Tinne Tuytelaars

List of Publications by Year in Descending Order

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	Residual Tuning: Toward Novel Category Discovery Without Labels.. *IEEE Transactions on Neural Networks and Learning Systems*, **2022**, PP,	10.3	1
187	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
186	**2021**,		1
185	Avalanche: an End-to-End Library for Continual Learning **2021**,		7
184	Show me where the action is!. *Multimedia Tools and Applications*, **2021**, 80, 383-408	2.5	
183	MIXEM: Unsupervised Image Classification Using a Mixture of Embeddings. *Lecture Notes in Computer Science*, **2021**, 38-55	0.9	1
182	In Defense of LSTMs for Addressing Multiple Instance Learning Problems. *Lecture Notes in Computer Science*, **2021**, 444-460	0.9	
181	Computer Vision and Human Behaviour, Emotion and Cognition Detection: A Use Case on Student Engagement. *Mathematics*, **2021**, 9, 287	2.3	6
180	Multiple Exemplars-Based Hallucination for Face Super-Resolution and Editing. *Lecture Notes in Computer Science*, **2021**, 258-273	0.9	0
179	Learning Multi-instance Sub-pixel Point Localization. *Lecture Notes in Computer Science*, **2021**, 669-686	0.9	0
178	A continual learning survey: Defying forgetting in classification tasks. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2021**, PP,	13.3	79
177	Continual Prototype Evolution: Learning Online from Non-Stationary Data Streams **2021**,		11
176	Rehearsal revealed: The limits and merits of revisiting samples in continual learning **2021**,		3
175	[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
174	A Deep Multi-modal Explanation Model for Zero-shot Learning. *IEEE Transactions on Image Processing*, **2020**,	8.7	7
173	SegBlocks: Towards Block-Based Adaptive Resolution Networks for Fast Segmentation. *Lecture Notes in Computer Science*, **2020**, 18-22	0.9	0
172	Feed-Forward On-Edge Fine-Tuning Using Static Synthetic Gradient Modules. *Lecture Notes in Computer Science*, **2020**, 131-146	0.9	

171	Real-Time Embedded Computer Vision on UAVs:. *Lecture Notes in Computer Science*, **2020**, 665-674	0.9	2
170	More Classifiers, Less Forgetting: A Generic Multi-classifier Paradigm for Incremental Learning. *Lecture Notes in Computer Science*, **2020**, 699-716	0.9	4
169	Attend and Segment: Attention Guided Active Semantic Segmentation. *Lecture Notes in Computer Science*, **2020**, 305-321	0.9	1
168	Commands 4 Autonomous Vehicles (C4AV) Workshop Summary. *Lecture Notes in Computer Science*, **2020**, 3-26	0.9	1
167	Dynamic Convolutions: Exploiting Spatial Sparsity for Faster Inference **2020**,		19
166	Unpaired Image-To-Image Shape Translation Across Fashion Data **2020**,		1
165	Mixture Dense Regression for Object Detection and Human Pose Estimation **2020**,		8
164	Unsupervised Model Personalization While Preserving Privacy and Scalability: An Open Problem **2020**,		4
163	Real-Time Embedded Computer Vision on UAVs. *Lecture Notes in Computer Science*, **2019**, 3-10	0.9	2
162	Exploring the Challenges Towards Lifelong Fact Learning. *Lecture Notes in Computer Science*, **2019**, 66-84	0.9	
161	**2019**,		4
160	Monocular Depth Estimation in New Environments With Absolute Scale **2019**,		4
159	**2019**,		45
158	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
157	Vision and Language Integration Meets Multimedia Fusion. *IEEE MultiMedia*, **2018**, 25, 7-10	2.1	
156	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
155	Error Correction for Dense Semantic Image Labeling **2018**,		2
154	Memory Aware Synapses: Learning What (not) to Forget. *Lecture Notes in Computer Science*, **2018**, 144-161	1.9	142

153	Modeling Temporal Structure with LSTM for Online Action Detection **2018**,		24
152	An Analysis of Human-Centered Geolocation **2018**,		1
151	From Pixels to Actions: Learning to Drive a Car with Deep Neural Networks **2018**,		2
150	Rank Pooling for Action Recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 773-787	13.3	156
149	Context-based object viewpoint estimation: A 2D relational approach. *Computer Vision and Image Understanding*, **2017**, 160, 100-113	4.3	
148	Multidisciplinary Learning through Implementation of the DVB-S2 Standard. *IEEE Communications Magazine*, **2017**, 55, 124-130	9.1	2
147	DeepProposals: Hunting Objects and Actions by Cascading Deep Convolutional Layers. *International Journal of Computer Vision*, **2017**, 124, 115-131	10.6	11
146	Three Ways to Improve the Performance of Real-Life Camera-Based Fall Detection Systems. *Journal of Sensors*, **2017**, 2017, 1-15	2	7
145	A Deeper Look at Dataset Bias. *Advances in Computer Vision and Pattern Recognition*, **2017**, 37-55	1.1	54
144	CNN-based single image obstacle avoidance on a quadrotor **2017**,		23
143	Entity linking across vision and language. *Multimedia Tools and Applications*, **2017**, 76, 22599-22622	2.5	5
142	What is Around the Camera? **2017**,		26
141	Expert Gate: Lifelong Learning with a Network of Experts **2017**,		106
140	Darwintrees for Action Recognition **2017**,		2
139	Encoder Based Lifelong Learning **2017**,		59
138	Novel Views of Objects from a Single Image. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 1576-1590	13.3	27
137	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
136	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

135	Vision and Language Integration Meets Multimedia Fusion **2016**,		3
134	Pose Estimation Errors, the Ultimate Diagnosis. *Lecture Notes in Computer Science*, **2016**, 118-134	0.9	3
133	Cross-Modal Supervision for Learning Active Speaker Detection in Video. *Lecture Notes in Computer Science*, **2016**, 285-301	0.9	10
132	Active speaker detection with audio-visual co-training **2016**,		5
131	Deep Reflectance Maps **2016**,		56
130	Wildlife recognition in nature documentaries with weak supervision from subtitles and external data. *Pattern Recognition Letters*, **2016**, 81, 63-70	4.7	6
129	Towards Automatic Image Editing: Learning to See another You **2016**,		2
128	Online Action Detection. *Lecture Notes in Computer Science*, **2016**, 269-284	0.9	49
127	Lightweight Unsupervised Domain Adaptation by Convolutional Filter Reconstruction. *Lecture Notes in Computer Science*, **2016**, 508-515	0.9	9
126	Scalable Semi-Automatic Annotation for Multi-Camera Person Tracking. *IEEE Transactions on Image Processing*, **2016**, 25, 2259-74	8.7	13
125	Recovering hard-to-find object instances by sampling context-based object proposals. *Computer Vision and Image Understanding*, **2016**, 152, 118-130	4.3	4
124	Example-Based Sketch Segmentation and Labeling Using CRFs. *ACM Transactions on Graphics*, **2016**, 35, 1-9	7.6	28
123	Local Alignments for Fine-Grained Categorization. *International Journal of Computer Vision*, **2015**, 111, 191-212	10.6	42
122	An Elastic Deformation Field Model for Object Detection and Tracking. *International Journal of Computer Vision*, **2015**, 111, 137-152	10.6	8
121	Swap Retrieval **2015**,		2
120	Location recognition over large time lags. *Computer Vision and Image Understanding*, **2015**, 139, 21-28	4.3	14
119	Joint cross-domain classification and subspace learning for unsupervised adaptation. *Pattern Recognition Letters*, **2015**, 65, 60-66	4.7	37
118	Who's Speaking? **2015**,		10

117	Weakly supervised object detection with convex clustering **2015**,		109
116	Modeling video evolution for action recognition **2015**,		261
115	Guiding the Long-Short Term Memory Model for Image Caption Generation **2015**,		175
114	Continuous Pose Estimation with a Spatial Ensemble of Fisher Regressors **2015**,		6
113	DeepProposal: Hunting Objects by Cascading Deep Convolutional Layers **2015**,		65
112	Active Transfer Learning with Zero-Shot Priors: Reusing Past Datasets for Future Tasks **2015**,		38
111	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
110	Learning Where to Position Parts in 3D **2015**,		1
109	Learning to Rank Based on Subsequences **2015**,		6
108	Towards sign language recognition based on body parts relations **2015**,		8
107	Dataset fingerprints: Exploring image collections through data mining **2015**,		8
106	Fast Head Pose Estimation for Human-Computer Interaction. *Lecture Notes in Computer Science*, **2015**, 101-110	0.9	3
105	A Deeper Look at Dataset Bias. *Lecture Notes in Computer Science*, **2015**, 504-516	0.9	29
104	A Testbed for Cross-Dataset Analysis. *Lecture Notes in Computer Science*, **2015**, 18-31	0.9	9
103	Spatio-Temporal Object Recognition. *Lecture Notes in Computer Science*, **2015**, 681-692	0.9	
102	Mining Mid-level Features for Image Classification. *International Journal of Computer Vision*, **2014**, 108, 186-203	10.6	54
101	Action in chains: A chains model for action localization and classification **2014**,		1
100	Towards cautious collective inference for object verification **2014**,		1

99	Coupling video segmentation and action recognition **2014**,		1
98	Boosting masked dominant orientation templates for efficient object detection. *Computer Vision and Image Understanding*, **2014**, 120, 103-116	4.3	7
97	Using a Deformation Field Model for Localizing Faces and Facial Points under Weak Supervision **2014**,		6
96	The Combinator: Optimal Combination of Multiple Pedestrian Detectors **2014**,		1
95	Color features for dating historical color images **2014**,		8
94	Sketch classification and classification-driven analysis using Fisher vectors. *ACM Transactions on Graphics*, **2014**, 33, 1-9	7.6	93
93	Dense interest features for video processing **2014**,		8
92	Image-Based Synthesis and Re-synthesis of Viewpoints Guided by 3D Models **2014**,		20
91	Object Classification with Adaptable Regions **2014**,		5
90	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
89	A Scalable 3D HOG Model for Fast Object Detection and Viewpoint Estimation **2014**,		3
88	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
87	Is 2D Information Enough For Viewpoint Estimation? **2014**,		18
86	Weakly Supervised Detection with Posterior Regularization **2014**,		14
85	All together now: Simultaneous Detection and Continuous Pose Estimation using a Hough Forest with Probabilistic Locally Enhanced Voting **2014**,		11
84	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
83	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
82	Allocentric Pose Estimation **2013**,		4

81	Discriminatively Trained Templates for 3D Object Detection: A Real Time Scalable Approach **2013**,		87
80	Pedestrian Detection at Warp Speed: Exceeding 500 Detections per Second **2013**,		6
79	A relational kernel-based approach to scene classification **2013**,		2
78	Fine-Grained Categorization by Alignments **2013**,		113
77	Mining Multiple Queries for Image Retrieval: On-the-Fly Learning of an Object-Specific Mid-level Representation **2013**,		26
76	Seeking the Strongest Rigid Detector **2013**,		149
75	Unsupervised Visual Domain Adaptation Using Subspace Alignment **2013**,		580
74	Multi RGB-D camera setup for generating large 3D point clouds **2013**,		5
73	The Pooled NBNN Kernel: Beyond Image-to-Class and Image-to-Image. *Lecture Notes in Computer Science*, **2013**, 176-189	0.9	4
72	Naive Bayes Image Classification: Beyond Nearest Neighbors. *Lecture Notes in Computer Science*, **2013**, 689-703	0.9	6
71	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
70	**2012**,		1
69	Integrating video and accelerometer signals for nocturnal epileptic seizure detection **2012**,		11
68	Codebook-free exemplar models for object detection **2012**,		1
67	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
66	Video object proposals **2012**,		9
65	Effective Use of Frequent Itemset Mining for Image Classification. *Lecture Notes in Computer Science*, **2012**, 214-227	0.9	25
64	Camera-Based Fall Detection on Real World Data. *Lecture Notes in Computer Science*, **2012**, 356-375	0.9	27

63	A Relational Kernel-Based Framework for Hierarchical Image Understanding. *Lecture Notes in Computer Science*, **2012**, 171-180	0.9	7
62	Non-Overlapping Multi-camera Detection and Tracking of Vehicles in Tunnel Surveillance **2011**,		5
61	Towards a more discriminative and semantic visual vocabulary. *Computer Vision and Image Understanding*, **2011**, 115, 415-425	4.3	11
60	Deformable part models revisited: A performance evaluation for object category pose estimation **2011**,		39
59	The NBNN kernel **2011**,		66
58	Naming People in News Videos with Label Propagation. *IEEE MultiMedia*, **2011**, 18, 44-55	2.1	21
57	Efficient multi-camera detection, tracking, and identification using a shared set of haar-features **2011**,		13
56	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	
55	Automatic Occlusion Removal from Facades for 3D Urban Reconstruction. *Lecture Notes in Computer Science*, **2011**, 681-692	0.9	1
54	Naming persons in news video with label propagation **2010**,		13
53	Dense interest points **2010**,		64
52	Beyond 2D-grids **2010**,		12
51	Kernelized sorting. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2010**, 32, 1809-21	13.3	26
50	. *IEEE Transactions on Multimedia*, **2010**, 12, 13-27	6.6	26
49	Unsupervised Object Discovery: A Comparison. *International Journal of Computer Vision*, **2010**, 88, 284-302	12.6	129
48	Automatic annotation of unique locations from video and text **2010**,		3
47	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
46	Shape-from-recognition: Recognition enables meta-data transfer. *Computer Vision and Image Understanding*, **2009**, 113, 1222-1234	4.3	12

45	Special issue on 3D representation for object and scene recognition. *Computer Vision and Image Understanding*, **2009**, 113, 1181-1182	4.3	3
44	Exemplar-based Action Recognition in Video **2009**,		25
43	Class Representative Visual Words for Category-Level Object Recognition. *Lecture Notes in Computer Science*, **2009**, 184-191	0.9	1
42	Spatio-temporal features for robust content-based video copy detection **2008**,		14
41	Speeded-Up Robust Features (SURF). *Computer Vision and Image Understanding*, **2008**, 110, 346-359	4.3	7840
40	Visual Topological Map Building in Self-similar Environments **2008**, 195-205		2
39	An Efficient Dense and Scale-Invariant Spatio-Temporal Interest Point Detector. *Lecture Notes in Computer Science*, **2008**, 650-663	0.9	317
38	Local Invariant Feature Detectors: A Survey. *Foundations and Trends in Computer Graphics and Vision* , **2007**, 3, 177-280	12	824
37	Range determination for mobile robots using an omnidirectional camera. *Integrated Computer-Aided Engineering*, **2007**, 14, 63-72	5.2	2
36	From omnidirectional images to hierarchical localization. *Robotics and Autonomous Systems*, **2007**, 55, 372-382	3.5	45
35	Omnidirectional Vision Based Topological Navigation. *International Journal of Computer Vision*, **2007**, 74, 219-236	10.6	135
34	A thousand words in a scene. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2007**, 29, 1575-89	13.3	138
33	Vector Quantizing Feature Space with a Regular Lattice **2007**,		93
32	Depth-From-Recognition: Inferring Meta-data by Cognitive Feedback **2007**,		13
31	7 th Dutch-Belgian Information Retrieval Workshop March 28--29, 2007 Katholieke Universiteit Leuven, Belgium. *ACM SIGIR Forum*, **2007**, 41, 121-122	0.9	
30	SURF: Speeded Up Robust Features. *Lecture Notes in Computer Science*, **2006**, 404-417	0.9	3343
29	Object Detection by Contour Segment Networks. *Lecture Notes in Computer Science*, **2006**, 14-28	0.9	88
28	Simultaneous Object Recognition and Segmentation from Single or Multiple Model Views. *International Journal of Computer Vision*, **2006**, 67, 159-188	10.6	136

27	Simultaneous Object Recognition and Segmentation by Image Exploration. *Lecture Notes in Computer Science*, **2006**, 145-169	0.9	6
26	A Comparison of Affine Region Detectors. *International Journal of Computer Vision*, **2005**, 65, 43-72	10.6	1902
25	**2005**,		197
24	Feature based omnidirectional sparse visual path following **2005**,		35
23	A Shape Based, Viewpoint Invariant Local Descriptor. *Lecture Notes in Computer Science*, **2005**, 349-359	0.9	
22	Simultaneous Object Recognition and Segmentation by Image Exploration. *Lecture Notes in Computer Science*, **2004**, 40-54	0.9	69
21	Matching Widely Separated Views Based on Affine Invariant Regions. *International Journal of Computer Vision*, **2004**, 59, 61-85	10.6	410
20	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
19	Moment invariants for recognition under changing viewpoint and illumination. *Computer Vision and Image Understanding*, **2004**, 94, 3-27	4.3	160
18	Dense matching of multiple wide-baseline views **2003**,		69
17	. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2003**, 25, 418-432	13.3	46
16	HPAT Indexing for Fast Object/Scene Recognition Based on Local Appearance **2003**, 71-80		46
15	Local Features for Image Retrieval. *Computational Imaging and Vision*, **2001**, 21-41		10
14	Grouping via the Matching of Repeated Patterns. *Lecture Notes in Computer Science*, **2001**, 252-261	0.9	3
13	Adventurous Tourism for Couch Potatoes. *Lecture Notes in Computer Science*, **1999**, 98-107	0.9	2
12	Content-Based Image Retrieval Based on Local Affinely Invariant Regions. *Lecture Notes in Computer Science*, **1999**, 493-500	0.9	87
11	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
10	The cascaded Hough transform		16

9	The cascaded Hough transform as an aid in aerial image interpretation	36
8	Is structure needed for omnidirectional visual homing?	5
7	Localization with omnidirectional images using the radial trifocal tensor	6
6	Wide-baseline multiple-view correspondences	40
5	Efficient grouping under perspective skew	12
4	Markerless augmented reality with a real-time affine region tracker	27
3	Modeling shapes and textures from images: new frontiers	4
2	Real-time affine region tracking and coplanar grouping	18
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	