Anton van den Hengel

List of Publications by Citations

172 papers	7,078 citations	44 h-index	80 g-index
185 ext. papers	9,375 ext. citations	5.9 avg, IF	6.63 L-index

#	Paper	IF	Citations
172	Image-Based Recommendations on Styles and Substitutes **2015**,		597
171	A survey of appearance models in visual object tracking. *ACM Transactions on Intelligent Systems and Technology*, **2013**, 4, 1-48	8	374
170	Wider or Deeper: Revisiting the ResNet Model for Visual Recognition. *Pattern Recognition*, **2019**, 90, 119-133	7.7	353
169	Memorizing Normality to Detect Anomaly: Memory-Augmented Deep Autoencoder for Unsupervised Anomaly Detection **2019**,		250
168	Learning to rank in person re-identification with metric ensembles **2015**,		249
167	Fast Supervised Hashing with Decision Trees for High-Dimensional Data **2014**,		219
166	What Value Do Explicit High Level Concepts Have in Vision to Language Problems? **2016**,		194
165	Is face recognition really a Compressive Sensing problem? **2011**,		170
164	Vision-and-Language Navigation: Interpreting Visually-Grounded Navigation Instructions in Real Environments **2018**,		170
163	Inductive Hashing on Manifolds **2013**,		149
162	Image Captioning and Visual Question Answering Based on Attributes and External Knowledge. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2018**, 40, 1367-1381	13.3	147
161	REFUGE Challenge: A unified framework for evaluating automated methods for glaucoma assessment from fundus photographs. *Medical Image Analysis*, **2020**, 59, 101570	15.4	147
160	Deep linear discriminant analysis on fisher networks: A hybrid architecture for person re-identification. *Pattern Recognition*, **2017**, 65, 238-250	7.7	132
159	Part-Based Visual Tracking with Online Latent Structural Learning **2013**,		132
158	From Motion Blur to Motion Flow: A Deep Learning Solution for Removing Heterogeneous Motion Blur **2017**,		129
157	Ask Me Anything: Free-Form Visual Question Answering Based on Knowledge from External Sources **2016**,		126
156	Graph-Structured Representations for Visual Question Answering **2017**,		125

155	Hashing on nonlinear manifolds. *IEEE Transactions on Image Processing*, **2015**, 24, 1839-51	8.7	109
154	Visual question answering: A survey of methods and datasets. *Computer Vision and Image Understanding*, **2017**, 163, 21-40	4.3	108
153	A General Two-Step Approach to Learning-Based Hashing **2013**,		101
152	FVQA: Fact-based Visual Question Answering. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2018**, 40, 2413-2427	13.3	97
151	Tips and Tricks for Visual Question Answering: Learnings from the 2017 Challenge **2018**,		91
150	The treasure beneath convolutional layers: Cross-convolutional-layer pooling for image classification **2015**,		86
149	Semantic Labeling of Aerial and Satellite Imagery. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2016**, 9, 2868-2881	4.7	82
148	VideoTrace. *ACM Transactions on Graphics*, **2007**, 26, 86	7.6	81
147	Strengthening the Effectiveness of Pedestrian Detection with Spatially Pooled Features. *Lecture Notes in Computer Science*, **2014**, 546-561	0.9	78
146	Pedestrian Detection with Spatially Pooled Features and Structured Ensemble Learning. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2016**, 38, 1243-57	13.3	76
145	Incremental learning of 3D-DCT compact representations for robust visual tracking. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2013**, 35, 863-81	13.3	73
144	Less is More: Zero-Shot Learning from Online Textual Documents with Noise Suppression **2016**,		67
143	Supervised hashing using graph cuts and boosted decision trees. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2015**, 37, 2317-31	13.3	63
142	Fast Detection of Multiple Objects in Traffic Scenes With a Common Detection Framework. *IEEE Transactions on Intelligent Transportation Systems*, **2016**, 17, 1002-1014	6.1	61
141	Characterness: an indicator of text in the wild. *IEEE Transactions on Image Processing*, **2014**, 23, 1666-77	8.7	60
140	Thrift: Local 3D Structure Recognition **2007**,		58
139	An Embarrassingly Simple Approach to Visual Domain Adaptation. *IEEE Transactions on Image Processing*, **2018**, 27, 3403-3417	8.7	57
138	Efficient computation of robust weighted low-rank matrix approximations using the L1 norm. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2012**, 34, 1681-90	13.3	57

137	Attention-Guided Network for Ghost-Free High Dynamic Range Imaging **2019**,		56
136	Deep Anomaly Detection with Deviation Networks **2019**,		55
135	Cluster Sparsity Field: An Internal Hyperspectral Imagery Prior for Reconstruction. *International Journal of Computer Vision*, **2018**, 126, 797-821	10.6	53
134	Visual tracking with spatio-temporal Dempster-Shafer information fusion. *IEEE Transactions on Image Processing*, **2013**, 22, 3028-40	8.7	51
133	Learning Compact Binary Codes for Visual Tracking **2013**,		51
132	Fast global kernel density mode seeking: applications to localization and tracking. *IEEE Transactions on Image Processing*, **2007**, 16, 1457-69	8.7	50
131	Exploring Context with Deep Structured Models for Semantic Segmentation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2018**, 40, 1352-1366	13.3	45
130	Mid-level deep pattern mining **2015**,		45
129	Cross-Convolutional-Layer Pooling for Image Recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 2305-2313	13.3	44
128	. *IEEE Transactions on Circuits and Systems for Video Technology*, **2018**, 28, 1358-1368	6.4	43
127	When Unsupervised Domain Adaptation Meets Tensor Representations **2017**,		39
126	Multi-attention Network for One Shot Learning **2017**,		37
125	**2020**,		37
124	Learning discriminative trajectorylet detector sets for accurate skeleton-based action recognition. *Pattern Recognition*, **2017**, 66, 202-212	7.7	36
123	Compositional Model Based Fisher Vector Coding for Image Classification. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 2335-2348	13.3	35
122	Efficient computation of robust low-rank matrix approximations in the presence of missing data using the L1 norm **2010**,		35
121	Rationalising the Renormalisation Method of Kanatani. *Journal of Mathematical Imaging and Vision*, **2001**, 14, 21-38	1.6	35
120	Explicit Knowledge-based Reasoning for Visual Question Answering **2017**,		35

119	Dictionary Learning for Promoting Structured Sparsity in Hyperspectral Compressive Sensing. *IEEE Transactions on Geoscience and Remote Sensing*, **2016**, 54, 7223-7235	8.1	35
118	Guaranteed Ellipse Fitting with a Confidence Region and an Uncertainty Measure for Centre, Axes, and Orientation. *Journal of Mathematical Imaging and Vision*, **2015**, 52, 173-199	1.6	31
117	Efficient dual approach to distance metric learning. *IEEE Transactions on Neural Networks and Learning Systems*, **2014**, 25, 394-406	10.3	30
116	The VQA-Machine: Learning How to Use Existing Vision Algorithms to Answer New Questions **2017**,		30
115	Unsupervised Domain Adaptation Using Robust Class-Wise Matching. *IEEE Transactions on Circuits and Systems for Video Technology*, **2019**, 29, 1339-1349	6.4	29
114	Graph mode-based contextual kernels for robust SVM tracking **2011**,		28
113	From FNS to HEIV: a link between two vision parameter estimation methods. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2004**, 26, 264-8	13.3	28
112	VideoTrace **2007**,		27
111	Mining Mid-level Visual Patterns with Deep CNN Activations. *International Journal of Computer Vision*, **2017**, 121, 344-364	10.6	26
110	Pairwise Matching through Max-Weight Bipartite Belief Propagation **2016**,		22
109	Training Effective Node Classifiers for Cascade Classification. *International Journal of Computer Vision*, **2013**, 103, 326-347	10.6	22
108	Large-Scale Binary Quadratic Optimization Using Semidefinite Relaxation and Applications. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2017**, 39, 470-485	13.3	21
107	Approximate least trimmed sum of squares fitting and applications in image analysis. *IEEE Transactions on Image Processing*, **2013**, 22, 1836-47	8.7	21
106	. *IEEE Distributed Systems Online*, **2008**, 9, 1-1		21
105	A new constrained parameter estimator for computer vision applications. *Image and Vision Computing*, **2004**, 22, 85-91	3.7	21
104	Learning Deep Gradient Descent Optimization for Image Deconvolution. *IEEE Transactions on Neural Networks and Learning Systems*, **2020**, 31, 5468-5482	10.3	20
103	Effectiveness of a Batteryless and Wireless Wearable Sensor System for Identifying Bed and Chair Exits in Healthy Older People. *Sensors*, **2016**, 16,	3.8	20
102	. *IEEE Transactions on Multimedia*, **2013**, 15, 1174-1183	6.6	19

101	Bilinear Programming for Human Activity Recognition with Unknown MRF Graphs **2013**,		19
100	Topology Estimation for Thousand-Camera Surveillance Networks **2007**,		19
99	REVERIE: Remote Embodied Visual Referring Expression in Real Indoor Environments **2020**,		19
98	. *IEEE Signal Processing Magazine*, **2017**, 34, 63-75	9.4	18
97	Learning graph structure for multi-label image classification via clique generation **2015**,		18
96	In situ image-based modeling **2009**,		18
95	Measuring Latency for Video Surveillance Systems **2009**,		18
94	FNS, CFNS and HEIV: A Unifying Approach. *Journal of Mathematical Imaging and Vision*, **2005**, 23, 175-183	1.6	18
93	A Fast Semidefinite Approach to Solving Binary Quadratic Problems **2013**,		17
92	Scaling CNNs for High Resolution Volumetric Reconstruction from a Single Image **2017**,		17
91	Depth and surface normal estimation from monocular images using regression on deep features and hierarchical CRFs **2015**,		17
90	Interactive modelling for AR applications **2010**,		17
89	Robust Tracking with Weighted Online Structured Learning. *Lecture Notes in Computer Science*, **2012**, 158-172	0.9	17
88	Guaranteed Ellipse Fitting with the Sampson Distance. *Lecture Notes in Computer Science*, **2012**, 87-100	0.9	17
87	Infinite Variational Autoencoder for Semi-Supervised Learning **2017**,		16
86	Activity Topology Estimation for Large Networks of Cameras **2006**,		16
85	Counterfactual Vision and Language Learning **2020**,		16
84	Adaptive Importance Learning for Improving Lightweight Image Super-Resolution Network. *International Journal of Computer Vision*, **2020**, 128, 479-499	10.6	15

83	Image Co-localization by Mimicking a Good Detector Confidence Score Distribution. *Lecture Notes in Computer Science*, **2016**, 19-34	0.9	14
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81	Multi-way backpropagation for training compact deep neural networks. *Neural Networks*, **2020**, 126, 250-261	9.1	13
80	Towards Effective Deep Embedding for Zero-Shot Learning. *IEEE Transactions on Circuits and Systems for Video Technology*, **2020**, 30, 2843-2852	6.4	13
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78	Self-Paced Kernel Estimation for Robust Blind Image Deblurring **2017**,		13
77	Learning What Makes a Difference from Counterfactual Examples and Gradient Supervision. *Lecture Notes in Computer Science*, **2020**, 580-599	0.9	13
76	Automatic camera placement for large scale surveillance networks **2009**,		12
75	Online unsupervised feature learning for visual tracking. *Image and Vision Computing*, **2016**, 51, 84-94	3.7	11
74	Sampson distance based joint estimation of multiple homographies with uncalibrated cameras. *Computer Vision and Image Understanding*, **2014**, 125, 200-213	4.3	11
73	Non-sparse linear representations for visual tracking with online reservoir metric learning **2012**,		11
72	How Might Autonomous Vehicles Impact the City? The Case of Commuting to Central Adelaide. *Urban Policy and Research*, **2019**, 37, 442-457	1.6	10
71	A scalable stagewise approach to large-margin multiclass loss-based boosting. *IEEE Transactions on Neural Networks and Learning Systems*, **2014**, 25, 1002-13	10.3	10
70	StructBoost: Boosting Methods for Predicting Structured Output Variables. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2014**, 36, 2089-103	13.3	10
69	Leveraging surrounding context for scene text detection **2013**,		10
68	Middleware for video surveillance networks **2006**,		10
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63	Estimating camera overlap in large and growing networks **2008**,		9
62	Finding Camera Overlap in Large Surveillance Networks. *Lecture Notes in Computer Science*, **2007**, 375-384	0.9	9
61	High-throughput 3D modelling to dissect the genetic control of leaf elongation in barley (Hordeum vulgare). *Plant Journal*, **2019**, 98, 555-570	6.9	9
60	Robust multiple homography estimation: An ill-solved problem **2015**,		8
59	Empirical evaluation of the exclusion approach to estimating camera overlap **2008**,		8
58	Visual Question Answering as a Meta Learning Task. *Lecture Notes in Computer Science*, **2018**, 229-245	0.9	8
57	A hierarchical model for recognizing alarming states in a batteryless sensor alarm intervention for preventing falls in older people. *Pervasive and Mobile Computing*, **2017**, 40, 1-16	3.5	7
56	Structured learning of metric ensembles with application to person re-identification. *Computer Vision and Image Understanding*, **2017**, 156, 51-65	4.3	7
55	Multiple Homography Estimation with Full Consistency Constraints **2010**,		7
54	Goal-Oriented Visual Question Generation via Intermediate Rewards. *Lecture Notes in Computer Science*, **2018**, 189-204	0.9	7
53	Worst case linear discriminant analysis as scalable semidefinite feasibility problems. *IEEE Transactions on Image Processing*, **2015**, 24, 2382-92	8.7	6
52	RandomBoost: simplified multiclass boosting through randomization. *IEEE Transactions on Neural Networks and Learning Systems*, **2014**, 25, 764-79	10.3	6
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50	Scalable Surveillance Software Architecture **2006**,		6
49	Reinforcement Learning with Attention that Works: A Self-Supervised Approach. *Communications in Computer and Information Science*, **2019**, 223-230	0.3	6
48	. *IEEE Transactions on Multimedia*, **2021**, 23, 2481-2492	6.6	6

47	On the Dimension of the Set of Two-View Multi-Homography Matrices. *Complex Analysis and Operator Theory*, **2013**, 7, 465-484	0.7	5
46	Efficient SDP inference for fully-connected CRFs based on low-rank decomposition **2015**,		5
45	Part-based modelling of compound scenes from images **2015**,		5
44	A dimensionality result for multiple homography matrices **2011**,		5
43	Sharing features in multi-class boosting via group sparsity **2012**,		5
42	Object-and-Action Aware Model for Visual Language Navigation. *Lecture Notes in Computer Science*, **2020**, 303-317	0.9	5
41	A Model-Based Approach to Recovering the Structure of a Plant from Images. *Lecture Notes in Computer Science*, **2015**, 215-230	0.9	5
40	Learning to Zoom-In via Learning to Zoom-Out: Real-World Super-Resolution by Generating and Adapting Degradation. *IEEE Transactions on Image Processing*, **2021**, 30, 2947-2962	8.7	5
39	Enforcing consistency constraints in uncalibrated multiple homography estimation using latent variables. *Machine Vision and Applications*, **2015**, 26, 401-422	2.8	4
38	Fully corrective boosting with arbitrary loss and regularization. *Neural Networks*, **2013**, 48, 44-58	9.1	4
37	A Study of the Region Covariance Descriptor: Impact of Feature Selection and Image Transformations **2015**,		4
36	Extended depth-of-field via focus stacking and graph cuts **2013**,		4
35	Optimization on the manifold of multiple homographies **2009**,		4
34	Accurate Tensor Completion via Adaptive Low-Rank Representation. *IEEE Transactions on Neural Networks and Learning Systems*, **2020**, 31, 4170-4184	10.3	4
33	Scripted Video Generation With a Bottom-Up Generative Adversarial Network. *IEEE Transactions on Image Processing*, **2020**, 29, 7454-7467	8.7	4
32	Actively Seeking and Learning From Live Data **2019**,		4
31	What's to Know? Uncertainty as a Guide to Asking Goal-Oriented Questions **2019**,		4
30	Spatially aware feature selection and weighting for object retrieval. *Image and Vision Computing*, **2013**, 31, 935-948	3.7	3

29	Tracking hand-off in large surveillance networks **2009**,		3
28	Determining the Translational Speed of a Camera from Time-Varying Optical Flow. *Lecture Notes in Computer Science*, **2007**, 190-197	0.9	3
27	**2019**,		3
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23	A framework for determining overlap in large scale networks **2009**,		2
22	Multi-projective Parameter Estimation for Sets of Homogeneous Matrices **2009**,		2
21	Surprisal-aware scheduling of PTZ cameras **2009**,		2
20	Is covariance information useful in estimating vision parameters? **2000**, 4309, 195		2
19	Using Digital Visualization of Archival Sources to Enhance Archaeological Interpretation of the Life Historyof Ships: The Case Study of HMCS/HMAS Protector. *Coastal Research Library*, **2019**, 89-101	0.4	2
18	Large-Scale Camera Topology Mapping: Application to Re-identification **2014**, 391-411		2
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16	A Hybrid Loss for Multiclass and Structured Prediction. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2015**, 37, 2-12	13.3	1
15	Image Retrieval with a Visual Thesaurus **2010**,		1
14	Image-Based Modelling for Augmenting Reality **2010**,		1
13	Contradiction and Correlation for Camera Overlap Estimation **2009**,		1
12	Dual-Attention-Guided Network for Ghost-Free High Dynamic Range Imaging. *International Journal of Computer Vision*,1	10.6	1

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10	Video Super-Resolution via Mixed Spatial-Temporal Convolution and Selective Fusion. *Pattern Recognition*, **2022**, 126, 108577	7.7	0
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7	Accurate imagery recovery using a multi-observation patch model. *Information Sciences*, **2019**, 501, 724-741	7.7	
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4	Large-Scale Camera Network Topology Estimation by Lighting Variation. *Lecture Notes in Computer Science*, **2017**, 455-467	0.9	
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