Kayvan Najarian

List of Publications by Year in Descending Order

94 papers	1,079 citations	16 h-index	29 g-index
109 ext. papers	1,483 ext. citations	3.6 avg, IF	4.78 L-index

#	Paper	IF	Citations
94	Vessel segmentation for X-ray coronary angiography using ensemble methods with deep learning and filter-based features.. *BMC Medical Imaging*, **2022**, 22, 10	2.9	1
93	A deep learning framework for automated detection and quantitative assessment of liver trauma.. *BMC Medical Imaging*, **2022**, 22, 39	2.9	0
92	A hierarchical expert-guided machine learning framework for clinical decision support systems: an application to traumatic brain injury prognostication. *Npj Digital Medicine*, **2021**, 4, 78	15.7	4
91	Decision Support Systems in Temporomandibular Joint Osteoarthritis: A review of Data Science and Artificial Intelligence Applications. *Seminars in Orthodontics*, **2021**, 27, 78-86	1.2	4
90	Detection of Low Cardiac Index using a Polyvinylidene Fluoride-Based Wearable Ring and Convolutional Neural Networks. *IEEE Sensors Journal*, **2021**, 21, 14281-14289	4	0
89	Machine learning approaches and databases for prediction of drug-target interaction: a survey paper. *Briefings in Bioinformatics*, **2021**, 22, 247-269	13.4	66
88	Fully automated endoscopic disease activity assessment in ulcerative colitis. *Gastrointestinal Endoscopy*, **2021**, 93, 728-736.e1	5.2	18
87	Learning Using Partially Available Privileged Information and Label Uncertainty: Application in Detection of Acute Respiratory Distress Syndrome. *IEEE Journal of Biomedical and Health Informatics*, **2021**, 25, 784-796	7.2	3
86	Novel Algorithm for Automated Optic Nerve Sheath Diameter Measurement Using a Clustering Approach. *Military Medicine*, **2021**, 186, 496-501	1.3	2
85	Multimodal tensor-based method for integrative and continuous patient monitoring during postoperative cardiac care. *Artificial Intelligence in Medicine*, **2021**, 113, 102032	7.4	2
84	Automated detection of acute respiratory distress syndrome from chest X-Rays using Directionality Measure and deep learning features. *Computers in Biology and Medicine*, **2021**, 134, 104463	7	1
83	Mechanistic Study of Membrane Disruption by Antimicrobial Methacrylate Random Copolymers by the Single Giant Vesicle Method. *Langmuir*, **2021**, 37, 9982-9995	4	2
82	Daily Variation in Sleep Quality is Associated With Health-Related Quality of Life in People With Spinal Cord Injury. *Archives of Physical Medicine and Rehabilitation*, **2021**,	2.8	2
81	Motion-based camera localization system in colonoscopy videos. *Medical Image Analysis*, **2021**, 73, 102180	5.4	3
80	Association between symptoms, affect and heart rhythm in patients with persistent or paroxysmal atrial fibrillation: an ambulatory pilot study. *American Heart Journal*, **2021**, 241, 1-5	4.9	1
79	Predicting atrial fibrillation episodes with rapid ventricular rates associated with low levels of activity.. *BMC Medical Informatics and Decision Making*, **2021**, 21, 364	3.6	1
78	Robust segmentation of lung in chest x-ray: applications in analysis of acute respiratory distress syndrome. *BMC Medical Imaging*, **2020**, 20, 116	2.9	13

77	Early Detection of Heart Failure With Reduced Ejection Fraction Using Perioperative Data Among Noncardiac Surgical Patients: A Machine-Learning Approach. *Anesthesia and Analgesia*, **2020**, 130, 1188-1200	3.9	9
76	Osteoarthritis of the Temporomandibular Joint can be diagnosed earlier using biomarkers and machine learning. *Scientific Reports*, **2020**, 10, 8012	4.9	31
75	Automated hematoma segmentation and outcome prediction for patients with traumatic brain injury. *Artificial Intelligence in Medicine*, **2020**, 107, 101910	7.4	8
74	Automated Segmentation and Severity Analysis of Subdural Hematoma for Patients with Traumatic Brain Injuries. *Diagnostics*, **2020**, 10,	3.8	7
73	Utilization of smartphone and tablet camera photographs to predict healing of diabetes-related foot ulcers. *Computers in Biology and Medicine*, **2020**, 126, 104042	7	7
72	Preprocessing Sequence Coverage Data for More Precise Detection of Copy Number Variations. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2020**, 17, 868-876	3	2
71	Signal quality measure for pulsatile physiological signals using morphological features: Applications in reliability measure for pulse oximetry. *Informatics in Medicine Unlocked*, **2019**, 16, 100222-100222	5.3	9
70	Real-time removal of impulse noise from MR images for radiosurgery applications. *International Journal of Circuit Theory and Applications*, **2019**, 47, 406-426	2	2
69	Learning Using Concave and Convex Kernels: Applications in Predicting Quality of Sleep and Level of Fatigue in Fibromyalgia. *Entropy*, **2019**, 21,	2.8	5
68	MATTERS OF THE HEART: DAILY SOCIAL INTERACTIONS AND CARDIOVASCULAR REACTIVITY IN MIDDLE AND OLD AGE. *Innovation in Aging*, **2019**, 3, S741-S741	0.1	1
67	Midline Shift vs. Mid-Surface Shift: Correlation with Outcome of Traumatic Brain Injuries **2019**, 2019, 1083-1086	0.8	
66	Detection of Acute Respiratory Distress Syndrome by Incorporation of Label Uncertainty and Partially Available Privileged Information. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 1717-1720	0.9	0
65	Private naive bayes classification of personal biomedical data: Application in cancer data analysis. *Computers in Biology and Medicine*, **2019**, 105, 144-150	7	23
64	Accounting for Label Uncertainty in Machine Learning for Detection of Acute Respiratory Distress Syndrome. *IEEE Journal of Biomedical and Health Informatics*, **2019**, 23, 407-415	7.2	24
63	Aggregation of Rich Depth-Aware Features in a Modified Stacked Generalization Model for Single Image Depth Estimation. *IEEE Transactions on Circuits and Systems for Video Technology*, **2019**, 29, 683-697	6.4	10
62	Retinal blood vessel segmentation for macula detachment surgery monitoring instruments. *International Journal of Circuit Theory and Applications*, **2018**, 46, 1166-1180	2	4
61	Deep learning in pharmacogenomics: from gene regulation to patient stratification. *Pharmacogenomics*, **2018**, 19, 629-650	2.6	80
60	Adaptive image watermarking using human perception based fuzzy inference system. *Journal of Intelligent and Fuzzy Systems*, **2018**, 35, 4589-4608	1.6	4

59	Game Theoretic Approach for Systematic Feature Selection; Application in False Alarm Detection in Intensive Care Units. *Entropy*, **2018**, 20,	2.8	7
58	An Integration of Decision Tree and Visual Analysis to Analyze Intracranial Pressure. *Methods in Molecular Biology*, **2017**, 1598, 405-419	1.4	3
57	Windowed persistent homology: A topological signal processing algorithm applied to clinical obesity data. *PLoS ONE*, **2017**, 12, e0177696	3.7	1
56	Non-invasive vascular resistance monitoring with a piezoelectric sensor and photoplethysmogram. *Sensors and Actuators A: Physical*, **2017**, 263, 198-208	3.9	5
55	Fast exposure fusion using exposedness function **2017**,		22
54	Feasibility and Usability of a Mobile Application to Assess Symptoms and Affect in Patients with Atrial Fibrillation: A Pilot Study. *Journal of Atrial Fibrillation*, **2017**, 10, 1672	0.8	6
53	Boosted Dictionary Learning for Image Compression. *IEEE Transactions on Image Processing*, **2016**, 25, 4900-4915	8.7	23
52	Suppression of false arrhythmia alarms in the ICU: a machine learning approach. *Physiological Measurement*, **2016**, 37, 1186-203	2.9	15
51	Real-time detection of intradialytic hypotension using a novel polyvinylidene fluoride based sensor **2016**,		2
50	Digitization of Electrocardiogram From Telemetry Prior to In-hospital Cardiac Arrest: A Pilot Study. *Biological Research for Nursing*, **2016**, 18, 230-6	2.6	
49	Integration of Attributes from Non-Linear Characterization of Cardiovascular Time-Series for Prediction of Defibrillation Outcomes. *PLoS ONE*, **2016**, 11, e0141313	3.7	3
48	A Signal Processing Approach for Detection of Hemodynamic Instability before Decompensation. *PLoS ONE*, **2016**, 11, e0148544	3.7	15
47	Transforming big data into computational models for personalized medicine and health care. *Dialogues in Clinical Neuroscience*, **2016**, 18, 339-343	5.7	16
46	Electrocardiogram characteristics prior to in-hospital cardiac arrest. *Journal of Clinical Monitoring and Computing*, **2015**, 29, 385-92	2	16
45	Spleen Segmentation and Assessment in CT Images for Traumatic Abdominal Injuries. *Journal of Medical Systems*, **2015**, 39, 87	5.1	6
44	Multi-modal integrated approach towards reducing false arrhythmia alarms during continuous patient monitoring: The Physionet Challenge 2015 **2015**,		13
43	Big Data Analytics in Healthcare. *BioMed Research International*, **2015**, 2015, 370194	3	244
42	Bone segmentation and 3D visualization of CT images for traumatic pelvic injuries. *International Journal of Imaging Systems and Technology*, **2014**, 24, 29-38	2.5	10

41	Blood loss severity prediction using game theoretic based feature selection **2014**,		6
40	Rule-based Computer Aided Decision Making for Traumatic Brain Injuries. *Intelligent Systems Reference Library*, **2014**, 229-259	0.8	2
39	Heart rate variability analysis during central hypovolemia using wavelet transformation. *Journal of Clinical Monitoring and Computing*, **2013**, 27, 289-302	2	12
38	Intracranial pressure (ICP) level estimation using textural features of brain CT images. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, **2013**, 1, 130-137	0.9	1
37	Automated Intracranial Pressure Prediction Using Multiple Features Sources **2013**,		2
36	Predictability of intracranial pressure level in traumatic brain injury: features extraction, statistical analysis and machine learning-based evaluation. *International Journal of Data Mining and Bioinformatics*, **2013**, 8, 480-94	0.5	7
35	A hierarchical method for removal of baseline drift from biomedical signals: application in ECG analysis. *Scientific World Journal, The*, **2013**, 2013, 896056	2.2	26
34	Biomedical informatics for computer-aided decision support systems: a survey. *Scientific World Journal, The*, **2013**, 2013, 769639	2.2	34
33	Signal, Image Processing, and Machine Learning: The Key to Complex Problems in Medicine and Biology **2013**, 141-152		
32	Non-linear dynamical signal characterization for prediction of defibrillation success through machine learning. *BMC Medical Informatics and Decision Making*, **2012**, 12, 116	3.6	21
31	Fracture Detection in Traumatic Pelvic CT Images. *International Journal of Biomedical Imaging*, **2012**, 2012, 327198	5.2	24
30	An automated optimal engagement and attention detection system using electrocardiogram. *Computational and Mathematical Methods in Medicine*, **2012**, 2012, 528781	2.8	21
29	Hemorrhage detection and segmentation in traumatic pelvic injuries. *Computational and Mathematical Methods in Medicine*, **2012**, 2012, 898430	2.8	11
28	Reduction of periodic motion artifacts from impedance plethysmography **2011**,		2
27	A physiological signal processing system for optimal engagement and attention detection **2011**,		11
26	Predicting defibrillation success with a multiple-domain model using machine learning **2011**,		2
25	A new hierarchical method for multi-level segmentation of bone in pelvic CT scans. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 3399-402	0.9	4
24	An automated method for hemorrhage detection in traumatic pelvic injuries. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 5108-11	0.9	3

23	Employing Decoding of Specific Error Correcting Codes as a New Classification Criterion in Multiclass Learning Problems **2010**,		2
22	Detection of fracture and quantitative assessment of displacement measures in pelvic X-RAY images **2010**,		2
21	Actual Midline Estimation from Brain CT Scan Using Multiple Regions Shape Matching **2010**,		3
20	Frustration Detection with Electrocardiograph Signal Using Wavelet Transform **2010**,		5
19	Vessel Extraction of Microcirculatory Video Recordings Using Multi-thresholding Based Verification Algorithm **2010**,		2
18	Impedance plethysmography on the arms: Respiration monitoring **2010**,		8
17	Intracranial pressure level prediction in traumatic brain injury by extracting features from multiple sources and using machine learning methods **2010**,		7
16	Adaptive set-membership normalized least mean squares: An adaptive filter for the systems with bounded noise **2010**,		2
15	Hierarchical object recognition in Pelvic CT Images. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 3533-6	0.9	1
14	Extraction of Respiratory Rate from Impedance Signal Measured on Arm: A Portable Respiratory Rate Measurement Device **2009**,		6
13	A comparative analysis of multi-level computer-assisted decision making systems for traumatic injuries. *BMC Medical Informatics and Decision Making*, **2009**, 9, 2	3.6	27
12	Unified wavelet and Gaussian filtering for segmentation of CT images; application in segmentation of bone in pelvic CT images. *BMC Medical Informatics and Decision Making*, **2009**, 9 Suppl 1, S8	3.6	7
11	Splines and Active Shape Model for segmentation of pelvic x-ray images **2009**,		4
10	Traumatic Pelvic Injury Outcome Prediction by Extracting Features from Relevant Medical Records and X-Ray Images **2009**,		1
9	Automated bone segmentation from Pelvic CT images **2008**,		9
8	Automated segmentation of pelvic bone structure in x-ray radiographs using active shape models and directed Hough transform **2008**,		3
7	Automated segmentation of lateral ventricles in brain CT images **2008**,		4
6	Interactive visual analysis of time-series microarray data. *Visual Computer*, **2008**, 24, 1053-1066	2.3	11

5	A Fixed-Distribution PAC Learning Theory for Neural FIR Models. *Journal of Intelligent Information Systems*, **2005**, 25, 275-291	2.1	2
4	A novel Mixture Model Method for identification of differentially expressed genes from DNA microarray data. *BMC Bioinformatics*, **2004**, 5, 201	3.6	8
3	FIR Volterra kernel neural models and PAC learning. *Complexity*, **2002**, 7, 48-55	1.6	2
2	Learning-Based Complexity Evaluation of Radial Basis Function Networks. *Neural Processing Letters*, **2002**, 16, 137-150	2.4	4
1	On learning of Sigmoid Neural Networks. *Complexity*, **2001**, 6, 39-45	1.6	8