Tinne Tuytelaars

List of Publications by Citations

188 papers	20,014 citations	42 h-index	141 g-index
202 ext. papers	24,647 ext. citations	3.7 avg, IF	7.1 L-index

#	Paper	IF	Citations
188	Speeded-Up Robust Features (SURF). *Computer Vision and Image Understanding*, **2008**, 110, 346-359	4.3	7840
187	SURF: Speeded Up Robust Features. *Lecture Notes in Computer Science*, **2006**, 404-417	0.9	3343
186	A Comparison of Affine Region Detectors. *International Journal of Computer Vision*, **2005**, 65, 43-72	10.6	1902
185	Local Invariant Feature Detectors: A Survey. *Foundations and Trends in Computer Graphics and Vision* , **2007**, 3, 177-280	12	824
184	Unsupervised Visual Domain Adaptation Using Subspace Alignment **2013**,		580
183	Matching Widely Separated Views Based on Affine Invariant Regions. *International Journal of Computer Vision*, **2004**, 59, 61-85	10.6	410
182	An Efficient Dense and Scale-Invariant Spatio-Temporal Interest Point Detector. *Lecture Notes in Computer Science*, **2008**, 650-663	0.9	317
181	Modeling video evolution for action recognition **2015**,		261
180	**2005**,		197
179	Guiding the Long-Short Term Memory Model for Image Caption Generation **2015**,		175
178	Moment invariants for recognition under changing viewpoint and illumination. *Computer Vision and Image Understanding*, **2004**, 94, 3-27	4.3	160
177	Rank Pooling for Action Recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 773-787	13.3	156
176	Seeking the Strongest Rigid Detector **2013**,		149
175	Memory Aware Synapses: Learning What (not) to Forget. *Lecture Notes in Computer Science*, **2018**, 144-161	0.9	142
174	A thousand words in a scene. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2007**, 29, 1575-89	13.3	138
173	Simultaneous Object Recognition and Segmentation from Single or Multiple Model Views. *International Journal of Computer Vision*, **2006**, 67, 159-188	10.6	136
172	Omnidirectional Vision Based Topological Navigation. *International Journal of Computer Vision*, **2007**, 74, 219-236	10.6	135

171	Unsupervised Object Discovery: A Comparison. *International Journal of Computer Vision*, **2010**, 88, 284-302	10.6	129
170	Fine-Grained Categorization by Alignments **2013**,		113
169	Weakly supervised object detection with convex clustering **2015**,		109
168	Expert Gate: Lifelong Learning with a Network of Experts **2017**,		106
167	Sketch classification and classification-driven analysis using Fisher vectors. *ACM Transactions on Graphics*, **2014**, 33, 1-9	7.6	93
166	Vector Quantizing Feature Space with a Regular Lattice **2007**,		93
165	Object Detection by Contour Segment Networks. *Lecture Notes in Computer Science*, **2006**, 14-28	0.9	88
164	Discriminatively Trained Templates for 3D Object Detection: A Real Time Scalable Approach **2013**,		87
163	Content-Based Image Retrieval Based on Local Affinely Invariant Regions. *Lecture Notes in Computer Science*, **1999**, 493-500	0.9	87
162	A continual learning survey: Defying forgetting in classification tasks. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2021**, PP,	13.3	79
161	Dense matching of multiple wide-baseline views **2003**,		69
160	Simultaneous Object Recognition and Segmentation by Image Exploration. *Lecture Notes in Computer Science*, **2004**, 40-54	0.9	69
159	The NBNN kernel **2011**,		66
158	DeepProposal: Hunting Objects by Cascading Deep Convolutional Layers **2015**,		65
157	Dense interest points **2010**,		64
156	Encoder Based Lifelong Learning **2017**,		59
155	Deep Reflectance Maps **2016**,		56
154	Mining Mid-level Features for Image Classification. *International Journal of Computer Vision*, **2014**, 108, 186-203	10.6	54

153	A Deeper Look at Dataset Bias. *Advances in Computer Vision and Pattern Recognition*, **2017**, 37-55	1.1	54
152	Online Action Detection. *Lecture Notes in Computer Science*, **2016**, 269-284	0.9	49
151	. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2003**, 25, 418-432	13.3	46
150	HPAT Indexing for Fast Object/Scene Recognition Based on Local Appearance **2003**, 71-80		46
149	From omnidirectional images to hierarchical localization. *Robotics and Autonomous Systems*, **2007**, 55, 372-382	3.5	45
148	**2019**,		45
147	Local Alignments for Fine-Grained Categorization. *International Journal of Computer Vision*, **2015**, 111, 191-212	10.6	42
146	Wide-baseline multiple-view correspondences		40
145	Deformable part models revisited: A performance evaluation for object category pose estimation **2011**,		39
144	Active Transfer Learning with Zero-Shot Priors: Reusing Past Datasets for Future Tasks **2015**,		38
143	Joint cross-domain classification and subspace learning for unsupervised adaptation. *Pattern Recognition Letters*, **2015**, 65, 60-66	4.7	37
142	The cascaded Hough transform as an aid in aerial image interpretation		36
141	Feature based omnidirectional sparse visual path following **2005**,		35
140	Reflectance and Natural Illumination from Single-Material Specular Objects Using Deep Learning. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2018**, 40, 1932-1947	13.3	32
139	Efficient multi-camera vehicle detection, tracking, and identification in a tunnel surveillance application. *Computer Vision and Image Understanding*, **2012**, 116, 742-753	4.3	29
138	A Deeper Look at Dataset Bias. *Lecture Notes in Computer Science*, **2015**, 504-516	0.9	29
137	Example-Based Sketch Segmentation and Labeling Using CRFs. *ACM Transactions on Graphics*, **2016**, 35, 1-9	7.6	28
136	Markerless augmented reality with a real-time affine region tracker		27

135	Novel Views of Objects from a Single Image. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 1576-1590	13.3	27
134	Camera-Based Fall Detection on Real World Data. *Lecture Notes in Computer Science*, **2012**, 356-375	0.9	27
133	What is Around the Camera? **2017**,		26
132	Mining Multiple Queries for Image Retrieval: On-the-Fly Learning of an Object-Specific Mid-level Representation **2013**,		26
131	Kernelized sorting. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2010**, 32, 1809-21	13.3	26
130	. *IEEE Transactions on Multimedia*, **2010**, 12, 13-27	6.6	26
129	Exemplar-based Action Recognition in Video **2009**,		25
128	Effective Use of Frequent Itemset Mining for Image Classification. *Lecture Notes in Computer Science*, **2012**, 214-227	0.9	25
127	Modeling Temporal Structure with LSTM for Online Action Detection **2018**,		24
126	CNN-based single image obstacle avoidance on a quadrotor **2017**,		23
125	Naming People in News Videos with Label Propagation. *IEEE MultiMedia*, **2011**, 18, 44-55	2.1	21
124	Image-Based Synthesis and Re-synthesis of Viewpoints Guided by 3D Models **2014**,		20
123	Dynamic Convolutions: Exploiting Spatial Sparsity for Faster Inference **2020**,		19
122	Camera-based fall detection using real-world versus simulated data: How far are we from the solution?. *Journal of Ambient Intelligence and Smart Environments*, **2016**, 8, 149-168	2.2	18
121	Real-time affine region tracking and coplanar grouping		18
120	Is 2D Information Enough For Viewpoint Estimation? **2014**,		18
119	The cascaded Hough transform		16
118	Location recognition over large time lags. *Computer Vision and Image Understanding*, **2015**, 139, 21-28	4.3	14

117	Spatio-temporal features for robust content-based video copy detection **2008**,		14
116	Weakly Supervised Detection with Posterior Regularization **2014**,		14
115	Naming persons in news video with label propagation **2010**,		13
114	Efficient multi-camera detection, tracking, and identification using a shared set of haar-features **2011**,		13
113	Depth-From-Recognition: Inferring Meta-data by Cognitive Feedback **2007**,		13
112	Scalable Semi-Automatic Annotation for Multi-Camera Person Tracking. *IEEE Transactions on Image Processing*, **2016**, 25, 2259-74	8.7	13
111	Beyond 2D-grids **2010**,		12
110	Shape-from-recognition: Recognition enables meta-data transfer. *Computer Vision and Image Understanding*, **2009**, 113, 1222-1234	4.3	12
109	Efficient grouping under perspective skew		12
108	DeepProposals: Hunting Objects and Actions by Cascading Deep Convolutional Layers. *International Journal of Computer Vision*, **2017**, 124, 115-131	10.6	11
107	Finding a needle in a haystack: an interactive video archive explorer for professional video searchers. *Multimedia Tools and Applications*, **2013**, 63, 331-356	2.5	11
106	Camera-based fall detection using a particle filter. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 6947-50	0.9	11
105	Towards a more discriminative and semantic visual vocabulary. *Computer Vision and Image Understanding*, **2011**, 115, 415-425	4.3	11
104	Integrating video and accelerometer signals for nocturnal epileptic seizure detection **2012**,		11
103	All together now: Simultaneous Detection and Continuous Pose Estimation using a Hough Forest with Probabilistic Locally Enhanced Voting **2014**,		11
102	Continual Prototype Evolution: Learning Online from Non-Stationary Data Streams **2021**,		11
101	Cross-Modal Supervision for Learning Active Speaker Detection in Video. *Lecture Notes in Computer Science*, **2016**, 285-301	0.9	10
100	Who's Speaking? **2015**,		10

99	Using Spatio-Temporal Interest Points (STIP) for myoclonic jerk detection in nocturnal video. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 4454-7	0.9	10
98	Local Features for Image Retrieval. *Computational Imaging and Vision*, **2001**, 21-41		10
97	Video object proposals **2012**,		9
96	The cascaded Hough transform as support for grouping and finding vanishing points and lines. *Lecture Notes in Computer Science*, **1997**, 278-289	0.9	9
95	Vision Based Intelligent Wheel Chair Control: The Role of Vision and Inertial Sensing in Topological Navigation. *Journal of Field Robotics*, **2004**, 21, 85-94		9
94	Lightweight Unsupervised Domain Adaptation by Convolutional Filter Reconstruction. *Lecture Notes in Computer Science*, **2016**, 508-515	0.9	9
93	A Testbed for Cross-Dataset Analysis. *Lecture Notes in Computer Science*, **2015**, 18-31	0.9	9
92	An Elastic Deformation Field Model for Object Detection and Tracking. *International Journal of Computer Vision*, **2015**, 111, 137-152	10.6	8
91	Towards sign language recognition based on body parts relations **2015**,		8
90	Dataset fingerprints: Exploring image collections through data mining **2015**,		8
89	Color features for dating historical color images **2014**,		8
88	Dense interest features for video processing **2014**,		8
87	Mixture Dense Regression for Object Detection and Human Pose Estimation **2020**,		8
86	A Deep Multi-modal Explanation Model for Zero-shot Learning. *IEEE Transactions on Image Processing*, **2020**,	8.7	7
85	Three Ways to Improve the Performance of Real-Life Camera-Based Fall Detection Systems. *Journal of Sensors*, **2017**, 2017, 1-15	2	7
84	Boosting masked dominant orientation templates for efficient object detection. *Computer Vision and Image Understanding*, **2014**, 120, 103-116	4.3	7
83	Using Multi-view Recognition and Meta-data Annotation to Guide a Robot's Attention. *International Journal of Robotics Research*, **2009**, 28, 976-998	5.7	7
82	A Relational Kernel-Based Framework for Hierarchical Image Understanding. *Lecture Notes in Computer Science*, **2012**, 171-180	0.9	7

81	Avalanche: an End-to-End Library for Continual Learning **2021**,		7
80	Wildlife recognition in nature documentaries with weak supervision from subtitles and external data. *Pattern Recognition Letters*, **2016**, 81, 63-70	4.7	6
79	Continuous Pose Estimation with a Spatial Ensemble of Fisher Regressors **2015**,		6
78	Learning to Rank Based on Subsequences **2015**,		6
77	Using a Deformation Field Model for Localizing Faces and Facial Points under Weak Supervision **2014**,		6
76	Pedestrian Detection at Warp Speed: Exceeding 500 Detections per Second **2013**,		6
75	Localization with omnidirectional images using the radial trifocal tensor		6
74	Naive Bayes Image Classification: Beyond Nearest Neighbors. *Lecture Notes in Computer Science*, **2013**, 689-703	0.9	6
73	Computer Vision and Human Behaviour, Emotion and Cognition Detection: A Use Case on Student Engagement. *Mathematics*, **2021**, 9, 287	2.3	6
72	Simultaneous Object Recognition and Segmentation by Image Exploration. *Lecture Notes in Computer Science*, **2006**, 145-169	0.9	6
71	[Formula: see text]-Patches: A Benchmark and Evaluation of Handcrafted and Learned Local Descriptors. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2020**, 42, 2825-2841	13.3	5
70	Active speaker detection with audio-visual co-training **2016**,		5
69	Entity linking across vision and language. *Multimedia Tools and Applications*, **2017**, 76, 22599-22622	2.5	5
68	Object Classification with Adaptable Regions **2014**,		5
67	Multi RGB-D camera setup for generating large 3D point clouds **2013**,		5
66	Non-Overlapping Multi-camera Detection and Tracking of Vehicles in Tunnel Surveillance **2011**,		5
65	Is structure needed for omnidirectional visual homing?		5
64	Allocentric Pose Estimation **2013**,		4

63	Modeling shapes and textures from images: new frontiers		4
62	More Classifiers, Less Forgetting: A Generic Multi-classifier Paradigm for Incremental Learning. *Lecture Notes in Computer Science*, **2020**, 699-716	0.9	4
61	The Pooled NBNN Kernel: Beyond Image-to-Class and Image-to-Image. *Lecture Notes in Computer Science*, **2013**, 176-189	0.9	4
60	Unsupervised Model Personalization While Preserving Privacy and Scalability: An Open Problem **2020**,		4
59	Recovering hard-to-find object instances by sampling context-based object proposals. *Computer Vision and Image Understanding*, **2016**, 152, 118-130	4.3	4
58	**2019**,		4
57	Monocular Depth Estimation in New Environments With Absolute Scale **2019**,		4
56	Vision and Language Integration Meets Multimedia Fusion **2016**,		3
55	Pose Estimation Errors, the Ultimate Diagnosis. *Lecture Notes in Computer Science*, **2016**, 118-134	0.9	3
54	A Scalable 3D HOG Model for Fast Object Detection and Viewpoint Estimation **2014**,		3
53	There are plenty of places like home: Using relational representations in hierarchies for distance-based image understanding. *Neurocomputing*, **2014**, 123, 75-85	5.4	3
52	Special issue on 3D representation for object and scene recognition. *Computer Vision and Image Understanding*, **2009**, 113, 1181-1182	4.3	3
51	Automatic annotation of unique locations from video and text **2010**,		3
50	Fast Head Pose Estimation for Human-Computer Interaction. *Lecture Notes in Computer Science*, **2015**, 101-110	0.9	3
49	The CAMETRON Lecture Recording System: High Quality Video Recording and Editing with Minimal Human Supervision. *Lecture Notes in Computer Science*, **2018**, 518-530	0.9	3
48	Grouping via the Matching of Repeated Patterns. *Lecture Notes in Computer Science*, **2001**, 252-261	0.9	3
47	Rehearsal revealed: The limits and merits of revisiting samples in continual learning **2021**,		3
46	Multidisciplinary Learning through Implementation of the DVB-S2 Standard. *IEEE Communications Magazine*, **2017**, 55, 124-130	9.1	2

45	Real-Time Embedded Computer Vision on UAVs. *Lecture Notes in Computer Science*, **2019**, 3-10	0.9	2
44	Swap Retrieval **2015**,		2
43	Naming persons in video: Using the weak supervision of textual stories. *Journal of Visual Communication and Image Representation*, **2013**, 24, 944-955	2.7	2
42	Darwintrees for Action Recognition **2017**,		2
41	A relational kernel-based approach to scene classification **2013**,		2
40	Range determination for mobile robots using an omnidirectional camera. *Integrated Computer-Aided Engineering*, **2007**, 14, 63-72	5.2	2
39	Real-Time Embedded Computer Vision on UAVs:. *Lecture Notes in Computer Science*, **2020**, 665-674	0.9	2
38	Towards Automatic Image Editing: Learning to See another You **2016**,		2
37	Who that Actor? Automatic Labelling of Actors in TV Series Starting from IMDB Images. *Lecture Notes in Computer Science*, **2017**, 467-483	0.9	2
36	Visual Topological Map Building in Self-similar Environments **2008**, 195-205		2
35	Error Correction for Dense Semantic Image Labeling **2018**,		2
34	From Pixels to Actions: Learning to Drive a Car with Deep Neural Networks **2018**,		2
33	Adventurous Tourism for Couch Potatoes. *Lecture Notes in Computer Science*, **1999**, 98-107	0.9	2
32	Action in chains: A chains model for action localization and classification **2014**,		1
31	Towards cautious collective inference for object verification **2014**,		1
30	Coupling video segmentation and action recognition **2014**,		1
29	Learning Where to Position Parts in 3D **2015**,		1
28	The Combinator: Optimal Combination of Multiple Pedestrian Detectors **2014**,		1

27	Real-Time Vision-Based Pedestrian Detection in a Truck's Blind Spot Zone Using a Warping Window Approach. *Lecture Notes in Electrical Engineering*, **2014**, 251-264	0.2	1
26	**2012**,		1
25	Codebook-free exemplar models for object detection **2012**,		1
24	Residual Tuning: Toward Novel Category Discovery Without Labels.. *IEEE Transactions on Neural Networks and Learning Systems*, **2022**, PP,	10.3	1
23	Attend and Segment: Attention Guided Active Semantic Segmentation. *Lecture Notes in Computer Science*, **2020**, 305-321	0.9	1
22	Commands 4 Autonomous Vehicles (C4AV) Workshop Summary. *Lecture Notes in Computer Science*, **2020**, 3-26	0.9	1
21	Class Representative Visual Words for Category-Level Object Recognition. *Lecture Notes in Computer Science*, **2009**, 184-191	0.9	1
20	Automatic Occlusion Removal from Facades for 3D Urban Reconstruction. *Lecture Notes in Computer Science*, **2011**, 681-692	0.9	1
19	Unpaired Image-To-Image Shape Translation Across Fashion Data **2020**,		1
18	**2021**,		1
17	MIXEM: Unsupervised Image Classification Using a Mixture of Embeddings. *Lecture Notes in Computer Science*, **2021**, 38-55	0.9	1
16	An Analysis of Human-Centered Geolocation **2018**,		1
15	Inline nondestructive internal disorder detection in pear fruit using explainable deep anomaly detection on X-ray images. *Computers and Electronics in Agriculture*, **2022**, 197, 106962	6.5	1
14	SegBlocks: Towards Block-Based Adaptive Resolution Networks for Fast Segmentation. *Lecture Notes in Computer Science*, **2020**, 18-22	0.9	0
13	Multiple Exemplars-Based Hallucination for Face Super-Resolution and Editing. *Lecture Notes in Computer Science*, **2021**, 258-273	0.9	0
12	Learning Multi-instance Sub-pixel Point Localization. *Lecture Notes in Computer Science*, **2021**, 669-686	0.9	0
11	Context-based object viewpoint estimation: A 2D relational approach. *Computer Vision and Image Understanding*, **2017**, 160, 100-113	4.3	
10	Vision and Language Integration Meets Multimedia Fusion. *IEEE MultiMedia*, **2018**, 25, 7-10	2.1	

9	Feed-Forward On-Edge Fine-Tuning Using Static Synthetic Gradient Modules. *Lecture Notes in Computer Science*, **2020**, 131-146	0.9
8	A Shape Based, Viewpoint Invariant Local Descriptor. *Lecture Notes in Computer Science*, **2005**, 349-359	0.9
7	7 th Dutch-Belgian Information Retrieval Workshop March 28--29, 2007 Katholieke Universiteit Leuven, Belgium. *ACM SIGIR Forum*, **2007**, 41, 121-122	0.9
6	Exploring the Challenges Towards Lifelong Fact Learning. *Lecture Notes in Computer Science*, **2019**, 66-84	0.9
5	Spatio-Temporal Object Recognition. *Lecture Notes in Computer Science*, **2015**, 681-692	0.9
4	Not Far Away from Home: A Relational Distance-Based Approach to Understanding Images of Houses. *Lecture Notes in Computer Science*, **2011**, 22-29	0.9
3	Show me where the action is!. *Multimedia Tools and Applications*, **2021**, 80, 383-408	2.5
2	In Defense of LSTMs for Addressing Multiple Instance Learning Problems. *Lecture Notes in Computer Science*, **2021**, 444-460	0.9
1	Can we Localize an AV from a Single Image? Deep-Geometric 6 DoF Localization in Topo-metric Maps. *ASME Journal of Autonomous Vehicles and Systems*,1-13	