Thomas B Moeslund

List of Publications by Year
in descending order

180	7,543	279798	64796
papers	citations	23 h-index	79 g-index

191	191	191	6029
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A survey of advances in vision-based human motion capture and analysis. Computer Vision and Image Understanding, 2006, 104, 90-126.	4.7	2,022
2	A Survey of Computer Vision-Based Human Motion Capture. Computer Vision and Image Understanding, 2001, 81, 231-268.	4.7	1,343
3	Super-resolution: a comprehensive survey. Machine Vision and Applications, 2014, 25, 1423-1468.	2.7	505
4	Thermal cameras and applications: a survey. Machine Vision and Applications, 2014, 25, 245-262.	2.7	501
5	Vision-Based Traffic Sign Detection and Analysis for Intelligent Driver Assistance Systems: Perspectives and Survey. IEEE Transactions on Intelligent Transportation Systems, 2012, 13, 1484-1497.	8.0	484
6	Computer vision for sports: Current applications and research topics. Computer Vision and Image Understanding, 2017, 159, 3-18.	4.7	134
7	Human Pose Estimation and Activity Recognition From Multi-View Videos: Comparative Explorations of Recent Developments. IEEE Journal on Selected Topics in Signal Processing, 2012, 6, 538-552.	10.8	122
8	Selective spatio-temporal interest points. Computer Vision and Image Understanding, 2012, 116, 396-410.	4.7	111
9	On soft biometrics. Pattern Recognition Letters, 2015, 68, 218-230.	4.2	85
10	Part-Based Pedestrian Detection and Feature-Based Tracking for Driver Assistance: Real-Time, Robust Algorithms, and Evaluation. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 1346-1359.	8.0	84
11	Long-Term Occupancy Analysis Using Graph-Based Optimisation in Thermal Imagery. , 2013, , .		75
12	Projecting robot intentions into human environments. , 2016, , .		73
13	Markerless motion capture can provide reliable 3D gait kinematics in the sagittal and frontal plane. Medical Engineering and Physics, 2014, 36, 1168-1175.	1.7	67
14	3D Human Action Recognition for Multi-view Camera Systems. , 2011, , .		64
15	Multi-modal RGBâ€“Depthâ€“Thermal Human Body Segmentation. International Journal of Computer Vision, 2016, 118, 217-239.	15.6	63
16	A Survey on Image-Based Automation of CCTV and SSET Sewer Inspections. Automation in Construction, 2020, 111, 103061.	9.8	59
17	SoccerNet-v2: A Dataset and Benchmarks for Holistic Understanding of Broadcast Soccer Videos. , 2021, , .		57
18	A Local 3-D Motion Descriptor for Multi-View Human Action Recognition from 4-D Spatio-Temporal Interest Points. IEEE Journal on Selected Topics in Signal Processing, 2012, 6, 553-565.	10.8	55

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19	Traffic Light Detection: A Learning Algorithm and Evaluations on Challenging Dataset. , 2015, , .		55
20	Rain Removal in Traffic Surveillance: Does it Matter?. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 2802-2819.	8.0	54
21	Introduction to Video and Image Processing. Undergraduate Topics in Computer Science, 2012, , .	0.2	52
22	Trajectory analysis and prediction for improved pedestrian safety: Integrated framework and evaluations. , 2015, , .		45
23	Tri-modal Person Re-identification with RGB, Depth and Thermal Features. , 2013, , .		43
24	Pedestrian Counting with Occlusion Handling Using Stereo Thermal Cameras. Sensors, 2016, 16, 62.	3.8	42
25	A Context-Aware Loss Function for Action Spotting in Soccer Videos. , 2020, , .		41
26	Detection and removal of chromatic moving shadows in surveillance scenarios. , 2009, , .		40
27	Deep Multimodal Pain Recognition: A Database and Comparison of Spatio-Temporal Visual Modalities. , 2018, , .		40
28	Improved RGBâ€Dâ€T based face recognition. IET Biometrics, 2016, 5, 297-303.	2.5	36
29	A selective spatio-temporal interest point detector for human action recognition in complex scenes. , 2011, , .		32
30	Facial videoâ€based detection of physical fatigue for maximal muscle activity. IET Computer Vision, 2016, 10, 323-330.	2.0	31
31	A 4-DOF Upper Limb Exoskeleton for Physical Assistance: Design, Modeling, Control and Performance Evaluation. Applied Sciences (Switzerland), 2021, 11, 5865.	2.5	27
32	Extracting a Good Quality Frontal Face Image From a Low-Resolution Video Sequence. IEEE Transactions on Circuits and Systems for Video Technology, 2011, 21, 1353-1362.	8.3	26
33	Modelling the 3D pose of a human arm and the shoulder complex utilising only two parameters. Integrated Computer-Aided Engineering, 2005, 12, 159-175.	4.6	25
34	3D-ZeF: A 3D Zebrafish Tracking Benchmark Dataset. , 2020, , .		25
35	Context-Aware Fusion of RGB and Thermal Imagery for Traffic Monitoring. Sensors, 2016, 16, 1947.	3.8	24
36	Population Preferences for Performance and Explainability of Artificial Intelligence in Health Care: Choice-Based Conjoint Survey. Journal of Medical Internet Research, 2021, 23, e26611.	4.3	24

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37	Chromatic shadow detection and tracking for moving foreground segmentation. Image and Vision Computing, 2015, 41, 42-53.	4.5	23
38	Sewer-ML: A Multi-Label Sewer Defect Classification Dataset and Benchmark. , 2021, , .		23
39	Two-Stage Recognition and beyond for Compound Facial Emotion Recognition. Electronics (Switzerland), 2021, 10, 2847.	3.1	23
40	3D Sensors for Sewer Inspection: A Quantitative Review and Analysis. Sensors, 2021, 21, 2553.	3.8	21
41	Deep visual unsupervised domain adaptation for classification tasks: a survey. IET Image Processing, 2020, 14, 3283-3299.	2.5	21
42	Attention estimation by simultaneous analysis of viewer and view. , 2014, , .		20
43	Constrained multi-target tracking for team sports activities. IPSJ Transactions on Computer Vision and Applications, 2018, 10, .	4.4	20
44	Finding Motion Primitives in Human Body Gestures. Lecture Notes in Computer Science, 2006, , 133-144.	1.3	20
45	Spatio-temporal Pain Recognition in CNN-Based Super-Resolved Facial Images. Lecture Notes in Computer Science, 2017, , 151-162.	1.3	20
46	RGB-D-T Based Face Recognition. , 2014, , .		19
47	Thermal Tracking of Sports Players. Sensors, 2014, 14, 13679-13691.	3.8	19
48	Real-time acquisition of high quality face sequences from an active pan-tilt-zoom camera. , 2013, , .		18
49	The Effect of a Diverse Dataset for Transfer Learning in Thermal Person Detection. Sensors, 2020, 20, 1982.	3.8	17
50	Automatic estimation of clothing insulation rate and metabolic rate for dynamic thermal comfort assessment. Pattern Analysis and Applications, 2022, 25, 619-634.	4.6	16
51	Shadow Detection in Dynamic Scenes Using Dense Stereo Information and an Outdoor Illumination Model. Lecture Notes in Computer Science, 2009, , 110-125.	1.3	15
52	Realâ€world superâ€resolution of faceâ€images from surveillance cameras. IET Image Processing, 2022, 16, 442-452.	2.5	15
53	The Challenge of Data Annotation in Deep Learningâ€”A Case Study on Whole Plant Corn Silage. Sensors, 2022, 22, 1596.	3.8	15
54	A new lowâ€complexity patchâ€based image superâ€resolution. IET Computer Vision, 2017, 11, 567-576.	2.0	14

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55	Camera Calibration for Underwater 3D Reconstruction Based on Ray Tracing Using Snellâ€™s Law. , 2018, , .		14
56	Anomaly Detection for Agricultural Vehicles Using Autoencoders. Sensors, 2022, 22, 3608.	3.8	14
57	Modelling and estimating the pose of a human arm. Machine Vision and Applications, 2003, 14, 237-247.	2.7	13
58	Fast calibration of industrial mobile robots to workstations using QR codes. , 2013, , .		13
59	Markerless motion capture systems for tracking of persons in forensic biomechanics: an overview. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2014, 2, 46-65.	1.9	13
60	A novel deep network architecture for reconstructing RGB facial images from thermal for face recognition. Multimedia Tools and Applications, 2019, 78, 25259-25271.	3.9	13
61	Water Level Estimation in Sewer Pipes Using Deep Convolutional Neural Networks. Water (Switzerland), 2020, 12, 3412.	2.7	13
62	Semantic Segmentation Guided Real-World Super-Resolution. , 2022, , .		13
63	Abnormal event detection using local sparse representation. , 2014, , .		12
64	Quality-Aware Estimation of Facial Landmarks in Video Sequences. , 2015, , .		12
65	Thermal super-pixels for bimodal stress recognition. , 2016, , .		12
66	Task space HRI for cooperative mobile robots in fit-out operations inside ship superstructures. , 2016, , .		12
67	LIGHT FIELD BASED FACE RECOGNITION VIA A FUSED DEEP REPRESENTATION. , 2018, , .		12
68	Multimodal and multiview distillation for real-time player detection on a football field. , 2020, , .		12
69	Expert Level Evaluations for Explainable AI (XAI) Methods in the Medical Domain. Lecture Notes in Computer Science, 2021, , 35-46.	1.3	12
70	Tamper detection for active surveillance systems. , 2013, , .		11
71	Changes in Facial Expression as Biometric: A Database and Benchmarks of Identification. , 2018, , .		11
72	Visual explanation of black-box model:ÂSimilarity Difference and Uniqueness (SIDU) method. Pattern Recognition, 2022, 127, 108604.	8.1	11

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73	Invariant gait continuum based on the duty-factor. Signal, Image and Video Processing, 2009, 3, 391-402.	2.7	10
74	Finding and improving the key-frames of long video sequences for face recognition. , 2010, , .		10
75	Sports Type Classification Using Signature Heatmaps. , 2013, , .		10
76	Segmentation of RGB-D indoor scenes by stacking random forests and conditional random fields. Pattern Recognition Letters, 2016, 80, 208-215.	4.2	10
77	Enhancing person reâ€identification by late fusion of lowâ€ midâ€and highâ€level features. IET Biometrics, 2018, 7, 125-135.	2.5	10
78	Organ Segmentation in Poultry Viscera Using RGB-D. Sensors, 2018, 18, 117.	3.8	10
79	SIDU: Similarity Difference And Uniqueness Method for Explainable AI. , 2020, , .		10
80	Interacting with a Virtual World Through Motion Capture. , 2001, , 221-234.		10
81	SUMMARIZATION OF SURVEILLANCE VIDEO SEQUENCES USING FACE QUALITY ASSESSMENT. International Journal of Image and Graphics, 2011, 11, 207-233.	1.5	9
82	Traffic sign detection and analysis: Recent studies and emerging trends. , 2012, , .		9
83	EREL: Extremal regions of extremum levels. , 2015, , .		9
84	Cycle-consistent generative adversarial neural networks based low quality fingerprint enhancement. Multimedia Tools and Applications, 2020, 79, 18569-18589.	3.9	9
85	Navigation-Oriented Scene Understanding for Robotic Autonomy: Learning to Segment Driveability in Egocentric Images. IEEE Robotics and Automation Letters, 2022, 7, 2913-2920.	5.1	9
86	Privacy-Constrained Biometric System for Non-Cooperative Users. Entropy, 2019, 21, 1033.	2.2	8
87	Anchor tuning in Faster R-CNN for measuring corn silage physical characteristics. Computers and Electronics in Agriculture, 2021, 188, 106344.	7.7	8
88	Classification of gait types based on the duty-factor. , 2007, , .		7
89	Contactless measurement of muscles fatigue by tracking facial feature points in a video. , 2014, , .		7
90	Taking the Temperature of Pedestrian Movement in Public Spaces. Transportation Research Procedia, 2014, 2, 660-668.	1.5	7

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91	Special issue on Multimedia Event Detection. Machine Vision and Applications, 2014, 25, 1-4.	2.7	7
92	New equations to calculate 3D joint centres in the lower extremities. Medical Engineering and Physics, 2015, 37, 948-955.	1.7	7
93	Day and night-time drive analysis using stereo vision for naturalistic driving studies. , 2015, , .		7
94	Multimodal Neural Network for Overhead Person Re-Identification. , 2017, , .		7
95	Estimating the Number of Soccer Players Using Simulation-Based Occlusion Handling. , 2018, , .		7
96	Maize Silage Kernel Fragment Estimation Using Deep Learning-Based Object Recognition in Non-Separated Kernel/Stover RGB Images. Sensors, 2019, 19, 3506.	3.8	7
97	Multi-level Quality Assessment of Retinal Fundus Images using Deep Convolution Neural Networks. , 2021, , .		7
98	Clothing Insulation Rate and Metabolic Rate Estimation for Individual Thermal Comfort Assessment in Real Life. Sensors, 2022, 22, 619.	3.8	7
99	Haar-like features for robust real-time face recognition. , 2013, , .		6
100	Ongoing work on traffic lights: Detection and evaluation. , 2015, , .		6
101	Multi-perspective vehicle detection and tracking: Challenges, dataset, and metrics. , 2016, , .		6
102	Locality regularized group sparse coding for action recognition. Computer Vision and Image Understanding, 2017, 158, 106-114.	4.7	6
103	Re-Identification of Zebrafish using Metric Learning. , 2020, , .		6
104	Improved interpolation kernels for super resolution algorithms. , 2016, , .		6
105	Computer Vision-Based Adaptive Semi-Autonomous Control of an Upper Limb Exoskeleton for Individuals with Tetraplegia. Applied Sciences (Switzerland), 2022, 12, 4374.	2.5	6
106	3D Pose Estimation of Cactus Leaves using an Active Shape Model. , 2005, , .		5
107	Reliable Gait Recognition Using 3D Reconstructions and Random Forests â€“ An Anthropometric Approach. Journal of Forensic Sciences, 2016, 61, 637-648.	1.6	5
108	Reducible dictionaries for single image super-resolution based on patch matching and mean shifting. Journal of Electronic Imaging, 2017, 26, 023024.	0.9	5

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109	Late Fusion in Part-based Person Re-identification. , 2017, , .		5
110	Rehabilitation of Traumatic Brain Injured Patients: Patient Mood Analysis from Multimodal Video. , 2018, , .		5
111	Teaching Pepper Robot to Recognize Emotions of Traumatic Brain Injured Patients Using Deep Neural Networks. , 2019, , .		5
112	Sewer Defect Classification using Synthetic Point Clouds. , 2021, , .		5
113	Deep Emotion Recognition through Upper Body Movements and Facial Expression. , 2021, , .		5
114	Pose Estimation of Interacting People using Pictorial Structures. , 2010, , .		4
115	Haar-like rectangular features for biometric recognition. , 2013, , .		4
116	Super-resolution of facial images in forensics scenarios. , 2015, , .		4
117	Quality inspection of printed texts. , 2016, , .		4
118	Special issue on Advanced Machine Vision. Machine Vision and Applications, 2020, 31, 1.	2.7	4
119	Memoryâ€•and timeâ€efficient dense network for singleâ€image superâ€resolution. IET Signal Processing, 2021, 15, 141-152.	1.5	4
120	Presenting the Multi-view Traffic Intersection Dataset (MTID): A Detailed Traffic-Surveillance Dataset. , 2020, , .		4
121	Vision-based Individual Factors Acquisition for Thermal Comfort Assessment in a Built Environment. , 2020, , .		4
122	Evaluation of human body tracking system for gesture-based programming of industrial robots. , 2012, , .		3
123	Detecting road user actions in traffic intersections using RGB and thermal video. , 2015, , .		3
124	Initiating GrabCut by color difference for automatic foreground extraction of passport imagery. , 2016, , .		3
125	Automatic Access Control Based on Face and Hand Biometrics in a Non-cooperative Context. , 2018, , .		3
126	Sewer Deterioration Modeling: The Effect of Training a Random Forest Model on Logically Selected Data-groups. Procedia Computer Science, 2020, 176, 291-299.	2.0	3

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127	Comprehensive Feature Analysis for Sewer Deterioration Modeling. Water (Switzerland), 2021, 13, 819.	2.7	3
128	Diagnosis of Broiler Livers by Classifying Image Patches. Lecture Notes in Computer Science, 2017, , 374-385.	1.3	3
129	Learning to Remove Rain in Traffic Surveillance by using Synthetic Data. , 2019, , .		3
130	Generating Synthetic Point Clouds of Sewer Networks: An Initial Investigation. Lecture Notes in Computer Science, 2020, , 364-373.	1.3	3
131	Multi-Task Classification of Sewer Pipe Defects and Properties using a Cross-Task Graph Neural Network Decoder. , 2022, , .		3
132	Hybrid super resolution using refined face logs. , 2010, , .		2
133	Automatic Analysis of Activities in Sports Arenas Using Thermal Cameras. , 2016, , .		2
134	Getting Crevices, Cracks, and Grooves in Line: Anomaly Categorization for AQC Judgment Models. , 2018, , .		2
135	Backâ€dropout transfer learning for action recognition. IET Computer Vision, 2018, 12, 484-491.	2.0	2
136	Preventing Drowning Accidents Using Thermal Cameras. Lecture Notes in Computer Science, 2016, , 111-122.	1.3	2
137	Face Detection Using Multiple Cues. , 2007, , 51-60.		2
138	Classification of Sports Types Using Thermal Imagery. Advances in Computer Vision and Pattern Recognition, 2014, , 209-227.	1.3	2
139	Re-Identification of Giant Sunfish using Keypoint Matching. Proceedings of the Northern Lights Deep Learning Workshop, 0, 3, .	0.0	2
140	Pose Estimating the Human Arm Using Kinematics and the Sequential Monte Carlo Framework. , 2005, , .		1
141	Hallucination of super-resolved face images. , 2010, , .		1
142	Action recognition using salient neighboring histograms. , 2013, , .		1
143	Occupancy analysis of soccer fields using wide-angle lens. , 2017, , .		1
144	Intelligent Injection Curing of Bacon. Procedia Manufacturing, 2019, 38, 148-155.	1.9	1

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145	Statistical Machine Learning for Human Behaviour Analysis. Entropy, 2020, 22, 530.	2.2	1
146	Fantastic plastic? An image-based test method to detect aesthetic defects in batches based on reference samples. Polymer Testing, 2020, 89, 106585.	4.8	1
147	Supervised versus Self-supervised Assistant for Surveillance of Harbor Fronts. , 2021, , .		1
148	Computer Vision for 3D Perception and Applications. Sensors, 2021, 21, 3944.	3.8	1
149	Deep transfer learning in humanâ€“robot interaction for cognitive and physical rehabilitation purposes. Pattern Analysis and Applications, 0, , 1.	4.6	1
150	Generalizing Floor Plans Using Graph Neural Networks. , 2021, , .		1
151	Image Acquisition. Undergraduate Topics in Computer Science, 2020, , 7-25.	0.2	1
152	Effective fusion of deep multitasking representations for robust visual tracking. Visual Computer, 0, , 1.	3.5	1
153	Detecting Road Users at Intersections Through Changing Weather Using RGB-Thermal Video. Lecture Notes in Computer Science, 2015, , 741-751.	1.3	1
154	Classify Broiler Viscera Using an Iterative Approach on Noisy Labeled Training Data. Lecture Notes in Computer Science, 2018, , 264-273.	1.3	1
155	Pose Estimation from RGB Images of Highly Symmetric Objects using a Novel Multi-Pose Loss and Differential Rendering. , 2021, , .		1
156	Autoencoders for Semi-Supervised Water Level Modeling in Sewer Pipes with Sparse Labeled Data. Water (Switzerland), 2022, 14, 333.	2.7	1
157	Imitating Emergencies: Generating Thermal Surveillance Fall Data Using Low-Cost Human-like Dolls. Sensors, 2022, 22, 825.	3.8	1
158	Data-Driven Drift Detection in Real Process Tanks: Bridging the Gap between Academia and Practice. Water (Switzerland), 2022, 14, 926.	2.7	1
159	AVSS 2008 Commentary Paper for: "Tracking People in Crowds by a Part Matching Approach". , 2008, , .		0
160	Invariant Classification of Gait Types. , 2008, , .		0
161	Is There Anybody Out There?. , 2011, , 3-9.		0
162	Adaptive Non-local Means for Cost Aggregation in a Local Disparity Estimation Algorithm. , 2014, , .		0

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163	Analyzing Wheels of Vehicles in Motion Using Laser Scanning. , 2016, , .		0
164	Guest Editorial: Analysis and Retrieval of Events/Actions and Workflows in Video Streams. Multimedia Tools and Applications, 2016, 75, 14985-14990.	3.9	0
165	Constraint patch matching for faster person re-identification. , 2017, , .		0
166	Guest editorial: special issue on human abnormal behavioural analysis. Machine Vision and Applications, 2019, 30, 807-811.	2.7	0
167	One-To-One Person Re-Identification For Queue Time Estimation. , 2020, , .		0
168	Defect or Design? Leveraging the Angle of Opportunity for Detecting Scratches on Brushed Aluminium Surfaces. IEEE Access, 2021, 9, 99526-99538.	4.2	0
169	Evaluation of Edge Platforms for Deep Learning in Computer Vision. Lecture Notes in Computer Science, 2021, , 523-537.	1.3	0
170	Complementing SRCNN by Transformed Self-Exemplars. Lecture Notes in Computer Science, 2017, , 127-136.	1.3	0
171	Geometric Transformations. Undergraduate Topics in Computer Science, 2020, , 131-141.	0.2	0
172	Pixel Classification. Undergraduate Topics in Computer Science, 2020, , 119-129.	0.2	0
173	Line and Path Detection. Undergraduate Topics in Computer Science, 2020, , 155-167.	0.2	0
174	Color Images. Undergraduate Topics in Computer Science, 2020, , 103-117.	0.2	0
175	BLOB Analysis. Undergraduate Topics in Computer Science, 2020, , 87-101.	0.2	0
176	Image Storage and Compression. Undergraduate Topics in Computer Science, 2020, , 27-32.	0.2	0
177	Real-World Thermal Image Super-Resolution. Lecture Notes in Computer Science, 2021, , 3-14.	1.3	0
178	SieveNet: Estimating the Particle Size Distribution of Kernel Fragments in Whole Plant Corn Silage. , 2022, , .		0
179	Detecting Anomalies Reliably in Long-term Surveillance Systems. , 2022, , .		0
180	Presenting a Novel Pipeline for Performance Comparison of V-PCC and G-PCC Point Cloud Compression Methods on Datasets with Varying Properties. , 2022, , .		0