Atshushi Shimada

List of Publications by Year
in descending order

155 papers	1,625 citations	393982 19 h-index	525886 27 g-index
160 all docs	160 docs citations	160 times ranked	1427 citing authors

#	Article	IF	Citations
1	Dynamic Control of Adaptive Mixture-of-Gaussians Background Model. , 2006, , .		72
2	Phosphorylation of Swi6/HP1 regulates transcriptional gene silencing at heterochromatin. Genes and Development, 2009, 23, 18-23.	2.7	61
3	Light Field Distortion Feature for Transparent Object Recognition. , 2013, , .		61
4	Evaluating Indoor Positioning Systems in a Shopping Mall: The Lessons Learned From the IPIN 2018 Competition. IEEE Access, 2019, 7, 148594-148628.	2.6	60
5	Learning unified binary codes for cross-modal retrieval via latent semantic hashing. Neurocomputing, 2016, 213, 191-203.	3.5	53
6	TransCut: Transparent Object Segmentation from a Light-Field Image. , 2015, , .		51
7	Indoor Positioning System Based on Chest-Mounted IMU. Sensors, 2019, 19, 420.	2.1	48
8	Analytics of Deep Neural Network-Based Background Subtraction. Journal of Imaging, 2018, 4, 78.	1.7	41
9	An Easy-to-Setup 3D Phenotyping Platform for KOMATSUNA Dataset. , 2017, , .		40
10	Evaluation report of integrated background modeling based on spatio-temporal features. , 2012, , .		37
11	Real-time learning analytics for C programming language courses. , 2017, , .		37
12	The IPIN 2019 Indoor Localisation Competitionâ€"Description and Results. IEEE Access, 2020, 8, 206674-206718.	2.6	37
13	Learning analytics of the relationships among self-regulated learning, learning behaviors, and learning performance. Research and Practice in Technology Enhanced Learning, 2017, 12, 13.	1.9	36
14	Putting learning back into learning analytics: actions for policy makers, researchers, and practitioners. Educational Technology Research and Development, 2021, 69, 2131-2150.	2.0	32
15	Learning Analytics for E-Book-Based Educational Big Data in Higher Education. , 2017, , 327-350.		32
16	A fast algorithm for adaptive background model construction using parzen density estimation. , 2007, , .		29
17	Fall detection using optical level anonymous image sensing system. Optics and Laser Technology, 2019, 110, 44-61.	2.2	29
18	Hybrid Background Model Using Spatial-Temporal LBP. , 2009, , .		25

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19	Object detection based on spatiotemporal background models. Computer Vision and Image Understanding, 2014, 122, 84-91.	3.0	25
20	Non-Linear Matrix Completion for Social Image Tagging. IEEE Access, 2017, 5, 6688-6696.	2.6	25
21	Automatic Summarization of Lecture Slides for Enhanced Student PreviewTechnical Report and User Study. IEEE Transactions on Learning Technologies, 2018, 11, 165-178.	2.2	25
22	Background Modeling Based on Bidirectional Analysis. , 2013, , .		24
23	Exploring the Relationships between Reading Behavior Patterns and Learning Outcomes Based on Log Data from E-Books: A Human Factor Approach. International Journal of Human-Computer Interaction, 2019, 35, 313-322.	3.3	24
24	Sparse Cost Volume for Efficient Stereo Matching. Remote Sensing, 2018, 10, 1844.	1.8	23
25	Real-time learning analytics system for improvement of on-site lectures. Interactive Technology and Smart Education, 2018, 15, 314-331.	3.8	23
26	Regulation of ectopic heterochromatin-mediated epigenetic diversification by the JmjC family protein Epe1. PLoS Genetics, 2019, 15, e1008129.	1.5	23
27	Direction of collaborative problem solving-based STEM learning by learning analytics approach. Research and Practice in Technology Enhanced Learning, 2019, 14, .	1.9	23
28	Adapting Local Features for Face Detection in Thermal Image. Sensors, 2017, 17, 2741.	2.1	22
29	Kitchen Scene Context Based Gesture Recognition: A Contest in ICPR2012. Lecture Notes in Computer Science, 2013, , 168-185.	1.0	21
30	Real-time people counting using blob descriptor. Procedia, Social and Behavioral Sciences, 2010, 2, 143-152.	0.5	20
31	Semi-supervised Coupled Dictionary Learning for Cross-modal Retrieval in Internet Images and Texts. , 2015, , .		18
32	Coupled dictionary learning and feature mapping for cross-modal retrieval. , 2015, , .		17
33	Bayesian Network for Predicting Students' Final Grade Using e-Book Logs in University Education. , 2016, , .		17
34	Object Detection under Varying Illumination Based on Adaptive Background Modeling Considering Spatial Locality. Lecture Notes in Computer Science, 2009, , 645-656.	1.0	15
35	Towards Robust Object Detection: Integrated Background Modeling Based on Spatio-temporal Features. Lecture Notes in Computer Science, 2010, , 201-212.	1.0	15
36	TransCut2: Transparent Object Segmentation From a Light-Field Image. IEEE Transactions on Computational Imaging, 2019, 5, 465-477.	2.6	15

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37	Background model based on intensity change similarity among pixels. , 2013, , .		14
38	Non-parametric Background and Shadow Modeling for Object Detection. Lecture Notes in Computer Science, 2007, , 159-168.	1.0	14
39	Hand gesture based TV control system — Towards both user- & machine-friendly gesture applications. , 2013, , .		13
40	Informal Learning Behavior Analysis Using Action Logs and Slide Features in E-Textbooks. , 2015, , .		13
41	Background Model Based on Statistical Local Difference Pattern. Lecture Notes in Computer Science, 2013, , 327-332.	1.0	13
42	Adaptive background model registration for moving cameras. Pattern Recognition Letters, 2017, 96, 86-95.	2.6	12
43	Analytics of deep neural network in change detection. , 2017, , .		12
44	Real-Time Learning Analytics of e-Book Operation Logs for On-site Lecture Support. , 2017, , .		12
45	Simple background subtraction constraint for weakly supervised background subtraction network. , 2019, , .		12
46	Rethinking Background And Foreground In Deep Neural Network-Based Background Subtraction. , 2020, , .		12
47	Plant Growth Prediction using Convolutional LSTM. , 2019, , .		12
48	Statistical Local Difference Pattern for Background Modeling. IPSJ Transactions on Computer Vision and Applications, 2011, 3, 198-210.	4.4	11
49	Cooking gesture recognition using local feature and depth image. , 2012, , .		11
50	Light field distortion feature for transparent object classification. Computer Vision and Image Understanding, 2015, 139, 122-135.	3.0	11
51	Change detection on light field for active video surveillance. , 2015, , .		10
52	Case-based background modeling: associative background database towards low-cost and high-performance change detection. Machine Vision and Applications, 2014, 25, 1121-1131.	1.7	9
53	Preliminary Research on Self-Regulated Learning and Learning Logs in a Ubiquitus Learning Environment. , 2015, , .		9
54	Simple Combination of Appearance and Depth for Foreground Segmentation. Lecture Notes in Computer Science, 2017, , 266-277.	1.0	9

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55	Object Detection Using Local Difference Patterns. Lecture Notes in Computer Science, 2011, , 216-227.	1.0	9
56	Tag completion with defective tag assignments via image-tag re-weighting. , 2014, , .		8
57	Learning multi-task local metrics for image annotation. Multimedia Tools and Applications, 2016, 75, 2203-2231.	2.6	8
58	Reproducibility of findings from educational big data. , 2017, , .		8
59	Online change detection for monitoring individual student behavior via clickstream data on E-book system. , 2018, , .		8
60	Early Recognition of Gesture Patterns Using Sparse Code of Self-Organizing Map. Lecture Notes in Computer Science, 2009, , 116-123.	1.0	8
61	Adaptive template method for early recognition of gestures. , 2011, , .		7
62	Background initialization based on bidirectional analysis and consensus voting. , 2016, , .		7
63	A meaningful discovery learning environment for e-book learners. , 2017, , .		7
64	Reconstruction-Based Change Detection with Image Completion for a Free-Moving Camera. Sensors, 2018, 18, 1232.	2.1	7
65	Educational data mining for discovering hidden browsing patterns using non-negative matrix factorization. Interactive Learning Environments, 2021, 29, 1176-1188.	4.4	7
66	Development and evaluation of a visualization system to support meaningful e-book learning. Interactive Learning Environments, 2023, 31, 836-853.	4.4	7
67	Visual feature extraction using variable map-dimension Hypercolumn Model. , 2008, , .		6
68	Robust Face Recognition Using Multiple Self-Organized Gabor Features and Local Similarity Matching. , 2010, , .		6
69	Evaluation of foreground detection methodology for a moving camera. , 2015, , .		6
70	Walking Velocity Model for Accurate and Massive Pedestrian Simulator. IEEJ Transactions on Electronics, Information and Systems, 2013, 133, 1779-1786.	0.1	6
71	Contribution estimation of participants for human interaction recognition. IEEJ Transactions on Electrical and Electronic Engineering, 2013, 8, 269-276.	0.8	5
72	A compact descriptor CHOG3D and its application in human action recognition. IEEJ Transactions on Electrical and Electronic Engineering, 2013, 8, 69-77.	0.8	5

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73	Object Detection Based on Spatio-temporal Light Field Sensing. IPSJ Transactions on Computer Vision and Applications, 2013, 5, 129-133.	4.4	5
74	Real time algorithm for efficient HCI employing features obtained from MYO sensor. , 2016, , .		5
75	Towards Supporting Multigenerational Co-creation and Social Activities: Extending Learning Analytics Platforms and Beyond. Lecture Notes in Computer Science, 2018, , 82-91.	1.0	5
76	An automatic quiz generation system utilizing digital textbook logs. Interactive Learning Environments, 2019, , 1-14.	4.4	5
77	Design of a Low-false-positive Gesture for a Wearable Device. , 2016, , .		5
78	Real-Time Learning Analytics Dashboard for Students in Online Classes. , 2020, , .		5
79	Clickable Real World: Interaction with real-world landmarks using mobile phone camera. , 2010, , .		4
80	Image annotation with incomplete labelling by modelling image specific structured loss. IEEJ Transactions on Electrical and Electronic Engineering, 2016, 11, 73-82.	0.8	4
81	Revealing Hidden Impression Topics in Students' Journals Based on Nonnegative Matrix Factorization. , 2017, , .		4
82	Hybrid Background Modeling for Long-term and Short-term Illumination Changes. IEEJ Transactions on Electronics, Information and Systems, 2010, 130, 1524-1529.	0.1	4
83	Adaptive search of background models for object detection in images taken by moving cameras. , 2015, , .		3
84	Face-to-Face Teaching Analytics: Extracting Teaching Activities from E-Book Logs via Time-Series Analysis. , 2017, , .		3
85	Trimethylguanosine synthase 1 (Tgs1) is involved in Swi6/HP1â€‘independent siRNA production and establishment of heterochromatin in fission yeast. Genes To Cells, 2021, 26, 203-218.	0.5	3
86	Video Object Segmentation Based on Superpixel Trajectories. Lecture Notes in Computer Science, 2016, , 191-197.	1.0	3
87	Potential of Wearable Technology for Super-Aging Societies. Lecture Notes in Computer Science, 2018, , 214-226.	1.0	3
88	Image Annotation by Learning Label-Specific Distance Metrics. Lecture Notes in Computer Science, 2013, , 101-110.	1.0	3
89	Use of Fast Algorithm for Adaptive Background Modeling with Parzen Density Estimation to Detect Objects. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2008, 62, 2045-2052.	0.0	3
90	Billiard instruction system for beginners with a projector-camera system. , 2008, , .		3

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91	Integrating Multimodal Learning Analytics and Inclusive Learning Support Systems for People of All Ages. Lecture Notes in Computer Science, 2019, , 469-481.	1.0	3
92	Improvement of early recognition of gesture patterns based on a self-organizing map. Artificial Life and Robotics, 2011, 16, 198-201.	0.7	2
93	Hash-based early recognition of gesture patterns. Artificial Life and Robotics, 2013, 17, 476-482.	0.7	2
94	Latent topic model for image annotation by modeling topic correlation. , 2013, , .		2
95	Background light ray modeling for change detection. Journal of Visual Communication and Image Representation, 2016, 38, 55-64.	1.7	2
96	Mixed features for face detection in thermal image. , 2017, , .		2
97	Pilot Study to Estimate "Difficult" Area in e-Learning Material by Physiological Measurements. , 2019, , .		2
98	Factors investigation of learning behaviors affecting learning performance and self-regulated learning. , 2019, , .		2
99	Learning Analytics Dashboard Supporting Metacognition. Cognition and Exploratory Learning in the Digital Age, 2021, , 129-149.	0.3	2
100	Congestion Analysis Across Locations Based on Wi-Fi Signal Sensing. Lecture Notes in Computer Science, 2018, , 204-221.	1.0	2
101	Elimination of Useless Neurons in Incremental Learnable Self-Organizing Map. Lecture Notes in Computer Science, 2009, , 264-271.	1.0	2
102	Object Detection Based on Fast and Low-Memory Hybrid Background Model. IEEJ Transactions on Electronics, Information and Systems, 2009, 129, 846-852.	0.1	2
103	Identifying solar panel defects with a CNN. , 2019, , .		2
104	On-the-fly Extrinsic Calibration of Non-Overlapping in-Vehicle Cameras based on Visual SLAM under 90-degree Backing-up Parking. , 2020, , .		2
105	Visualizing Source-Code Evolution for Understanding Class-Wide Programming Processes. Sustainability, 2022, 14, 8084.	1.6	2
106	Associative learning method in a hypercolumn model. Artificial Life and Robotics, 2007, 11, 76-81.	0.7	1
107	Robust estimation of human posture using incremental learnable Self-Organizing Map. , 2008, , .		1
108	Robust human posture analysis using incremental learning and recall based on degree of confidence of feature points. International Journal of Intelligent Computing and Cybernetics, 2009, 2, 304-326.	1.6	1

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109	Object Detection Based on Combining Multiple Background Modelings. IPSJ Transactions on Computer Vision and Applications, 2010, 2, 156-168.	4.4	1
110	A compact 3D descriptor in ROI for human action recognition. , 2010, , .		1
111	Geolocation based image annotation. , 2011, , .		1
112	Maintenance of Blind Background Model for Robust Object Detection. IPSJ Transactions on Computer Vision and Applications, 2011, 3, 148-159.	4.4	1
113	Correlated topic model for image annotation. , 2013, , .		1
114	Real-Time Foreground Segmentation from Moving Camera Based on Case-Based Trajectory Classification. , 2013, , .		1
115	Multi-layered Background Modeling for Complex Environment Surveillance. , 2013, , .		1
116	Query expansion with pairwise learning in object retrieval challenge. , 2015, , .		1
117	Sensing technologies for advanced smart agricultural systems. , 2017, , .		1
118	Redesign of a Data Collection in Digital Textbook Systems. , 2018, , .		1
119	Yield Visualization Based on Farm Work Information Measured by Smart Devices. Sensors, 2018, 18, 3906.	2.1	1
120	Learning Analytics of the Relationships among Learning Behaviors, Learning Performance, and Motivation. , 2020, , .		1
121	Human Action Recognition by SOM Considering the Probability of Spatio-temporal Features. Lecture Notes in Computer Science, 2010, , 391-398.	1.0	1
122	Object segmentation under varying illumination: stochastic background model considering spatial locality. Progress in Informatics, 2010, , 21.	0.2	1
123	A Method for Analyzing the Image Disparity of 3D Video. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2013, 67, J400-J406.	0.0	1
124	Vision-Based Motion Capture of Interacting Multiple People. Lecture Notes in Computer Science, 2009, , 451-460.	1.0	1
125	Early Recognition Based on Co-occurrence of Gesture Patterns. Lecture Notes in Computer Science, 2010, , 431-438.	1.0	1
126	A Subunit-Based Dynamic Time Warping Approach for Hand Movement Recognition. Lecture Notes in Computer Science, 2013, , 672-681.	1.0	1

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127	Analysis of Wi-Fi-based and Perceptual Congestion. , 2017, , .		1
128	Extracting Latent Behavior Patterns of People from Probe Request Data: A Non-negative Tensor Factorization Approach. , 2017, , .		1
129	Design and Evaluation of Seamless Learning Analytics. Lecture Notes in Computer Science, 2018, , 101-111.	1.0	1
130	Development of a Visualization System to Enhance Participation in Computer-Supported Collaboration Learning. , 2020, , .		1
131	How to Design Collaborative Problem Solving-based STEM Lessons based on the Perspective of Learning Behaviors?. , 2020, , .		1
132	Toward Identification of Learning Skills from Learning Analytics Approach: A Research Review. , 2020, , .		1
133	How Does Analysis of Handwritten Notes Provide Better Insights for Learning Behavior?. , 2022, , .		1
134	Live Sharing of Learning Activities on E-Books for Enhanced Learning in Online Classes. Sustainability, 2022, 14, 6946.	1.6	1
135	WiP Abstract: Estimation of Electric Power Consumption of Individuals by Observing People's Activity. , 2012, , .		0
136	“Clickable real world” information retrieval application based on geo-visual clustering. , 2013, , .		0
137	Spatially-multiplexed MIMO markers. , 2015, , .		0
138	Person re-identification visualization tool for object tracking across non-overlapping cameras. , 2015, , .		0
139	Toward Social Services Based on Cyber Physical Systems. , 2015, , 427-446.		0
140	Real time vision/sensor based features processing for efficient HCI employing canonical correlation analysis. Journal of Reliable Intelligent Environments, 2016, 2, 187-195.	3.8	0
141	Early Change Detection Based on SpotRank. , 2018, , .		0
142	Visualization of Farm Field Information Based on Farm Worker Activity Sensing. Lecture Notes in Computer Science, 2018, , 191-202.	1.0	0
143	Proposal and Implementation of an Elderly-oriented User Interface for Learning Support Systems. , 2019, , .		0
144	A System for Grouping Texts and Objects in Slide Layout. , 2019, , .		0

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145	Do different instructional styles affect students'€™ learning on summer assignments?. , 2020, , .		0
146	Movement Recommendation System Based on Multi-Spot Congestion Analytics. Sustainability, 2020, 12, 2417.	1.6	0
147	Structuring and Presenting the Distributed Sensory Information in the Sensing Web. Communications in Computer and Information Science, 2010, , 643-652.	0.4	0
148	Geolocation based Landmark Detection and Annotation. IEEJ Transactions on Electronics, Information and Systems, 2013, 133, 142-149.	0.1	0
149	Incremental Learning of Hand Gestures Based on Submovement Sharing. Lecture Notes in Computer Science, 2014, , 58-65.	1.0	0
150	Exploring Image Specific Structured Loss for Image Annotation with Incomplete Labelling. Lecture Notes in Computer Science, 2015, , 704-719.	1.0	0
151	Visualization of Real World Activity on Group Work. Lecture Notes in Computer Science, 2018, , 23-37.	1.0	0
152	Advanced Tools for Digital Learning Management Systems in University Education. Lecture Notes in Computer Science, 2019, , 419-429.	1.0	0
153	SALATA: A Web Application for Visualizing Sensor Information in Farm Fields. , 2020, , .		0
154	Using a Visualization System to Enhance Students' Online Learning Participation Based on Learning Behaviors and Social Presence. , 2021, , .		0
155	Learning Analytics of the Relationships among Knowledge Constructions, Self-regulated Learning, and Learning Performance. , 2021, , .		0