Dwaipayan Biswas

List of Publications by Year
in descending order

41 papers	1,445 citations	623734 14 h-index	713466 21 g-index
41 all docs	41 docs citations	41 times ranked	1577 citing authors

#	Article	IF	Citations
1	Wearable Multiple Modality Bio-Signal Recording and Processing on Chip: A Review. IEEE Sensors Journal, 2021, 21, 1108-1123.	4.7	24
2	M2DA: A Low-Complex Design Methodology for Convolutional Neural Network Exploiting Data Symmetry and Redundancy. Circuits, Systems, and Signal Processing, 2021, 40, 1542-1567.	2.0	3
3	A Compact Chopper Stabilized Î"-Î"Î£ Neural Readout IC With Input Impedance Boosting. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 67-78.	2.7	12
4	LSTM-only Model for Low-complexity HR Estimation from Wrist PPG. , 2021, 2021, 1068-1071.		3
5	PP-Net: A Deep Learning Framework for PPG-Based Blood Pressure and Heart Rate Estimation. IEEE Sensors Journal, 2020, 20, 10000-10011.	4.7	109
6	Binary CorNET: Accelerator for HR Estimation From Wrist-PPG. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 715-726.	4.0	27
7	MyoNet: A Transfer-Learning-Based LRCN for Lower Limb Movement Recognition and Knee Joint Angle Prediction for Remote Monitoring of Rehabilitation Progress From sEMG. IEEE Journal of Translational Engineering in Health and Medicine, 2020, 8, 1-10.	3.7	55
8	A 769 Î¼W Battery-Powered Single-Chip SoC With BLE for Multi-Modal Vital Sign Monitoring Health Patches. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1506-1517.	4.0	87
9	Heart Rate Estimation From Wrist-Worn Photoplethysmography: A Review. IEEE Sensors Journal, 2019, 19, 6560-6570.	4.7	157
10	Motion Artifact Reduction for Wrist-Worn Photoplethysmograph Sensors Based on Different Wavelengths. Sensors, 2019, 19, 673.	3.8	89
11	Rehab-Net: Deep Learning Framework for Arm Movement Classification Using Wearable Sensors for Stroke Rehabilitation. IEEE Transactions on Biomedical Engineering, 2019, 66, 3026-3037.	4.2	99
12	BioTranslator: Inferring R-Peaks from Ambulatory Wrist-Worn PPG Signal. , 2019, 2019, 4241-4245.		5
13	Real-time HR Estimation from wrist PPG using Binary LSTMs. , 2019, , .		9
14	CorNET: Deep Learning Framework for PPG-Based Heart Rate Estimation and Biometric Identification in Ambulant Environment. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 282-291.	4.0	188
15	Inter-Cluster Thread-to-Core Mapping and DVFS on Heterogeneous Multi-Cores. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 369-382.	2.4	46
16	BiometricNet: Deep Learning based Biometric Identification using Wrist-Worn PPG. , 2018, , .		41
17	Coordinate Rotation-Based Low Complexity K -Means Clustering Architecture. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 1568-1572.	3.1	10
18	Low-Complexity Framework for Movement Classification Using Body-Worn Sensors. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 1537-1548.	3.1	7

#	Article	IF	Citations
19	Machine learning for run-time energy optimisation in many-core systems. , 2017, , .		14
20	Architecture for complex network measures of brain connectivity. , 2017, , .		6
21	Modified distributed arithmetic based low complexity CNN architecture design methodology. , 2017, , .		12
22	CNN based approach for activity recognition using a wrist-worn accelerometer. , 2017, 2017, 2438-2441.		85
23	Low Complexity Single Channel ICA Architecture Design Methodology for Pervasive Healthcare Applications. , 2016, , .		8
24	Classifying human emotional states using wireless EEG based ERP and functional connectivity measures. , 2016, , .		9
25	Analysing wireless EEG based functional connectivity measures with respect to change in environmental factors. , 2016, , .		2
26	K-nearest neighbor based methodology for accurate diagnosis of diabetes mellitus. , 2016, , .		22
27	Body Area Sensing Networks for Remote Health Monitoring. , 2016, , 85-136.		2
28	Detecting Elementary Arm Movements by Tracking Upper Limb Joint Angles With MARG Sensors. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 1088-1099.	6.3	32
29	Evaluations with Patients and Lessons Learned. , 2016, , 295-324.		0
30	Prototyping and Business Potential. , 2016, , 233-293.		0
31	A CORDIC-Based Low-Power Statistical Feature Computation Engine for WSN Applications. Circuits, Systems, and Signal Processing, 2015, 34, 4011-4028.	2.0	7
32	Real-time arm movement recognition using FPGA. , 2015, , .		5
33	Recognizing upper limb movements with wrist worn inertial sensors using k-means clustering classification. Human Movement Science, 2015, 40, 59-76.	1.4	82
34	On the data analysis for classification of elementary upper limb movements. Biomedical Engineering Letters, 2014, 4, 403-413.	4.1	7
35	Recognition of elementary arm movements using orientation of a tri-axial accelerometer located near the wrist. Physiological Measurement, 2014, 35, 1751-1768.	2.1	20
36	Recognition of Elementary Upper Limb Movements in an Activity of Daily Living Using Data from Wrist Mounted Accelerometers. , 2014, , .		3

#	Article	IF	Citations
37	On the sensor choice and data analysis for classification of elementary upper limb movements. , 2014, , .		3
38	Telemedicine system for game-based rehabilitation of stroke patients in the FP7-&#x201C;StrokeBack&#x201D; project. , 2014, , .		6
39	An Investigation into the Accuracy of Calculating upper Body Joint Angles Using MARG Sensors. Procedia Engineering, 2014, 87, 1330-1333.	1.2	1
40	A Low-Complexity ECG Feature Extraction Algorithm for Mobile Healthcare Applications. IEEE Journal of Biomedical and Health Informatics, 2013, 17, 459-469.	6.3	143
41	ECG compression for remote healthcare systems using selective thresholding based on energy compaction. , 2012, , .		5