , <b>2017</b> , 17,	3.8	192
286	A hybrid method for activity monitoring using principal component analysis and back-propagation neural network. <b>2017</b> ,		1
285	Internet of things: a survey of challenges and issues. <b>2018</b> , 1, 40		16
284	Robust Human Activity Recognition using smartwatches and smartphones. <b>2018</b> , 72, 190-202		46
283	Human Activity Recognition from Body Sensor Data using Deep Learning. <b>2018</b> , 42, 99		55
282	An Internet of Things based physiological signal monitoring and receiving system for virtual enhanced health care network. <b>2018</b> , 26, 379-385		16
281	Real-Time Multilead Convolutional Neural Network for Myocardial Infarction Detection. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2018</b> , 22, 1434-1444	7.2	77
280	. <b>2018</b> , 56, 78-86		41
279	A Survey of Deep Learning: Platforms, Applications and Emerging Research Trends. <i>IEEE Access</i> , <b>2018</b> , 6, 24411-24432	3.5	265
278	Spectrometry analysis based on approximation coefficients and deep belief networks. <b>2018</b> , 29, 1		8
277	Deep learning algorithms for human activity recognition using mobile and wearable sensor networks: State of the art and research challenges. <i>Expert Systems With Applications</i> , <b>2018</b> , 105, 233-261	7.8	352
276	Deep learning for healthcare: review, opportunities and challenges. <b>2018</b> , 19, 1236-1246		762
275	Iss2Image: A Novel Signal-Encoding Technique for CNN-Based Human Activity Recognition. <i>Sensors</i> , <b>2018</b> , 18,	3.8	31

274	A Framework for Automatic Recognition of Cell Damage on Microscopic Images using Artificial Neural Networks. <b>2018</b> , 2018, 636-639		1
273	A Robust Deep Learning Approach for Position-Independent Smartphone-Based Human Activity Recognition. <i>Sensors</i> , <b>2018</b> , 18,	3.8	28
272	Learning analytics for IoE based educational model using deep learning techniques: architecture, challenges and applications. <b>2018</b> , 5,		22
271	MV-Sports: A Motion and Vision Sensor Integration-Based Sports Analysis System. <b>2018</b> ,		8
270	WearableDL: Wearable Internet-of-Things and Deep Learning for Big Data Analytics Concept, Literature, and Future. <b>2018</b> , 2018, 1-20		12
269	Action Detection and Recognition in Continuous Action Streams by Deep Learning-Based Sensing Fusion. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 9660-9668	4	34
268	SDN-Based Multi-Tier Computing and Communication Architecture for Pervasive Healthcare. <i>IEEE Access</i> , <b>2018</b> , 6, 56765-56781	3.5	9
267	A Comparative Study of Supervised Learning Techniques for Human Activity Monitoring Using Smart Sensors. <b>2018</b> ,		4
266	Feature Representation and Data Augmentation for Human Activity Classification Based on Wearable IMU Sensor Data Using a Deep LSTM Neural Network. <i>Sensors</i> , <b>2018</b> , 18,	3.8	87
265	Convolutional Neural Networks for Human Activity Recognition Using Body-Worn Sensors. <b>2018</b> , 5, 26		60
264	A robust convolutional neural network for online smartphone-based human activity recognition. <b>2018</b> , 35, 1609-1620		16
263	Multi-Channels LSTM Networks for Fence Activity Classification. <b>2018</b> , E101.D, 2173-2177		0
262	Knowledge discovery for enabling smart Internet of Things: A survey. <b>2018</b> , 8, e1276		4
261	A Novel Integrated Smart System for Indoor Air Monitoring and Gas Recognition. <b>2018</b> ,		10
260	Introduction to the Special Section: Convergence of Automation Technology, Biomedical Engineering, and Health Informatics Toward the Healthcare 4.0. <b>2018</b> , 11, 249-259		56
259	Optical Sensor Based Gestures Inference Using Recurrent Neural Network in Mobile Conditions. <b>2018</b> ,		3
258	Comparison of Data Preprocessing Approaches for Applying Deep Learning to Human Activity Recognition in the Context of Industry 4.0. <i>Sensors</i> , <b>2018</b> , 18,	3.8	47
257	Activity Recognition Invariant to Wearable Sensor Unit Orientation Using Differential Rotational Transformations Represented by Quaternions. <i>Sensors</i> , <b>2018</b> , 18,	3.8	15

256	Deep Learning for IoT Big Data and Streaming Analytics: A Survey. <b>2018</b> , 20, 2923-2960		574
255	Data fusion and multiple classifier systems for human activity detection and health monitoring: Review and open research directions. <i>Information Fusion</i> , <b>2019</b> , 46, 147-170	16.7	151
254	Activity-aware essential tremor evaluation using deep learning method based on acceleration data. <b>2019</b> , 58, 17-22		15
253	Evolutionary Design of Recurrent Neural Network Architecture for Human Activity Recognition. <b>2019</b> ,		4
252	Deep Learning for Monitoring of Human Gait: A Review. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 9575-9591	4	41
251	Survey On Applications Of Internet Of Things Using Machine Learning. <b>2019</b> ,		5
250	Characterization of Industry 4.0 Lean Management Problem-Solving Behavioral Patterns Using EEG Sensors and Deep Learning. <i>Sensors</i> , <b>2019</b> , 19,	3.8	19
249	Human Activity Recognition Using Inertial Sensors in a Smartphone: An Overview. <i>Sensors</i> , <b>2019</b> , 19,	3.8	65
248	DeepMorse: A Deep Convolutional Learning Method for Blind Morse Signal Detection in Wideband Wireless Spectrum. <i>IEEE Access</i> , <b>2019</b> , 7, 80577-80587	3.5	15
247	. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 7565-7574	4	3
246	Learning the Orientation of a Loosely-Fixed Wearable IMU Relative to the Body Improves the Recognition Rate of Human Postures and Activities. <i>Sensors</i> , <b>2019</b> , 19,	3.8	4
245	Deep Learning and Big Data in Healthcare: A Double Review for Critical Beginners. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 2331	2.6	39
244	Hierarchical multi-view aggregation network for sensor-based human activity recognition. <b>2019</b> , 14, e0221390		11
243	Multi-Sensor Fusion for Activity Recognition-A Survey. <i>Sensors</i> , <b>2019</b> , 19,	3.8	25
242	Case-Based Reasoning Research and Development. <i>Lecture Notes in Computer Science</i> , <b>2019</b> ,	0.9	2
241	An Energy-Efficient Method for Human Activity Recognition with Segment-Level Change Detection and Deep Learning. <i>Sensors</i> , <b>2019</b> , 19,	3.8	12
240	IoT-based Architectures for Sensing and Local Data Processing in Ambient Intelligence: Research and Industrial Trends. <b>2019</b> ,		9
239	. <b>2019</b> , 21, 2671-2701		253

238	Landscape of Big Medical Data: A Pragmatic Survey on Prioritized Tasks. <i>IEEE Access</i> , <b>2019</b> , 7, 15590-15615	3.5	0
237	. <b>2019</b> , 8, 78-83		13
236	AI on the Move: From On-Device to On-Multi-Device. <b>2019</b> ,		3
235	Virtual Sensors for Optimal Integration of Human Activity Data. <i>Sensors</i> , <b>2019</b> , 19,	3.8	3
234	Process Management in IoT Operating Systems: Cross-Influence between Processing and Communication Tasks in End-Devices. <i>Sensors</i> , <b>2019</b> , 19,	3.8	14
233	. <i>IEEE Access</i> , <b>2019</b> , 7, 37650-37663	3.5	17
232	Deep Learning - An Emerging Paradigm. <i>SSRN Electronic Journal</i> , <b>2019</b> ,	1	
231	Review of the Complexity of Managing Big Data of the Internet of Things. <b>2019</b> , 2019, 1-12		10
230	Rehab-Net: Deep Learning Framework for Arm Movement Classification Using Wearable Sensors for Stroke Rehabilitation. <b>2019</b> , 66, 3026-3037		51
229	Recognition and Repetition Counting for Complex Physical Exercises with Deep Learning. <i>Sensors</i> , <b>2019</b> , 19,	3.8	19
228	Technology Support for Autistic People: A survey. <b>2019</b> ,		
227	A Concise Temporal Data Representation Model for Prediction in Biomedical Wearable Devices. <b>2019</b> , 6, 1438-1445		4
226	Energy-Oriented Designs of an Augmented-Reality Application on a VUZIX Blade Smart Glass. <b>2019</b> ,		2
225	Bidirectional Gated Recurrent Units For Human Activity Recognition Using Accelerometer Data. <b>2019</b> ,		4
224	HARGRURNN: Human activity recognition using inertial body sensor gated recurrent units recurrent neural network. <b>2019</b> , 22, 1577-1587		3
223	A Deep Convolutional-Recurrent Neural Network for Freezing of Gait Detection in Patients with Parkinson's Disease. <b>2019</b> ,		3
222	A review of AI Technologies for Wearable Devices. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2019</b> , 688, 044072	0.4	5
221	MIGOU: A Low-Power Experimental Platform with Programmable Logic Resources and Software-Defined Radio Capabilities. <i>Sensors</i> , <b>2019</b> , 19,	3.8	4

220	Detection of Tennis Activities with Wearable Sensors. <i>Sensors</i> , <b>2019</b> , 19,	3.8	6
219	Unravelling machine learning: insights in respiratory medicine. <b>2019</b> , 54,		14
218	Resource-Aware Distributed Epilepsy Monitoring Using Self-Awareness From Edge to Cloud. <b>2019</b> , 13, 1338-1350		20
217	A Survey on Deep Learning Empowered IoT Applications. <i>IEEE Access</i> , <b>2019</b> , 7, 181721-181732	3.5	45
216	Wearable Devices for Monitoring Dementia Sufferers: A Review and Framework for Discussion. <b>2019</b> ,		0
215	Deep Learning for Multimodal Fall Detection. <b>2019</b> ,		5
214	Wearable Sport Activity Classification Based on Deep Convolutional Neural Network. <i>IEEE Access</i> , <b>2019</b> , 7, 170199-170212	3.5	13
213	A Survey on Energy Efficient Narrowband Internet of Things (NBIoT): Architecture, Application and Challenges. <i>IEEE Access</i> , <b>2019</b> , 7, 16739-16776	3.5	111
212	Deep Learning Approaches to Electrophysiological Multivariate Time-Series Analysis. <b>2019</b> , 219-243		8
211	Analysing the power of deep learning techniques over the traditional methods using medicare utilisation and provider data. <b>2019</b> , 31, 99-115		7
210	Deep learning for sensor-based activity recognition: A survey. <b>2019</b> , 119, 3-11		689
209	Learning Analytics in Distance and Mobile Learning for Designing Personalised Software. <i>Intelligent Systems Reference Library</i> , <b>2020</b> , 185-203	0.8	4
208	A Normalized Figure of Merit for Capacitive Accelerometer Interface Circuits. <b>2020</b> , 67, 19-22		0
207	Vision-Based Freezing of Gait Detection With Anatomic Directed Graph Representation. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2020</b> , 24, 1215-1225	7.2	18
206	A Handbook of Internet of Things in Biomedical and Cyber Physical System. <i>Intelligent Systems Reference Library</i> , <b>2020</b> ,	0.8	3
205	A SVM Algorithm for Falling Detection in an IoTs-Based System. <i>Intelligent Systems Reference Library</i> , <b>2020</b> , 139-170	0.8	4
204	Intelligent Human Counting through Environmental Sensing in Closed Indoor Settings. <b>2020</b> , 25, 474-490		1
203	Deep learning and big data technologies for IoT security. <b>2020</b> , 151, 495-517		108

202	A Localized Learning Approach Applied to Human Activity Recognition. <b>2020</b> , 1-1		3
201	Automatic equine activity detection by convolutional neural networks using accelerometer data. <b>2020</b> , 168, 105139		11
200	Resampling and Data Augmentation For Equines Behaviour Classification Based on Wearable Sensor Accelerometer Data Using a Convolutional Neural Network. <b>2020</b> ,		2
199	Hybridized Hierarchical Deep Convolutional Neural Network for Sports Rehabilitation Exercises. <i>IEEE Access</i> , <b>2020</b> , 8, 118969-118977	3.5	17
198	. <b>2020</b> , 6, 39-48		6
197	Reconstruction Technique of Distorted Sensor Signals With Low-Pass NGD Function. <i>IEEE Access</i> , <b>2020</b> , 1-1	3.5	3
196	Foot type classification using sensor-enabled footwear and 1D-CNN. <b>2020</b> , 165, 108184		7
195	Discrete wavelet transform based data representation in deep neural network for gait abnormality detection. <b>2020</b> , 62, 102076		11
194	Smartphone Motion Sensor-Based Complex Human Activity Identification Using Deep Stacked Autoencoder Algorithm for Enhanced Smart Healthcare System. <i>Sensors</i> , <b>2020</b> , 20,	3.8	6
193	Effect of Reduced Dimensionality on Deep learning for Human Activity Recognition. <b>2020</b> ,		1
192	Literature review and analysis on big data stream classification techniques. <b>2020</b> , 24, 205-215		1
191	Computation-Affordable Recognition System for Activity Identification using a Smart Phone at Home. <b>2020</b> ,		2
190	Ink-Based Additive Nanomanufacturing of Functional Materials for Human-Integrated Smart Wearables. <b>2020</b> , 2, 2000117		9
189	PhD Forum Abstract: Activity Classification at the Edge. <b>2020</b> ,		1
188	. <i>IEEE Access</i> , <b>2020</b> , 8, 146376-146394	3.5	6
187	A Comparison of Unidirectional and Bidirectional LSTM Networks for Human Activity Recognition. <b>2020</b> ,		3
186	Golf Swing Segmentation from a Single IMU Using Machine Learning. <i>Sensors</i> , <b>2020</b> , 20,	3.8	5
185	Accurate human activity recognition with multi-task learning. <b>2020</b> , 2, 288-298		0

184	. <b>2020</b> , 69, 13718-13727		2
183	Multivariate Time Series Classification With An Attention-Based Multivariate Convolutional Neural Network. <b>2020</b> ,		2
182	. <b>2020</b> ,		3
181	Human Activity Recognition Based on Gramian Angular Field and Deep Convolutional Neural Network. <i>IEEE Access</i> , <b>2020</b> , 8, 199393-199405	3.5	15
180	Vision-based human activity recognition: a survey. <b>2020</b> , 79, 30509-30555		70
179	Evolving Deep Recurrent Neural Networks Using A New Variable-Length Genetic Algorithm. <b>2020</b> ,		1
178	Research of Epidemic Big Data Based on Improved Deep Convolutional Neural Network. <b>2020</b> , 2020, 3641745		1
177	Real-Time Physical Activity Recognition on Smart Mobile Devices Using Convolutional Neural Networks. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 8482	2.6	11
176	A Framework of Combining Short-Term Spatial/Frequency Feature Extraction and Long-Term IndRNN for Activity Recognition. <i>Sensors</i> , <b>2020</b> , 20,	3.8	6
175	Efficient Learning of Healthcare Data from IoT Devices by Edge Convolution Neural Networks. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 8934	2.6	3
174	Deep learning for internet of things in fog computing: Survey and Open Issues. <b>2020</b> ,		3
173	An Overview of IoT Sensor Data Processing, Fusion, and Analysis Techniques. <i>Sensors</i> , <b>2020</b> , 20,	3.8	49
172	PP-Net: A Deep Learning Framework for PPG-Based Blood Pressure and Heart Rate Estimation. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 10000-10011	4	35
171	Classical and deep learning methods for recognizing human activities and modes of transportation with smartphone sensors. <i>Information Fusion</i> , <b>2020</b> , 62, 47-62	16.7	28
170	Improving physical activity recognition using a new deep learning architecture and post-processing techniques. <b>2020</b> , 92, 103679		18
169	The Effect of Axis-Wise Triaxial Acceleration Data Fusion in CNN-Based Human Activity Recognition. <b>2020</b> , E103.D, 813-824		0
168	Optimized unsupervised deep learning assisted reconstructed coder in the on-nodule wearable sensor for human activity recognition. <b>2020</b> , 164, 108050		30
167	Cognitive Computing in Human Cognition. <i>Learning and Analytics in Intelligent Systems</i> , <b>2020</b> ,	0.3	0



166	Smartphone based human activity monitoring and recognition using ML and DL: a comprehensive survey. <i>Journal of Ambient Intelligence and Humanized Computing</i> , <b>2020</b> , 11, 5433-5444	3.7	18
165	Activity Monitoring of Islamic Prayer (Salat) Postures using Deep Learning. <b>2020</b> ,		3
164	A study of deep neural networks for human activity recognition. <b>2020</b> , 36, 1113-1139		16
163	Ten caveats of learning analytics in health professions education: A consumer's perspective. <b>2020</b> , 42, 673-678		7
162	Towards a Secure Internet of Things: A Comprehensive Study of Second Line Defense Mechanisms. <i>IEEE Access</i> , <b>2020</b> , 8, 127272-127312	3.5	6
161	Adversarial Attacks and Defenses on CyberPhysical Systems: A Survey. <b>2020</b> , 7, 5103-5115		16
160	. <b>2020</b> , 22, 1121-1167		230
159	Cyber-Physiochemical Interfaces. <b>2020</b> , 32, e1905522		37
158	Classifying Daily and Sports Activities Invariantly to the Positioning of Wearable Motion Sensor Units. <b>2020</b> , 7, 4801-4815		17
157	Choosing the Best Sensor Fusion Method: A Machine-Learning Approach. <i>Sensors</i> , <b>2020</b> , 20,	3.8	7
156	Wearable Computing With Distributed Deep Learning Hierarchy: A Study of Fall Detection. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 9408-9416	4	13
155	Adversarial Attacks on Time Series. <b>2021</b> , 43, 3309-3320		17
154	Review of automated emotion-based quantification of facial expression in Parkinson's patients. <b>2021</b> , 37, 1151-1167		3
153	Analysis of real-time heartbeat monitoring using wearable device Internet of Things system in sports environment. <b>2021</b> , 37, 1080-1097		7
152	Deep-Learning-Enabled Security Issues in the Internet of Things. <b>2021</b> , 8, 9531-9538		40
151	Clustering-Learning-Based Long-Term Predictive Localization in 5G-Envisioned Internet of Connected Vehicles. <b>2021</b> , 22, 5232-5246		7
150	A spatiotemporal multi-feature extraction framework with space and channel based squeeze-and-excitation blocks for human activity recognition. <i>Journal of Ambient Intelligence and Humanized Computing</i> , <b>2021</b> , 12, 7983-7995	3.7	3
149	A Review on the Effectiveness of Machine Learning and Deep Learning Algorithms for Cyber Security. <b>2021</b> , 28, 2861-2879		19

148	Trust and energy aware routing algorithm for Internet of Things networks. <b>2021</b> , 34, e2858		2
147	Pathological gait pattern analysis using inertial sensor. <b>2021</b> , 81-100		
146	Discriminant Knowledge Extraction from Electrocardiograms for Automated Diagnosis of Myocardial Infarction. <i>Lecture Notes in Computer Science</i> , <b>2021</b> , 70-82	0.9	0
145	Emerging Wearable Interfaces and Algorithms for Hand Gesture Recognition: A Survey. <b>2021</b> , PP,		15
144	Inertial Sensing Meets Machine Learning: Opportunity or Challenge?. <b>2021</b> , 1-17		3
143	Application of wearable devices in 6G internet of things communication environment using artificial intelligence. <b>2021</b> , 12, 741-747		2
142	A time-efficient convolutional neural network model in human activity recognition. <b>2021</b> , 80, 19361-19376		7
141	S-THAD: a framework for sensor-based temporal human activity detection from continuous data streams. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 1	3.7	
140	Scaling Spectrogram Data Representation for Deep Learning on Edge TPU. <b>2021</b> ,		2
139	Sensor-data augmentation for human activity recognition with time-warping and data masking. <b>2021</b> , 80, 20991-21009		2
138	A Modelling of Context-Aware Elderly Healthcare Eco-System-(CA-EHS) Using Signal Analysis and Machine Learning Approach. <i>Wireless Personal Communications</i> , <b>2021</b> , 119, 2501-2516	1.9	4
137	Multimodal discourse analysis in the blended teaching of college English flipped class. 002072092110042		1
136	Predicting lying, sitting, walking and running using Apple Watch and Fitbit data. <i>BMJ Open Sport and Exercise Medicine</i> , <b>2021</b> , 7, e001004	3.4	2
135	Long-term rate control for concurrent multipath real-time video transmission in heterogeneous wireless networks. <b>2021</b> , 77, 102999		0
134	Position Invariance for Wearables: Interchangeability and Single-Unit Usage via Machine Learning. <b>2021</b> , 8, 8328-8342		2
133	Deep Learning for Sensor-based Human Activity Recognition. <i>ACM Computing Surveys</i> , <b>2021</b> , 54, 1-40	13.4	30
132	Wearable Devices for Gait Analysis in Intelligent Healthcare. <b>2021</b> , 3,		8
131	Role of emerging technologies in future IoT-driven Healthcare 4.0 technologies: a survey, current challenges and future directions. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 1	3.7	9

130	Cyber forensic framework for big data analytics using Sunflower Jaya optimization-based Deep stacked autoencoder. <b>2021</b> , 34, e2892		1
129	Luminance-Degradation Compensation Based on Multistream Self-Attention to Address Thin-Film Transistor-Organic Light Emitting Diode Burn-In. <i>Sensors</i> , <b>2021</b> , 21,	3.8	
128	Decision-Making under Uncertainty for the Deployment of Future Hyperconnected Networks: A Survey. <i>Sensors</i> , <b>2021</b> , 21,	3.8	1
127	Sensor-Driven Achieving of Smart Living: A Review. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 10369-10391	4	23
126	Improving phoneme recognition of throat microphone speech recordings using transfer learning. <b>2021</b> , 129, 25-32		1
125	Can Appliances Understand the Behavior of Elderly Via Machine Learning? A Feasibility Study. <b>2021</b> , 8, 8343-8355		2
124	Hierarchical evolutionary classification framework for human action recognition using sparse dictionary optimization. <b>2021</b> , 63, 100873		2
123	A Review on Human Action Recognition Approaches. <b>2021</b> ,		2
122	Two-Stage Genetic Algorithm for Designing Long Short Term Memory (LSTM) Ensembles. <b>2021</b> ,		0
121	A Survey on Wearable Technology: History, State-of-the-Art and Current Challenges. <b>2021</b> , 193, 108074		50
120	A Reinforcement Learning-Based Framework for Crowdsourcing in Massive Health Care Internet of Things. <b>2021</b> ,		
119	Unsupervised Learning for Product Use Activity Recognition: An Exploratory Study of a "Chatty Device". <i>Sensors</i> , <b>2021</b> , 21,	3.8	3
118	A review of multimodal human activity recognition with special emphasis on classification, applications, challenges and future directions. <b>2021</b> , 223, 106970		25
117	A 392-pW 42.7-dB Gm-C wavelet filter for low-frequency feature extraction used for wearable sensor. <b>2021</b> , 109, 335		2
116	Deep learning-based cattle behaviour classification using joint time-frequency data representation. <b>2021</b> , 187, 106241		3
115	A Deep Learning-Based Framework for Human Activity Recognition in Smart Homes. <b>2021</b> , 2021, 1-11		2
114	A survey on deep learning for challenged networks: Applications and trends. <i>Journal of Network and Computer Applications</i> , <b>2021</b> , 194, 103213	7.9	8
113	Enhancing human activity recognition using deep learning and time series augmented data. <i>Journal of Ambient Intelligence and Humanized Computing</i> , <b>2021</b> , 12, 10565	3.7	5

112	Low-cost sensors for gait analysis. <b>2021</b> , 25-44		1
111	Wearable Devices and Privacy Concerns. <b>2021</b> , 83-111		
110	A Hybrid Model of Learning Methodology Analyzed Through the Use of Machine Learning Techniques. <b>2021</b> , 77-103		1
109	A study on smartphone sensor-based Human Activity Recognition using deep learning approaches. <b>2021</b> , 343-369		1
108	Wearable Devices and Privacy Concerns. <b>2021</b> , 208-230		
107	Deep Learning for Sensor-Based Activity Recognition: Recent Trends. <i>Intelligent Systems Reference Library</i> , <b>2021</b> , 149-173	0.8	2
106	Proactive Preventive and Evidence-Based Artificial Intelligence Models: Future Healthcare. <b>2020</b> , 463-472		2
105	Human Activity Recognition from Multiple Sensors Data Using Multi-fusion Representations and CNNs. <b>2020</b> , 16, 1-19		10
104	Auto-Encoder based Deep Learning for Surface Electromyography Signal Processing. <b>2018</b> , 3, 94-102		3
103	Closing the Wearable Gap-Part V: Development of a Pressure-Sensitive Sock Utilizing Soft Sensors. <i>Sensors</i> , <b>2019</b> , 20,	3.8	12
102	Deep Learning for Healthcare Biometrics. <i>Advances in Medical Technologies and Clinical Practice Book Series</i> , <b>2019</b> , 73-108	0.3	2
101	Wearables, Artificial intelligence, and the Future of Healthcare. <b>2020</b> , 104-129		10
100	Quantified Self-Using Consumer Wearable Device: Predicting Physical and Mental Health. <b>2020</b> , 26, 83-92		9
99	Human Activity Recognition Based on Acceleration Data From Smartphones Using HMMs. <i>IEEE Access</i> , <b>2021</b> , 9, 139336-139351	3.5	3
98	Activity Identification using Supervised Machine Learning on Wearable Activity Tracker Data. <b>2021</b> ,		
97	PPG-Based Non-invasive Methodologies for Pervasive Monitoring of Vitals: BP and HR. <b>2022</b> , 87-99		
96	Deep Learning-Based Optimal Smart Shoes Sensor Selection for Energy Expenditure and Heart Rate Estimation. <i>Sensors</i> , <b>2021</b> , 21,	3.8	0
95	Application of Deep Learning for Quality of Service Enhancement in Internet of Things: A Review. <b>2021</b> , 14, 6384		2

94	A systematic review of smartphone-based human activity recognition methods for health research. <b>2021</b> , 4, 148		10
93	Human Activity Recognition: A Comparative Study to Assess the Contribution Level of Accelerometer, ECG, and PPG Signals. <i>Sensors</i> , <b>2021</b> , 21,	3.8	4
92	Akıllı Geleneksel Giyilebilir Sağlık Cihazlarında Nesnelerin İnterneti.		1
91	Convolutional neural networks as means to identify apposite sensor combination for human activity recognition. <b>2018</b> ,		4
90	Winning the Sussex-Huawei Locomotion-Transportation Recognition Challenge. <i>Springer Series in Adaptive Environments</i> , <b>2019</b> , 233-250	0.3	2
89	NOD-CC: A Hybrid CBR-CNN Architecture for Novel Object Discovery. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 373-387	0.9	2
88	Personalized Treatment for Opioid Use Disorder. <i>SSRN Electronic Journal</i> ,		1
87	Vision-Based Freezing of Gait Detection with Anatomic Patch Based Representation. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 564-576	0.9	2
86	Recent Research on Data Analytics Techniques for Internet of Things. <i>Communications in Computer and Information Science</i> , <b>2019</b> , 462-476	0.3	
85	Cobal -A Novel Design of CNN Basedgait Feature Extraction Using Bat-Elm for Human Tracking System. <i>IOP Conference Series: Materials Science and Engineering</i> , 993, 012094	0.4	
84	Eye State Classification Through Analysis of EEG Data Using Deep Learning. <b>2020</b> ,		0
83	Internet of Things in Healthcare. <i>Advances in Medical Technologies and Clinical Practice Book Series</i> , <b>2020</b> , 23-39	0.3	1
82	Graph Based Approach for Image Data Retrieval in Medical Application. <i>Learning and Analytics in Intelligent Systems</i> , <b>2020</b> , 91-98	0.3	0
81	On-Body Piezoelectric Energy Harvesters through Innovative Designs and Conformable Structures. <i>ACS Biomaterials Science and Engineering</i> , <b>2021</b> ,	5.5	3
80	Bıyık Göz Aktivitelerinin Yeni Bir Veri Kütlesi: Derin Öğrenme Tekniklerini Kullanarak Sağlık Performansını Ölçme Sonuçları		0
79	Flexible one-dimensional Zn-based electrochemical energy storage devices: recent progress and future perspectives. <i>Journal of Materials Chemistry A</i> ,	13	0
78	Application of artificial intelligence in wearable devices: Opportunities and challenges. <i>Computer Methods and Programs in Biomedicine</i> , <b>2022</b> , 213, 106541	6.9	13
77	Ecological momentary assessment and other digital technologies for capturing daily life in mental health. <b>2022</b> , 81-108		1

76	Multi-sensor information fusion based on machine learning for real applications in human activity recognition: State-of-the-art and research challenges. <i>Information Fusion</i> , <b>2022</b> , 80, 241-265	16.7	44
75	Smart Healthcare, IoT and Machine Learning: A Complete Survey. <i>Intelligent Systems Reference Library</i> , <b>2022</b> , 307-330	0.8	
74	Emerging Artificial Intelligence-Empowered Mobile Health: A scoping review (Preprint).		
73	Deep learning method for karate motion identification using inertial sensor data. <i>Transactions of the JSME (in Japanese)</i> , <b>2021</b> , 87, 21-00214-21-00214	0.2	
72	Deep Learning in Computer Vision Through Mobile Edge Computing for IoT. <b>2021</b> , 443-471		0
71	. <i>IEEE Access</i> , <b>2022</b> , 10, 2408-2428	3.5	10
70	Light Weight Dilated CNN for Time Series Classification and Prediction. <b>2020</b> ,		
69	Developing Low Energy Consumption Software Defined Radio Using Internet Of Things. <b>2020</b> ,		
68	Wearable Accelerometer Layout Optimization for Activity Recognition Based on Swarm Intelligence and User Preference. <i>IEEE Access</i> , <b>2021</b> , 9, 166906-166919	3.5	1
67	Towards Real-time Learning for Edge-Cloud Continuum with Vehicular Computing. <b>2021</b> ,		1
66	Activity Graph based Convolutional Neural Network for Physical Activity Recognition using Acceleration and Gyroscope Data. <i>IEEE Transactions on Industrial Informatics</i> , <b>2022</b> , 1-1	11.9	1
65	Human Activity Recognition Using Stacked LSTM. <i>Lecture Notes in Networks and Systems</i> , <b>2022</b> , 33-42	0.5	
64	CHIMERA: A 0.92-TOPS, 2.2-TOPS/W Edge AI Accelerator With 2-MByte On-Chip Foundry Resistive RAM for Efficient Training and Inference. <i>IEEE Journal of Solid-State Circuits</i> , <b>2022</b> , 1-1	5.5	3
63	ConvAE-LSTM: Convolutional Autoencoder Long Short-Term Memory Network for Smartphone-Based Human Activity Recognition. <i>IEEE Access</i> , <b>2022</b> , 10, 4137-4156	3.5	7
62	Daily Living Activity Recognition In-The-Wild: Modeling and Inferring Activity-Aware Human Contexts. <i>Electronics (Switzerland)</i> , <b>2022</b> , 11, 226	2.6	0
61	A Survey of Techniques for Fulfilling the Time-Bound Requirements of Time-Sensitive IoT Applications. <i>ACM Computing Surveys</i> ,	13.4	1
60	Wearable GPS and Accelerometer Technologies for Monitoring Mobility and Physical Activity in Neurodegenerative Disorders: A Systematic Review.. <i>Sensors</i> , <b>2021</b> , 21,	3.8	2
59	TTGN: Two-Tier Geographical Networking for Industrial Internet of Things With Edge-Based Cognitive Computing. <i>IEEE Access</i> , <b>2022</b> , 10, 22238-22246	3.5	0

58	Machine Learning and Deep Learning as New Tools for Business Analytics. <i>Advances in Business Information Systems and Analytics Book Series</i> , <b>2022</b> , 166-188	0.4	0
57	Wearable Sensor-Based Human Activity Recognition in the Smart Healthcare System.. <i>Computational Intelligence and Neuroscience</i> , <b>2022</b> , 2022, 1391906	3	5
56	Personalized human activity recognition using deep learning and edge-cloud architecture. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 1	3.7	0
55	Smart Clothing Framework for Health Monitoring Applications. <i>Signals</i> , <b>2022</b> , 3, 113-145	1.2	3
54	SmartAirQ: A Big Data Governance Framework for Urban Air Quality Management in Smart Cities. <i>Frontiers in Environmental Science</i> , <b>2022</b> , 10,	4.8	1
53	Daily Physical Activity of College Students Based on Embedded Accelerometer. <i>Wireless Communications and Mobile Computing</i> , <b>2022</b> , 2022, 1-12	1.9	
52	Machine learning in medical applications: A review of state-of-the-art methods.. <i>Computers in Biology and Medicine</i> , <b>2022</b> , 145, 105458	7	19
51	Emerging Artificial Intelligence-Empowered Mobile Health: A Scoping Review (Preprint). <i>JMIR MHealth and UHealth</i> ,	5.5	1
50	Fusion Models for Generalized Classification of Multi-Axial Human Movement: Validation in Sport Performance.. <i>Sensors</i> , <b>2021</b> , 21,	3.8	1
49	Tackling Climate Change with Machine Learning. <i>ACM Computing Surveys</i> , <b>2023</b> , 55, 1-96	13.4	26
48	Tree-Based Fixed Data Transmission for Healthcare Sensor Networks. <i>Transactions on Computational Science and Computational Intelligence</i> , <b>2021</b> , 593-607	0.9	
47	IoT threat mitigation engine empowered by artificial intelligence multi-objective optimization. <i>Journal of Network and Computer Applications</i> , <b>2022</b> , 103398	7.9	1
46	Pre-Detection Sensing with Multi-Stage Low-Pass Type Negative Group Delay Circuit. <i>IEEE Sensors Journal</i> , <b>2022</b> , 1-1	4	1
45	Transforming Deep Learning Models for Resource-Efficient Activity Recognition on Mobile Devices. <b>2022</b> ,		1
44	Feasibility of DRNN for Identifying Built Environment Barriers to Walkability Using Wearable Sensor Data from PedestriansGait. <i>Applied Sciences (Switzerland)</i> , <b>2022</b> , 12, 4384	2.6	
43	iHearken: Chewing sound signal analysis based food intake recognition system using Bi-LSTM softmax network. <i>Computer Methods and Programs in Biomedicine</i> , <b>2022</b> , 106843	6.9	
42	A Wearable Real-Time Character Recognition System Based on Edge Computing-Enabled Deep Learning for Air-Writing. <i>Journal of Sensors</i> , <b>2022</b> , 2022, 1-12	2	3
41	The Construction of Sports Health Management Model Based on Deep Learning. <i>Applied Bionics and Biomechanics</i> , <b>2022</b> , 2022, 1-10	1.6	0

40	Fast Connectivity Construction via Deep Channel Learning Cognition in Beyond 5G D2D Networks. <i>Electronics (Switzerland)</i> , <b>2022</b> , 11, 1580	2.6	
39	Computational Aspects in BSN-Based Wearable Computing Systems: From Raw-Data Collection to High-Level Data Analysis. <b>2022</b> ,		
38	Multitemporal Sampling Module for Real-Time Human Activity Recognition. <i>IEEE Access</i> , <b>2022</b> , 10, 545073545152	3.5	
37	Predicting lying, sitting and walking at different intensities using smartphone accelerometers at three different wear locations: hands, pant pockets, backpack. <i>BMJ Open Sport and Exercise Medicine</i> , <b>2022</b> , 8, e001242	3.4	0
36	A Survey of Machine Learning and Meta-heuristics Approaches for Sensor-based Human Activity Recognition Systems. <i>Journal of Ambient Intelligence and Humanized Computing</i> ,	3.7	1
35	Smart implanted access port catheter for therapy intervention with pH and lactate biosensors. <i>Materials Today Bio</i> , <b>2022</b> , 15, 100298	9.9	1
34	A Supervised Autoencoder for Human Activity Recognition with Inertial Sensors. <i>SSRN Electronic Journal</i> ,	1	
33	Human Activity Recognition Systems Based on Audio-Video Data Using Machine Learning and Deep Learning. <i>Smart Computing and Intelligence</i> , <b>2022</b> , 151-175	1.1	
32	Human Activity Recognition Systems Based on Sensor Data Using Machine Learning. <i>Smart Computing and Intelligence</i> , <b>2022</b> , 121-150	1.1	
31	The Application of Successful Physical Education Teaching Mode Integrating Deep Learning in Basketball Teaching. <i>Wireless Communications and Mobile Computing</i> , <b>2022</b> , 2022, 1-12	1.9	0
30	Transformation classification of human squat/sit-to-stand based on multichannel information fusion. <i>International Journal of Advanced Robotic Systems</i> , <b>2022</b> , 19, 172988062211037	1.4	
29	Deep transfer learning in sheep activity recognition using accelerometer data. <i>Expert Systems With Applications</i> , <b>2022</b> , 207, 117925	7.8	0
28	Evolution and Adoption of Next Generation IoT-Driven Health Care 4.0 Systems. <i>Wireless Personal Communications</i> ,	1.9	0
27	Evaluation System of Hand Motor Function by Home Rehabilitation Device. <b>2021</b> , 33, 67-76		
26	Human activity recognition using tools of convolutional neural networks: A state of the art review, data sets, challenges, and future prospects. <b>2022</b> , 149, 106060		0
25	Lead Separation and Combination: A Novel Unsupervised 12-lead ECG Feature Learning Framework for Internet of Medical Things. <b>2022</b> , 1-1		0
24	Online Learning of Wearable Sensing for Human Activity Recognition. <b>2022</b> , 1-1		0
23	?????????????????????. <b>2022</b> ,		0



22	Artificial Intelligence for Metaverse: A Framework. <b>2022</b> , 1, 54-67	1
21	Rolling Bearing Fault Detection System and Experiment Based on Deep Learning. <b>2022</b> , 2022, 1-10	0
20	A Human-in-the-loop Segmented Mixed-effects Modeling Method For Analyzing Wearables Data.	0
19	Embedded Basketball Motion Detection Video Target Tracking Algorithm Based on Deep Learning. <b>2022</b> ,	0
18	Representative-discriminative dictionary learning algorithm for human action recognition using smartphone sensors.	0
17	Conceptual structure and current trends in Artificial Intelligence, Machine Learning, and Deep Learning research in sports: A bibliometric review.	0
16	A joint cross-dimensional contrastive learning framework for 12-lead ECGs and its heterogeneous deployment on SoC. <b>2023</b> , 152, 106390	0
15	Designing a Multiple-User Wearable Edge AI system towards Human Activity Recognition. <b>2022</b> ,	0
14	Conceptual Structure and Current Trends in Artificial Intelligence, Machine Learning, and Deep Learning Research in Sports: A Bibliometric Review. <b>2023</b> , 20, 173	0
13	Deep Learning in Diverse Intelligent Sensor Based Systems. <b>2023</b> , 23, 62	1
12	DSCNN-CAU: Deep Learning-Based Mental Activity Classification for IoT Implementation Towards Portable BCI. <b>2022</b> , 1-1	0
11	A Generic Flow of Cyber-Physical systemsA Comprehensive Survey. <b>2023</b> , 223-240	0
10	Medical Data Analytics and Wearable Devices. <b>2022</b> , 6, e2	0
9	On-Device Deep Learning for Mobile and Wearable Sensing Applications: A Review. <b>2023</b> , 1-1	0
8	Technological Evolution in the Instrumentation of Ataxia Severity Measurement. <b>2023</b> , 1-1	0
7	Artificial Intelligence Based Approach for Classification of Human Activities Using MEMS Sensors Data. <b>2023</b> , 23, 1275	0
6	Cooktop Sensing Based on a YOLO Object Detection Algorithm. <b>2023</b> , 23, 2780	0
5	Exploring Edge TPU for deep feed-forward neural networks. <b>2023</b> , 22, 100749	0

- 4 Machine Learning and AI Technologies for Smart Wearables. **2023**, 12, 1509
- 3 An efficient deep learning-based approach for human activity recognition using smartphone inertial sensors. 1-14
- 2 Activity recognition of stroke-affected people using wearable sensor.
- 1 HARBIC: Human activity recognition using bi-stream convolutional neural network with dual joint timefrequency representation. **2023**, 22, 100816