Stefanos Kollias

List of Publications by Year
in descending order

171 papers	2,725 citations	218677 26 h-index	265206 42 g-index
182 all docs	182 docs citations	182 times ranked	2130 citing authors

#	Article	IF	Citations
1	Visualization in Deep Neural Network Training. International Journal on Artificial Intelligence Tools, 2022, 31, .	1.0	0
2	Machine learning for analysis of real nuclear plant data in the frequency domain. Annals of Nuclear Energy, 2022, 177, 109293.	1.8	3
3	A novel unified deep neural networks methodology for use by date recognition in retail food package image. Signal, Image and Video Processing, 2021, 15, 449-457.	2.7	13
4	Machine Learning for Predictive Modelling of Ambulance Calls. Electronics (Switzerland), 2021, 10, 482.	3.1	4
5	AI-Enabled Efficient and Safe Food Supply Chain. Electronics (Switzerland), 2021, 10, 1223.	3.1	11
6	An autoencoder wavelet based deep neural network with attention mechanism for multi-step prediction of plant growth. Information Sciences, 2021, 560, 35-50.	6.9	27
7	Advanced Non-linear Generative Model with a Deep Classifier for Immunotherapy Outcome Prediction: A Bladder Cancer Case Study. Lecture Notes in Computer Science, 2021, , 227-242.	1.3	3
8	DeMoCap: Low-Cost Marker-Based Motion Capture. International Journal of Computer Vision, 2021, 129, 3338-3366.	15.6	14
9	MIA-COV19D: COVID-19 Detection through 3-D Chest CT Image Analysis. , 2021, , .		43
10	Effects of image quality and quantity on building a competitive COVID-19 diagnosis model. , 2021, , .		1
11	Extracting geographical characteristics about COVID-19 evolution worldwide using machine learning. , 2021, , .		0
12	A Scalable Test Suite for Continuous Dynamic Multiobjective Optimization. IEEE Transactions on Cybernetics, 2020, 50, 2814-2826.	9.5	30
13	Combining guaranteed and spot markets in display advertising: Selling guaranteed page views with stochastic demand. European Journal of Operational Research, 2020, 280, 1144-1159.	5.7	6
14	Deep Bayesian Self-Training. Neural Computing and Applications, 2020, 32, 4275-4291.	5.6	21
15	HUMAN4D: A Human-Centric Multimodal Dataset for Motions and Immersive Media. IEEE Access, 2020, 8, 176241-176262.	4.2	28
16	Multi-source domain adaptation for quality control in retail food packaging. Computers in Industry, 2020, 123, 103293.	9.9	14
17	Unified deep learning approach for prediction of Parkinson's disease. IET Image Processing, 2020, 14, 1980-1989.	2.5	37
18	A Compact Sequence Encoding Scheme for Online Human Activity Recognition in HRI Applications. Proceedings of the International Neural Networks Society, 2020, , 3-14.	0.6	1

#	Article	IF	Citations
19	Capsule Routing via Variational Bayes. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 3749-3756.	4.9	39
20	DeepMoCap: Deep Optical Motion Capture Using Multiple Depth Sensors and Retro-Reflectors. Sensors, 2019, 19, 282.	3.8	16
21	Predicting Parkinson's Disease using Latent Information extracted from Deep Neural Networks. , 2019, , .		22
22	3D convolutional and recurrent neural networks for reactor perturbation unfolding and anomaly detection. EPJ Nuclear Sciences & Technologies, 2019, 5, 20.	0.7	7
23	Revisiting the medial axis for planar shape decomposition. Computer Vision and Image Understanding, 2019, 179, 66-78.	4.7	7
24	A novel rule based machine translation scheme from Greek to Greek Sign Language: Production of different types of large corpora and Language Models evaluation. Computer Speech and Language, 2018, 51, 110-135.	4.3	14
25	Deep neural architectures for prediction in healthcare. Complex & Intelligent Systems, 2018, 4, 119-131.	6.5	88
26	On the Beneficial Effect of Noise in Vertex Localization. International Journal of Computer Vision, 2018, 126, 111-139.	15.6	0
27	A Deep Learning Approach for Load Demand Forecasting of Power Systems. , 2018, , .		7
28	A Deep Learning Approach to Anomaly Detection in Nuclear Reactors. , 2018, , .		38
29	Towards a Deep Unified Framework for Nuclear Reactor Perturbation Analysis. , 2018, , .		9
30	A Refined 3D Dataset for the Analysis of Player Actions in Exertion Games. , 2018, , .		1
31	Investigating the Best Performing Task Conditions of a Multi-Tasking Learning Model in Healthcare Using Convolutional Neural Networks: Evidence from a Parkinson'S Disease Database. , 2018, , .		3
32	Applications of human action analysis and recognition on wireless network infrastructures: State of the art and real world challenges. , 2018, , .		3
33	Machine Learning for Neurodegenerative Disorder Diagnosis â€" Survey of Practices and Launch of Benchmark Dataset. International Journal on Artificial Intelligence Tools, 2018, 27, 1850011.	1.0	28
34	Multi-Task Learning for Predicting Parkinson's Disease Based on Medical Imaging Information. , 2018, , .		7
35	An End-to-End Deep Neural Architecture for Optical Character Verification and Recognition in Retail Food Packaging. , 2018, , .		15
36	An adaptable deep learning system for optical character verification in retail food packaging. , 2018, , .		12

#	Article	IF	Citations
37	Computer vision based fall detection by a convolutional neural network. , 2017, , .		32
38	Conference Report on 2016 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2016) [Conference Reports]. IEEE Computational Intelligence Magazine, 2017, 12, 18-19.	3.2	0
39	3D cylindrical trace transform based feature extraction for effective human action classification. , 2017, , .		7
40	HEAR?INFO: A Modern Mobile-Web Platform Addressed to Hard-of-Hearing Elderly Individuals. , 2017, , .		0
41	Identifying unintentional falls in action videos using the 3D Cylindrical Trace Transform. , 2017, , .		1
42	Variance-based shape descriptors for determining the level of expertise of tennis players. , 2017, , .		4
43	Adaptation and contextualization of deep neural network models. , 2017, , .		13
44	Context incorporation using context â€" aware language features. , 2017, , .		0
45	From Conditional Random Field (CRF) to Rhetorical Structure Theory(RST): Incorporating Context Information in Sentiment Analysis. Lecture Notes in Computer Science, 2017, , 283-295.	1.3	1
46	Affective Natural Interaction Using EEG: Technologies, Applications and Future Directions. , 2017, , 397-420.		3
47	A systemic approach to automatic metadata extraction from multimedia content. , 2016, , .		3
48	The Mecanex system for Multimedia Content Annotation. , 2016, , .		0
49	A Semantic Approach to Film Content Analysis and Retrieval. , 2016, , .		1
50	Preface from IEEE SSCI 2016 general chairs. , 2016, , .		0
51	Î±-shapes for local feature detection. Pattern Recognition, 2016, 50, 56-73.	8.1	15
52	Fall detection using history triple features. , 2015, , .		16
53	Dithering-based Sampling and Weighted Î±-shapes for Local Feature Detection. IPSJ Transactions on Computer Vision and Applications, 2015, 7, 189-200.	4.4	2
54	Design of a lifestyle recommender system for the elderly. , 2015, , .		14

#	ARTICLE	IF	CITATIONS
55	User and home appliances pervasive interaction in a sensor driven smart home environment: The SandS approach. , 2015, , .		1
56	HCI and Natural Progression of Context-Related Questions. Lecture Notes in Computer Science, 2015, , 530-541.	1.3	0
57	Context-Aware User Modeling and Semantic Interoperability in Smart Home Environments. International Journal of Virtual Communities and Social Networking, 2015, 7, 17-50.	0.2	0
58	Investigating Context Awareness of Affective Computing Systems: A Critical Approach. Procedia Computer Science, 2014, 39, 91-98.	2.0	11
59	Context in Affective Multiparty and Multimodal Interaction. , 2014, , .		3
60	Towards large-scale geometry indexing by feature selection. Computer Vision and Image Understanding, 2014, 120, 31-45.	4.7	19
61	Visual Focus of Attention in Non-calibrated Environments using Gaze Estimation. International Journal of Computer Vision, 2014, 107, 293-316.	15.6	43
62	Player-Specific Conflict Handling Ontology. Lecture Notes in Computer Science, 2014, , 304-315.	1.3	0
63	Exploring trace transform for robust human action recognition. Pattern Recognition, 2013, 46, 3238-3248.	8.1	42
64	Mining User Queries with Markov Chains: Application to Online Image Retrieval. IEEE Transactions on Knowledge and Data Engineering, 2013, 25, 433-447.	5.7	7
65	A Particle Swarm Optimization (PSO) Model for Scheduling Nonlinear Multimedia Services in Multicommodity Fat-Tree Cloud Networks. Communications in Computer and Information Science, 2013, , 257-268.	0.5	6
66	Visual analysis for semantic search in digital libraries. , 2013, , .		0
67	W&#x03B1;SH-ing visual repositories: Searching Europeana using local features. , 2013, , .		0
68	Context-Aware User Modeling and Semantic Interoperability in Smart Home Environments. , 2013, , .		3
69	THETIS: Three Dimensional Tennis Shots a Human Action Dataset. , 2013, , .		29
70	Social things - The SandS instantiation. , 2013, , .		12
71	Intelligent and Adaptive Pervasive Future Internet: Smart Cities for the Citizens. Communications in Computer and Information Science, 2013, , 269-281.	0.5	1
72	Tractable reasoning with vague knowledge using fuzzy $\mathcal{EL}^{++}$. Journal of Intelligent Information Systems, 2012, 39, 399-440.	3.9	11

#	ARTICLE	IF	CITATIONS
73	Non parametric, self organizing, scalable modeling of spatiotemporal inputs: The sign language paradigm. Neural Networks, 2012, 36, 157-166.	5.9	3
74	Detecting Regions from Single Scale Edges. Lecture Notes in Computer Science, 2012, , 298-311.	1.3	5
75	Detecting human behavior emotional cues in Natural Interaction. , 2011, , .		3
76	The Importance of Eye Gaze and Head Pose to Estimating Levels of Attention. , 2011, , .		14
77	VIRaL: Visual Image Retrieval and Localization. Multimedia Tools and Applications, 2011, 51, 555-592.	3.9	60
78	Spatiotemporal Features for Action Recognition and Salient Event Detection. Cognitive Computation, 2011, 3, 167-184.	5.2	15
79	The Globalâ€"Local transformation for noise resistant shape representation. Computer Vision and Image Understanding, 2011, 115, 1170-1186.	4.7	9
80	Robust validation of Visual Focus of Attention using adaptive fusion of head and eye gaze patterns. , 2011, , .		6
81	Affine morphological shape stable boundary regions (SSBR) for image representation. , 2011, , .		3
82	Multimodal Emotion Recognition from Low-Level Cues. Cognitive Technologies, 2011, , 115-132.	0.8	19
83	SOMM: Self organizing Markov map for gesture recognition. Pattern Recognition Letters, 2010, 31, 52-59.	4.2	46
84	Using a region and visual word approach towards semantic image retrieval. , 2010, , .		0
85	Intelligent content retrieval using a visual vocabulary and geometric constraints. , 2010, , .		2
86	Face tracking and head pose estimation using convolutional neural networks. , 2010, , .		5
87	Head pose estimation with one camera, in uncalibrated environments. , 2010, , .		15
88	Shape-stable region boundary extraction via affine morphological scale space (AMSS). , 2010, , .		1
89	Semantic object watermark re-synchronization based on skeleton vertex corresponds. , 2010, , .		1
90	MPEG-4 facial expression synthesis. Personal and Ubiquitous Computing, 2009, 13, 77-83.	2.8	9

#	ARTICLE	IF	CITATIONS
91	Towards modeling embodied conversational agent character profiles using appraisal theory predictions in expression synthesis. Applied Intelligence, 2009, 30, 58-64.	5.3	27
92	Estimation of behavioral user state based on eye gaze and head pose—application in an e-learning environment. Multimedia Tools and Applications, 2009, 41, 469-493.	3.9	131
93	Spatiotemporal saliency for video classification. Signal Processing: Image Communication, 2009, 24, 557-571.	3.2	30
94	Dense saliency-based spatiotemporal feature points for action recognition. , 2009, , .		100
95	A natural head pose and eye gaze dataset. , 2009, , .		34
96	Adaptive gesture recognition in Human Computer Interaction. , 2009, , .		0
97	Semantic Classification of Byzantine Icons. IEEE Intelligent Systems, 2009, 24, 35-43.	4.0	12
98	Using Visual Context and Region Semantics for High-Level Concept Detection. IEEE Transactions on Multimedia, 2009, 11, 229-243.	7.2	31
99	Feature Extraction and Selection for Inferring User Engagement in an HCI Environment. Lecture Notes in Computer Science, 2009, , 22-29.	1.3	17
100	Dense saliency-based spatiotemporal feature points for action recognition. , 2009, , .		8
101	Semantic representation of multimedia content: Knowledge representation and semantic indexing. Multimedia Tools and Applications, 2008, 39, 293-327.	3.9	11
102	User and context adaptive neural networks for emotion recognition. Neurocomputing, 2008, 71, 2553-2562.	5.9	42
103	An intelligent e-learning system based on learner profiling and learning resources adaptation. Computers and Education, 2008, 51, 224-238.	8.3	55
104	A non-intrusive method for user focus of attention estimation in front of a computer monitor. , 2008, , .		0
105	Reasoning with qualified cardinality restrictions in fuzzy Description Logics. , 2008, , .		9
106	Hand trajectory based gesture recognition using self-organizing feature maps and markov models. , 2008, , .		12
107	Adaptive Reading Assistance for the Inclusion of Students with Dyslexia: The AGENT-DYSL Approach. , 2008, , .		21
108	A Neuro-fuzzy Approach to User Attention Recognition. Lecture Notes in Computer Science, 2008, , 927-936.	1.3	12

#	Article	IF	Citations
109	Adaptation of Connectionist Weighted Fuzzy Logic Programs with Kripke-Kleene Semantics. Lecture Notes in Computer Science, 2008, , 492-502.	1.3	0
110	Semantic Adaptation of Neural Network Classifiers in Image Segmentation. Lecture Notes in Computer Science, 2008, , 907-916.	1.3	1
111	TWO ALGORITHMS FOR FAST INCREMENTAL TRANSITIVE CLOSURE OF SPARSE FUZZY BINARY RELATIONS. International Journal of Computational Methods, 2007, 04, 1-13.	1.3	5
112	f-DLPs: Extending Description Logic Programs with Fuzzy Sets and Fuzzy Logic. IEEE International Conference on Fuzzy Systems, 2007, , .	0.0	13
113	Spatiotemporal saliency for event detection and representation in the 3D wavelet domain. , 2007, , .		25
114	Semantic clustering of information systems' users with stochastic techniques. , 2007, , .		8
115	Modeling Naturalistic Affective States Via Facial, Vocal, and Bodily Expressions Recognition. , 2007, , 91-112.		33
116	Robust Feature Detection for Facial Expression Recognition. Eurasip Journal on Image and Video Processing, 2007, 2007, 1-22.	2.6	29
117	E-learning and intelligent content adaptation: an integrated approach. International Journal of Continuing Engineering Education and Life-Long Learning, 2007, 17, 273.	0.2	3
118	salienShrink: Saliency-Based Wavelet Shrinkage. Proceedings International Conference on Image Processing, 2007, , .	0.0	0
119	Semantic Image Segmentation and Object Labeling. IEEE Transactions on Circuits and Systems for Video Technology, 2007, 17, 298-312.	8.3	85
120	Probabilistic Video-Based Gesture Recognition Using Self-organizing Feature Maps. Lecture Notes in Computer Science, 2007, , 261-270.	1.3	2
121	Multimedia Reasoning with f-SHIN. , 2007, , .		8
122	Non-Verbal Feedback on User Interest Based on Gaze Direction and Head Pose. , 2007, , .		1
123	Robust Feature Detection for Facial Expression Recognition. Eurasip Journal on Image and Video Processing, 2007, 2007, 029081.	2.6	6
124	Multimedia Reasoning with f-SHIN. , 2007, , .		2
125	Computationally efficient sup-t transitive closure for sparse fuzzy binary relations. Fuzzy Sets and Systems, 2006, 157, 341-372.	2.7	26
126	Confronting the Synchronization Problem of Semantic Region Under Geometric Attacks. , 2006, , .		0

#	Article	IF	Citations
127	MPEG-4 Facial Expression Synthesis based on Appraisal Theory. , 2006, , 378-384.		5
128	Emotion Synthesis in Virtual Environments. , 2006, , 301-309.		1
129	Adaptive On-Line Neural Network Retraining for Real Life Multimodal Emotion Recognition. Lecture Notes in Computer Science, 2006, , 81-92.	1.3	7
130	Automatic Thematic Categorization of Multimedia Documents using Ontological Information and Fuzzy Algebra. , 2006, , 247-274.		3
131	An Intermediate Expressions' Generator System in the MPEG-4 Framework. Lecture Notes in Computer Science, 2006, , 129-136.	1.3	0
132	Fast Video Object Tracking using Affine Invariant Normalization. , 2006, , 549-556.		0
133	Semantic Web Applications. , 2005, , 253-277.		0
134	Multimedia Indexing and Retrieval Using Natural Language, Speech and Image Processing Methods. , 2005, , 279-297.		1
135	Knowledge-Based Multimedia Content Indexing and Retrieval. , 2005, , 299-338.		7
136	Multimedia Content Indexing and Retrieval Using an Object Ontology. , 2005, , 339-371.		17
137	Context-Based Video Retrieval for Life-Log Applications. , 2005, , 373-387.		1
138	Ontology Representation and Querying for Realizing Semantics-Driven Applications. , 2005, , 45-73.		1
139	A Fuzzy Knowledge-Based System for Multimedia Applications. , 2005, , 107-131.		0
140	Object-Based Video Indexing. , 2005, , 163-201.		0
141	Automatic Extraction and Analysis of Visual Objects Information. , 2005, , 203-221.		4
142	Mining the Semantics of Visual Concepts and Context. , 2005, , 223-235.		0
143	Machine Learning in Multimedia. , 2005, , 237-252.		0
144	Adding Multimedia to the SemanticWeb: Building and Applying an MPEG-7 Ontology. , 2005, , 75-106.		12

#	ARTICLE	IF	CITATIONS
145	Intelligent initialization of resource allocating RBF networks. Neural Networks, 2005, 18, 117-122.	5.9	27
146	Emotion recognition through facial expression analysis based on a neurofuzzy network. Neural Networks, 2005, 18, 423-435.	5.9	190
147	Structure Identification in an Audiovisual Document. , 2005, , 133-161.		0
148	Multimedia Content Description in MPEG-7 and MPEG-21. , 2005, , 1-43.		1
149	PROBABILISTIC BOUNDARY-BASED CONTOUR TRACKING WITH SNAKES IN NATURAL CLUTTERED VIDEO SEQUENCES. International Journal of Image and Graphics, 2004, 04, 469-498.	1.5	5
150	Electronic Roads in Historical Documents: A Student Oriented Approach. Education and Information Technologies, 2004, 9, 271-289.	5.7	4
151	A snake model for object tracking in natural sequences. Signal Processing: Image Communication, 2004, 19, 219-238.	3.2	31
152	Rule-Driven Object Tracking in Clutter and Partial Occlusion with Model-Based Snakes. Eurasip Journal on Advances in Signal Processing, 2004, 2004, 1.	1.7	0
153	INTELLIGENT ONE-STOP-SHOP TRAVEL RECOMMENDATIONS USING AN ADAPTIVE NEURAL NETWORK AND CLUSTERING OF HISTORY. Information Technology and Tourism, 2003, 6, 181-193.	5.8	22
154	MPEG-4 Authoring Tool Using Moving Object Segmentation and Tracking in Video Shots. Eurasip Journal on Advances in Signal Processing, 2003, 2003, 1.	1.7	4
155	An Intelligent Scheme for Facial Expression Recognition. Lecture Notes in Computer Science, 2003, , 1109-1116.	1.3	7
156	Parameterized Facial Expression Synthesis Based on MPEG-4. Eurasip Journal on Advances in Signal Processing, 2002, 2002, 1.	1.7	81
157	Affine-invariant curve normalization for object shape representation, classification, and retrieval. Machine Vision and Applications, 2001, 13, 80-94.	2.7	35
158	Optimal wavelet filter banks for regularized restoration of noisy images. Circuits, Systems, and Signal Processing, 2000, 19, 99-119.	2.0	6
159	Higher-order spectral analysis in laser-Doppler flowmetry signal processing. Technology and Health Care, 1999, 7, 85-101.	1.2	3
160	An efficient multiresolution texture classification scheme using neural networks. International Journal of Computer Mathematics, 1998, 67, 155-168.	1.8	3
161	The rendering pipeline in the classroom. SIGCSE Bulletin, 1998, 30, 139-142.	0.1	0
162	Efficient Processing and Analysis of Images Using Neural Networks. , 1997, , 214-223.		1

#	Article	IF	Citations
163	Adaptive classification of textured images using linear prediction and neural networks. Signal Processing, 1994, 36, 209-232.	3.7	17
164	A fast adaptive approach to the restoration of images degraded by noise. Signal Processing, 1990, 19, 151-162.	3.7	9
165	A study of neural network applications to signal processing. Lecture Notes in Computer Science, 1990, , 233-242.	1.3	3
166	One-dimensional seismic inversion using adaptive deconvolution. Signal Processing, 1988, 14, 269-285.	3.7	5
167	Adaptive parameter estimation and deconvolution of seismic signals. Signal Processing, 1985, 8, 453-454.	3.7	1
168	An Instrumental Variable Approach to Minimum-Variance Seismic Deconvolution. IEEE Transactions on Geoscience and Remote Sensing, 1985, GE-23, 778-788.	6.3	18
169	Emotion Recognition and Synthesis Based on MPEG-4 FAPs. , 0, , 141-167.		35
170	Player-Specific Conflict Handling Ontology. International Journal of Serious Games, 0, , .	1.1	0
171	Automatic Thematic Categorization of Multimedia Documents using Ontological Information and Fuzzy Algebra. , 0, , 247-274.		0