

# Christian Bauckhage

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/772932/publications.pdf>

Version: 2024-02-01

158  
papers

4,474  
citations

361413  
20  
h-index

182427  
51  
g-index

165  
all docs

165  
docs citations

165  
times ranked

3779  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of Interest Point Detectors. International Journal of Computer Vision, 2000, 37, 151-172.	15.6	1,169
2	The slashdot zoo. , 2009, , .		300
3	Informed Haar-Like Features Improve Pedestrian Detection. , 2014, , .		221
4	Informed Machine Learning - A Taxonomy and Survey of Integrating Prior Knowledge into Learning Systems. IEEE Transactions on Knowledge and Data Engineering, 2021, , 1-1.	5.7	178
5	Loveparade 2010: Automatic video analysis of a crowd disaster. Computer Vision and Image Understanding, 2012, 116, 307-319.	4.7	141
6	Early drought stress detection in cereals: simplex volume maximisation for hyperspectral image analysis. Functional Plant Biology, 2012, 39, 878.	2.1	119
7	Propagation kernels: efficient graph kernels from propagated information. Machine Learning, 2016, 102, 209-245.	5.4	118
8	Guns, swords and data: Clustering of player behavior in computer games in the wild. , 2012, , .		107
9	Predicting player churn in the wild. , 2014, , .		102
10	Plant Phenotyping using Probabilistic Topic Models: Uncovering the Hyperspectral Language of Plants. Scientific Reports, 2016, 6, 22482.	3.3	96
11	Metro Maps of Plant Disease Dynamicsâ€”Automated Mining of Differences Using Hyperspectral Images. PLoS ONE, 2015, 10, e0116902.	2.5	90
12	Clustering Game Behavior Data. IEEE Transactions on Games, 2015, 7, 266-278.	1.4	73
13	I tag, you tag. , 2010, , .		69
14	How players lose interest in playing a game: An empirical study based on distributions of total playing times. , 2012, , .		67
15	Descriptive matrix factorization for sustainability Adopting the principle of opposites. Data Mining and Knowledge Discovery, 2012, 24, 325-354.	3.7	53
16	Action recognition by learning discriminative key poses. , 2011, , .		50
17	Automatic detection of abnormal gait. Image and Vision Computing, 2009, 27, 108-115.	4.5	47
18	Malware Detection on Mobile Devices Using Distributed Machine Learning. , 2010, , .		46

#	ARTICLE	IF	CITATIONS
19	The Playtime Principle: Large-scale cross-games interest modeling. , 2014, , .		44
20	Game Data Mining. , 2013, , 205-253.		41
21	Convex Non-negative Matrix Factorization in the Wild. , 2009, , .		40
22	Fast moving pedestrian detection based on motion segmentation and new motion features. Multimedia Tools and Applications, 2016, 75, 6263-6282.	3.9	40
23	Making Archetypal Analysis Practical. Lecture Notes in Computer Science, 2009, , 272-281.	1.3	38
24	Towards 3D Internet: Why, What, and How?. , 2007, , .		37
25	Learning Human-Like Opponent Behavior for Interactive Computer Games. Lecture Notes in Computer Science, 2003, , 148-155.	1.3	33
26	Convex non-negative matrix factorization for massive datasets. Knowledge and Information Systems, 2011, 29, 457-478.	3.2	32
27	Data Mining and Pattern Recognition in Agriculture. KI - Kunstliche Intelligenz, 2013, 27, 313-324.	3.2	31
28	The Good, the Bad, and the Ugly: Predicting Aesthetic Image Labels. , 2010, , .		28
29	Erosion Band Features for Cell Phone Image Based Plant Disease Classification. , 2014, , .		27
30	Temporal key poses for human action recognition. , 2011, , .		26
31	Efficient Subframe Video Alignment Using Short Descriptors. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 2371-2386.	13.9	26
32	Yes we can. , 2010, , .		25
33	Non-negative factor analysis supporting the interpretation of elemental distribution images acquired by XRF. Journal of Physics: Conference Series, 2014, 499, 012013.	0.4	25
34	Analyzing the Evolution of Social Groups in World of Warcraft <sup>®</sup> . , 2010, , .		24
35	An XML based framework for cognitive vision architectures. , 2004, , .		23
36	Network growth and the spectral evolution model. , 2010, , .		22

#	ARTICLE	IF	CITATIONS
37	Behavior evolution in Tomb Raider Underworld. , 2013, , .		22
38	Efficient Pose-Based Action Recognition. Lecture Notes in Computer Science, 2015, , 428-443.	1.3	22
39	Exploring Human Vision Driven Features for Pedestrian Detection. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 1709-1720.	8.3	20
40	Combining speech and haptics for intuitive and efficient navigation through image databases. , 2003, , .		19
41	Analyzing pedestrian behavior in crowds for automatic detection of congestions. , 2011, , .		19
42	Beyond heatmaps: Spatio-temporal clustering using behavior-based partitioning of game levels. , 2014, , .		19
43	Automatic detection of dangerous motion behavior in human crowds. , 2011, , .		18
44	Action recognition in still images by learning spatial interest regions from videos. Pattern Recognition Letters, 2015, 51, 8-15.	4.2	18
45	Predicting Retention in Sandbox Games with Tensor Factorization-based Representation Learning. , 2016, , .		18
46	Non-negative matrix factorization for the near real-time interpretation of absorption effects in elemental distribution images acquired by X-ray fluorescence imaging. Journal of Synchrotron Radiation, 2016, 23, 579-589.	2.4	18
47	Triple Classification Using Regions and Fine-Grained Entity Typing. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 77-85.	4.9	18
48	Human activity recognition by separating style and content. Pattern Recognition Letters, 2014, 50, 130-138.	4.2	17
49	Prediction of successful memory encoding based on single-trial rhinal and hippocampal phase information. NeuroImage, 2016, 139, 127-135.	4.2	17
50	Bounding box splitting for robust shape classification. , 2005, , .		15
51	Simplex Volume Maximization (SiVM): A matrix factorization algorithm with non-negative constrains and low computing demands for the interpretation of full spectral X-ray fluorescence imaging data. Microchemical Journal, 2017, 132, 179-184.	4.5	15
52	Detecting Abnormal Gait. , 0, , .		14
53	Bayesian Imitation of Human Behavior in Interactive Computer Games. , 2006, , .		14
54	Synthesizing Movements for Computer Game Characters. Lecture Notes in Computer Science, 2004, , 179-186.	1.3	13

#	ARTICLE	IF	CITATIONS
55	Face Recognition with Weighted Locally Linear Embedding. , 0, , .		13
56	Simplex Distributions for Embedding Data Matrices over Time. , 2012, , .		13
57	Deep learning supports the differentiation of alcoholic and other-than-alcoholic cirrhosis based on MRI. Scientific Reports, 2022, 12, 8297.	3.3	13
58	Detecting Trends in Social Bookmarking Systems. International Journal of Data Warehousing and Mining, 2010, 6, 38-57.	0.6	12
59	Efficient Pedestrian Detection via Rectangular Features Based on a Statistical Shape Model. IEEE Transactions on Intelligent Transportation Systems, 2014, , 1-13.	8.0	12
60	Towards Contradiction Detection in German: a Translation-Driven Approach. , 2019, , .		12
61	Robust Tensor Classifiers for Color Object Recognition. Lecture Notes in Computer Science, 2007, , 352-363.	1.3	12
62	FROM IMAGE FEATURES TO SYMBOLS AND VICE VERSA " USING GRAPHS TO LOOP DATA- AND MODEL-DRIVEN PROCESSING IN VISUAL ASSEMBLY RECOGNITION. International Journal of Pattern Recognition and Artificial Intelligence, 2004, 18, 497-517.	1.2	11
63	Bayesian imitation learning in game characters. International Journal of Intelligent Systems Technologies and Applications, 2007, 2, 284.	0.2	11
64	Alternative similarity functions for graph kernels. , 2008, , .		11
65	Spectral evolution in dynamic networks. Knowledge and Information Systems, 2013, 37, 1-36.	3.2	11
66	A Probabilistic Diffusion Scheme for Anomaly Detection on Smartphones. Lecture Notes in Computer Science, 2010, , 31-46.	1.3	11
67	Agricultural plant cataloging and establishment of a data framework from UAV-based crop images by computer vision. GigaScience, 2022, 11, .	6.4	11
68	Action Recognition in Videos Using Nonnegative Tensor Factorization. , 2010, , .		10
69	Ising Models for Binary Clustering via Adiabatic Quantum Computing. Lecture Notes in Computer Science, 2018, , 3-17.	1.3	10
70	Echo State Networks for Named Entity Recognition. Lecture Notes in Computer Science, 2019, , 110-120.	1.3	10
71	Discriminative Joint Non-negative Matrix Factorization for Human Action Classification. Lecture Notes in Computer Science, 2013, , 61-70.	1.3	10
72	The "Spree" Expert Finding System. , 2007, , .		9

#	ARTICLE	IF	CITATIONS
73	Performance of ECG-based seizure detection algorithms strongly depends on training and test conditions. <i>Epilepsia Open</i> , 2021, 6, 597-606.	2.4	9
74	Cognitive Agents for Microscopic Traffic Simulations in Virtual Environments. <i>Lecture Notes in Computer Science</i> , 2012, , 318-325.	1.3	9
75	MALADY: A Machine Learning-Based Autonomous Decision-Making System for Sensor Networks. , 2009, , .		8
76	Archetypical motion: Supervised game behavior learning with Archetypal Analysis. , 2013, , .		8
77	High dimensional low sample size activity recognition using geometric classifiers. , 2015, 42, 61-69.		8
78	User Churn Migration Analysis with DEDICOM. , 2015, , .		8
79	Problem Solving with Hopfield Networks and Adiabatic Quantum Computing. , 2020, , .		8
80	Using Echo State Networks for Cryptography. <i>Lecture Notes in Computer Science</i> , 2017, , 663-671.	1.3	8
81	Deterministic CUR for Improved Large-Scale Data Analysis: An Empirical Study. , 2012, , .		8
82	Anonymization of German financial documents using neural network-based language models with contextual word representations. <i>International Journal of Data Science and Analytics</i> , 2022, 13, 151-161.	4.1	8
83	Mosaics from Arbitrary Stereo Video Sequences. <i>Lecture Notes in Computer Science</i> , 2004, , 342-349.	1.3	7
84	Vision Systems with the Human in the Loop. <i>Eurasip Journal on Advances in Signal Processing</i> , 2005, 2005, 1.	1.7	7
85	The visual active memory perspective on integrated recognition systems. <i>Image and Vision Computing</i> , 2008, 26, 5-14.	4.5	7
86	Moving pedestrian detection based on motion segmentation. , 2013, , .		7
87	Kernel Archetypal Analysis for Clustering Web Search Frequency Time Series. , 2014, , .		7
88	Tackling Contradiction Detection in German Using Machine Translation and End-to-End Recurrent Neural Networks. , 2021, , .		7
89	Tree-Based Signatures for Shape Classification. , 2006, , .		6
90	An unsupervised hierarchical approach to document categorization. , 2007, , .		6

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91	A lightweight biometric signature scheme for user authentication over networks. , 2008, , .		6
92	A distributed machine learning framework. , 2009, , .		6
93	An Efficient Ontology-Based Expert Peering System. Lecture Notes in Computer Science, 2007, , 273-282.	1.3	6
94	Investigating CAPTCHAs Based on Visual Phenomena. Lecture Notes in Computer Science, 2009, , 745-748.	1.3	6
95	Separable Linear Discriminant Classification. Lecture Notes in Computer Science, 2005, , 318-325.	1.3	6
96	Integration frameworks for large scale cognitive vision systems - an evaluative study. , 2004, , .		5
97	Age Recognition in the Wild. , 2010, , .		5
98	Agriculture's Technological Makeover. IEEE Pervasive Computing, 2012, 11, 4-7.	1.3	5
99	A Neural Network Implementation of Frank-Wolfe Optimization. Lecture Notes in Computer Science, 2017, , 219-226.	1.3	5
100	Grammars and Discourse Theory to Describe and Recognize Mechanical Assemblies. Lecture Notes in Computer Science, 2000, , 173-182.	1.3	5
101	Image Tagging Using PageRank over Bipartite Graphs. Lecture Notes in Computer Science, 2008, , 426-435.	1.3	5
102	An intelligent knowledge sharing system for web communities. , 2007, , .		4
103	A new evaluation measure for information retrieval systems. , 2007, , .		4
104	Image retrieval and Web 2.0 &#x2014; where can we go from here?. , 2008, , .		4
105	More influence means less work. , 2011, , .		4
106	Feeding the World with Big Data: Uncovering Spectral Characteristics and Dynamics of Stressed Plants. Studies in Computational Intelligence, 2016, , 99-120.	0.9	4
107	Prediction of memory formation based on absolute electroencephalographic phases in rhinal cortex and hippocampus outperforms prediction based on stimulus-related phase shifts. European Journal of Neuroscience, 2018, 47, 824-831.	2.6	4
108	Joint Selection of Central and Extremal Prototypes Based on Kernel Minimum Enclosing Balls. , 2019, , .		4

#	ARTICLE	IF	CITATIONS
109	Novelty Discovery with Kernel Minimum Enclosing Balls. Lecture Notes in Computer Science, 2020, , 414-420.	1.3	4
110	Memory consistency validation in a cognitive vision system. , 2004, , .		3
111	Towards manifold learning for gamebot behavior modeling. , 2005, , .		3
112	Fast Learning for Customizable Head Pose Recognition in Robotic Wheelchair Control. , 0, , .		3
113	A discrete-time parallel update algorithm for distributed learning. , 2008, , .		3
114	Archetypal Images in Large Photo Collections. , 2009, , .		3
115	Subspace manifold learning with sample weights. Image and Vision Computing, 2009, 27, 80-86.	4.5	3
116	Who is doing what? Simultaneous recognition of actions and actors. , 2012, , .		3
117	Efficient Learning for Hashing Proportional Data. , 2012, , .		3
118	Can Computers Learn from the Aesthetic Wisdom of the Crowd?. KI - Kunstliche Intelligenz, 2013, 27, 25-35.	3.2	3
119	Efficient Mesoscopic Simulations for Persistent Agents in 3D-Applications and Games. , 2013, , .		3
120	Synthetic perception for intelligent virtual agents. , 2014, , .		3
121	The Age of Analytics. IEEE Transactions on Games, 2015, 7, 205-206.	1.4	3
122	Automatic mapping of human behavior data to personality model parameters for traffic simulations in virtual environments. , 2015, , .		3
123	Simple Recurrent Neural Networks for Support Vector Machine Training. Lecture Notes in Computer Science, 2018, , 13-22.	1.3	3
124	Matrix- and Tensor Factorization for Game Content Recommendation. KI - Kunstliche Intelligenz, 2020, 34, 57-67.	3.2	3
125	Hopfield Networks for Vector Quantization. Lecture Notes in Computer Science, 2020, , 192-203.	1.3	3
126	Towards Intelligent Food Waste Prevention: An Approach Using Scalable and Flexible Harvest Schedule Optimization With Evolutionary Algorithms. IEEE Access, 2021, 9, 169044-169055.	4.2	3



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127	The Snippet Statistics of Font Recognition. , 2010, , .		2
128	Adapting Information Theoretic Clustering to Binary Images. , 2010, , .		2
129	Gait recognition by learning distributed key poses. , 2012, , .		2
130	Center-Surround Contrast Features for Pedestrian Detection. , 2014, , .		2
131	Collective Attention on the Web. Foundations and Trends in Web Science, 2016, 5, 1-136.	0.5	2
132	Interpretable Topic Extraction and Word Embedding Learning Using Non-Negative Tensor DEDICOM. Machine Learning and Knowledge Extraction, 2021, 3, 123-167.	5.0	2
133	A Stochastic Late Fusion Approach to Human Action Recognition in Unconstrained Images and Videos. Lecture Notes in Computer Science, 2014, , 616-628.	1.3	2
134	Separable Linear Classifiers for Online Learning in Appearance Based Object Detection. Lecture Notes in Computer Science, 2005, , 347-354.	1.3	2
135	Content-based image retrieval by multimodal interaction. , 0, , .		1
136	A Structural Framework for Assembly Modeling and Recognition. Lecture Notes in Computer Science, 2003, , 49-56.	1.3	1
137	Classification of Team Behaviors in Sports Video Games. , 2006, , .		1
138	Tensor-Based Filter Design using Kernel Ridge Regression. , 2007, , .		1
139	Tailoring Taxonomies for Efficient Text Categorization and Expert Finding. , 2008, , .		1
140	Adaptive wireless services for augmented environments. , 2009, , .		1
141	SPSA for Layer-Wise Training of Deep Networks. Lecture Notes in Computer Science, 2018, , 564-573.	1.3	1
142	Image Space I 3 and Eigen Curvature for Illumination Insensitive Face Detection. Lecture Notes in Computer Science, 2005, , 456-463.	1.3	1
143	Cognitive Aspects of Traffic Simulations in Virtual Environments. SNE Simulation Notes Europe, 2012, 22, .	0.3	1
144	Interpretable Topic Extraction and Word Embedding Learning Using Row-Stochastic DEDICOM. Lecture Notes in Computer Science, 2020, , 401-422.	1.3	1

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145	Cell Phone Image-Based Plant Disease Classification. Advances in Environmental Engineering and Green Technologies Book Series, 0, , 295-322.	0.4	1
146	Fast, Illumination Insensitive Face Detection Based on Multilinear Techniques and Curvature Features. , 2006, , .		0
147	Benefits of Separable, Multilinear Discriminant Classification. , 2006, , .		0
148	Usability Evaluation for Image Retrieval Beyond Desktop Applications. , 2006, , .		0
149	A Fast, Feature-based Cluster Algorithm for Information Retrieval. , 2007, , .		0
150	Integral correlograms and probabilistic diffusion for image tagging. , 2008, , .		0
151	Probabilistic Diffusion Classifiers for Object Detection. , 2008, , .		0
152	Reverse Indexing for Reading Graffiti Tags. , 2010, , .		0
153	Matrix Factorization as Search. Lecture Notes in Computer Science, 2012, , 850-853.	1.3	0
154	Extracting Salient Points and Parts of Shapes Using Modified kd-Trees. Lecture Notes in Computer Science, 2007, , 995-1002.	1.3	0
155	Cell Phone Image-Based Plant Disease Classification. , 2017, , 778-805.		0
156	Investigating and Forecasting User Activities in Newsblogs: A Study of Seasonality, Volatility and Attention Burst. , 2017, , 19-24.		0
157	tanh Neurons Are Bayesian Decision Makers. Advances in Intelligent Systems and Computing, 2021, , 703-707.	0.6	0
158	Shells within Minimum Enclosing Balls. , 2020, , .		0