

# Hubert Pâ€™h Shum

## List of Publications by Year in descending order

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Version: 2024-02-01

111  
papers

2,006  
citations

361413

20  
h-index

302126

39  
g-index

115  
all docs

115  
docs citations

115  
times ranked

1835  
citing authors

#	ARTICLE	IF	CITATIONS
1	Image editing-based data augmentation for illumination-insensitive background subtraction. Journal of Enterprise Information Management, 2023, 36, 818-838.	7.5	3
2	Interaction-Aware Decision-Making for Automated Vehicles Using Social Value Orientation. IEEE Transactions on Intelligent Vehicles, 2023, 8, 1339-1349.	12.7	14
3	3D car shape reconstruction from a contour sketch using GAN and lazy learning. Visual Computer, 2022, 38, 1317-1330.	3.5	16
4	GAN-based reactive motion synthesis with class-aware discriminators for human-human interaction. Computers and Graphics, 2022, 102, 634-645.	2.5	11
5	A Pose-Based Feature Fusion and Classification Framework for the Early Prediction of Cerebral Palsy in Infants. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 8-19.	4.9	14
6	PyTorch-based implementation of label-aware graph representation for multi-class trajectory prediction. Software Impacts, 2022, 11, 100201.	1.4	5
7	360 Depth Estimation in the Wild - the Depth360 Dataset and the SegFuse Network. , 2022, , .		5
8	RobIn: A robust interpretable deep network for schizophrenia diagnosis. Expert Systems With Applications, 2022, 201, 117158.	7.6	6
9	Formation control for UAVs using a Flux Guided approach. Expert Systems With Applications, 2022, 205, 117665.	7.6	6
10	LMZMPM: Local Modified Zernike Moment Per-Unit Mass for Robust Human Face Recognition. IEEE Transactions on Information Forensics and Security, 2021, 16, 495-509.	6.9	15
11	Spatio-Temporal Manifold Learning for Human Motions via Long-Horizon Modeling. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 216-227.	4.4	39
12	Stable Hand Pose Estimation under Tremor via Graph Neural Network. , 2021, , .		2
13	Facial reshaping operator for controllable face beautification. Expert Systems With Applications, 2021, 167, 114067.	7.6	4
14	Spoofing detection on hand images using quality assessment. Multimedia Tools and Applications, 2021, 80, 28603-28626.	3.9	3
15	Two-stage human verification using HandCAPTCHA and anti-spoofed finger biometrics with feature selection. Expert Systems With Applications, 2021, 171, 114583.	7.6	4
16	Interpreting Deep Learning based Cerebral Palsy Prediction with Channel Attention. , 2021, , .		6
17	A Quadruple Diffusion Convolutional Recurrent Network for Human Motion Prediction. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 3417-3432.	8.3	14
18	Makeup Style Transfer on Low-quality Images with Weighted Multi-scale Attention. , 2021, , .		7

#	ARTICLE	IF	CITATIONS
19	A Two-Stream Recurrent Network for Skeleton-based Human Interaction Recognition. , 2021, , .		4
20	STGAE: Spatial-Temporal Graph Auto-Encoder for Hand Motion Denoising. , 2021, , .		3
21	Interaction-Based Human Activity Comparison. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 2620-2633.	4.4	11
22	Filtering techniques for channel selection in motor imagery EEG applications: a survey. Artificial Intelligence Review, 2020, 53, 1207-1232.	15.7	98
23	Cumuliform cloud formation control using parameter-predicting convolutional neural network. Graphical Models, 2020, 111, 101083.	2.4	1
24	Unifying Person and Vehicle Re-Identification. IEEE Access, 2020, 8, 115673-115684.	4.2	5
25	Resolving hand-object occlusion for mixed reality with joint deep learning and model optimization. Computer Animation and Virtual Worlds, 2020, 31, e1956.	1.2	4
26	A Privacy-Preserving Efficient Location-Sharing Scheme for Mobile Online Social Network Applications. IEEE Access, 2020, 8, 221330-221351.	4.2	7
27	High-speed multi-person pose estimation with deep feature transfer. Computer Vision and Image Understanding, 2020, 197-198, 103010.	4.7	5
28	Sparse metric-based mesh saliency. Neurocomputing, 2020, 400, 11-23.	5.9	8
29	A Unified Deep Metric Representation for Mesh Saliency Detection and Non-Rigid Shape Matching. IEEE Transactions on Multimedia, 2020, 22, 2278-2292.	7.2	5
30	Editorial: Special Issue on Machine Vision with Deep Learning. International Journal of Computer Vision, 2020, 128, 771-772.	15.6	4
31	Abnormal Infant Movements Classification With Deep Learning on Pose-Based Features. IEEE Access, 2020, 8, 51582-51592.	4.2	45
32	Multi-task deep learning with optical flow features for self-driving cars. IET Intelligent Transport Systems, 2020, 14, 1845-1854.	3.0	1
33	Foreground-aware Dense Depth Estimation for 360 Images. Journal of WSCG, 2020, 28, 79-88.	0.6	1
34	Motion analysis of work conditions using commercial depth cameras in real industrial conditions. , 2019, , 673-682.		0
35	A Secure Authentication Protocol for Multi-Server-Based E-Healthcare Using a Fuzzy Commitment Scheme. IEEE Access, 2019, 7, 12557-12574.	4.2	54
36	Multiview discriminative marginal metric learning for makeup face verification. Neurocomputing, 2019, 333, 339-350.	5.9	12

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37	Illumination-Aware Multi-Task GANs for Foreground Segmentation. IEEE Access, 2019, 7, 10976-10986.	4.2	25
38	A generic framework for editing and synthesizing multimodal data with relative emotion strength. Computer Animation and Virtual Worlds, 2019, 30, e1871.	1.2	4
39	A new method to evaluate the dynamic air gap thickness and garment sliding of virtual clothes during walking. Textile Research Journal, 2019, 89, 4148-4161.	2.2	9
40	Curvature-based sparse rule base generation for fuzzy rule interpolation. Journal of Intelligent and Fuzzy Systems, 2019, 36, 4201-4214.	1.4	8
41	Illumination-Based Data Augmentation for Robust Background Subtraction. , 2019, , .		6
42	DSPP: Deep Shape and Pose Priors of Humans. , 2019, , .		0
43	Machine Learning Algorithms for Network Intrusion Detection. Intelligent Systems Reference Library, 2019, , 151-179.	1.2	23
44	Prior-less 3D Human Shape Reconstruction with an Earth Mover's Distance Informed CNN. , 2019, , .		1
45	Fast Accelerometer-Based Motion Recognition with a Dual Buffer Framework. The International Journal of Virtual Reality, 2019, 10, 17-24.	2.2	6
46	A HYBRID METAHEURISTIC NAVIGATION ALGORITHM FOR ROBOT PATH ROLLING PLANNING IN AN UNKNOWN ENVIRONMENT. Mechatronic Systems and Control, 2019, 47, .	0.2	4
47	Triplet Loss with Channel Attention for Person Re-identification. Journal of WSCG, 2019, 27, .	0.6	4
48	3D Car Shape Reconstruction from a Single Sketch Image. , 2019, , .		1
49	An interactive motion analysis framework for diagnosing and rectifying potential injuries caused through resistance training. , 2019, , .		0
50	Automatic Sign Dance Synthesis from Gesture-based Sign Language. , 2019, , .		2
51	Data-Driven Crowd Motion Control With Multi-Touch Gestures. Computer Graphics Forum, 2018, 37, 382-394.	3.0	9
52	CCESK: A Chinese Character Educational System Based on Kinect. IEEE Transactions on Learning Technologies, 2018, 11, 342-347.	3.2	3
53	Synthesizing Expressive Facial and Speech Animation by Text-to-IPA Translation with Emotion Control. , 2018, , .		4
54	NETIVAR: NETwork Information Visualization based on Augmented Reality. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
55	Resolving occlusion for 3D object manipulation with hands in mixed reality. , 2018, , .		9
56	Identifying Abnormal Gait in Older People during Multiple-Tasks Assessment with Audio-Visual Cues. , 2018, , .		1
57	A Dual-Stream Recurrent Neural Network for Student Feedback Prediction using Kinect. , 2018, , .		6
58	Automatic Musculoskeletal and Neurological Disorder Diagnosis With Relative Joint Displacement From Human Gait. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 2387-2396.	4.9	13
59	High-quality compatible triangulations and their application in interactive animation. Computers and Graphics, 2018, 76, 60-72.	2.5	6
60	From A to Z: Wearable technology explained. Maturitas, 2018, 113, 40-47.	2.4	126
61	Action Recognition From Arbitrary Views Using Transferable Dictionary Learning. IEEE Transactions on Image Processing, 2018, 27, 4709-4723.	9.8	51
62	DanceDJ: A 3D Dance Animation Authoring System for Live Performance. Lecture Notes in Computer Science, 2018, , 653-670.	1.3	2
63	Depth Sensor-Based Facial and Body Animation Control. , 2018, , 1943-1958.		0
64	Filtered pose graph for efficient kinect pose reconstruction. Multimedia Tools and Applications, 2017, 76, 4291-4312.	3.9	27
65	Inverse dynamics based on occlusion-resistant Kinect data: Is it usable for ergonomics?. International Journal of Industrial Ergonomics, 2017, 61, 71-80.	2.6	21
66	Manifold Regularized Experimental Design for Active Learning. IEEE Transactions on Image Processing, 2017, 26, 969-981.	9.8	6
67	Posture-based and action-based graphs for boxing skill visualization. Computers and Graphics, 2017, 69, 104-115.	2.5	12
68	Differential evolution algorithm as a tool for optimal feature subset selection in motor imagery EEG. Expert Systems With Applications, 2017, 90, 184-195.	7.6	119
69	Validation of an ergonomic assessment method using Kinect data in real workplace conditions. Applied Ergonomics, 2017, 65, 562-569.	3.1	144
70	Biofeedback assessment for older people with balance impairment using a low-cost balance board. , 2017, , .		3
71	A motion classification approach to fall detection. , 2017, , .		3
72	Unsupervised abnormal behaviour detection with overhead crowd video. , 2017, , .		4

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73	Usability of corrected Kinect measurement for ergonomic evaluation in constrained environment. International Journal of Human Factors Modelling and Simulation, 2017, 5, 338.	0.2	7
74	TSK Inference with Sparse Rule Bases. Advances in Intelligent Systems and Computing, 2017, , 107-123.	0.6	14
75	Usability of Corrected Kinect Measurement for Ergonomic Evaluation in Constrained Environment. International Journal of Human Factors Modelling and Simulation, 2017, 5, 1.	0.2	0
76	Temporal clustering of motion capture data with optimal partitioning. , 2016, , .		3
77	Towards sparse rule base generation for fuzzy rule interpolation. , 2016, , .		23
78	Experience-based rule base generation and adaptation for fuzzy interpolation. , 2016, , .		17
79	Coordinated Crowd Simulation With Topological Scene Analysis. Computer Graphics Forum, 2016, 35, 120-132.	3.0	19
80	Automatic dance generation system considering sign language information. , 2016, , .		3
81	SkillVis. , 2016, , .		3
82	Human action recognition via skeletal and depth based feature fusion. , 2016, , .		18
83	An interactive human morphing system with self-occlusion enhancement. , 2016, , .		0
84	Arbitrary view action recognition via transfer dictionary learning on synthetic training data. , 2016, , .		2
85	Improving posture classification accuracy for depth sensor-based human activity monitoring in smart environments. Computer Vision and Image Understanding, 2016, 148, 97-110.	4.7	58
86	Discriminative Semantic Subspace Analysis for Relevance Feedback. IEEE Transactions on Image Processing, 2016, 25, 1275-1287.	9.8	21
87	Kinect Posture Reconstruction Based on a Local Mixture of Gaussian Process Models. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 2437-2450.	4.4	37
88	Depth Sensor-Based Facial and Body Animation Control. , 2016, , 1-16.		0
89	High quality compatible triangulations for 2D shape morphing. , 2015, , .		6
90	Multi-layer Lattice Model for Real-Time Dynamic Character Deformation. Computer Graphics Forum, 2015, 34, 99-109.	3.0	12

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91	An intelligent mobile-based automatic diagnostic system to identify retinal diseases using mathematical morphological operations. , 2014, , .		9
92	Posture reconstruction using Kinect with a probabilistic model. , 2014, , .		19
93	Natural preparation behavior synthesis. Computer Animation and Virtual Worlds, 2014, 25, 531-542.	1.2	1
94	Human motion variation synthesis with multivariate Gaussian processes. Computer Animation and Virtual Worlds, 2014, 25, 301-309.	1.2	3
95	Interactive Formation Control in Complex Environments. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 211-222.	4.4	25
96	Real-Time Posture Reconstruction for Microsoft Kinect. IEEE Transactions on Cybernetics, 2013, 43, 1357-1369.	9.5	227
97	Motion adaptation for humanoid robots in constrained environments. , 2013, , .		15
98	Topology Aware Data-Driven Inverse Kinematics. Computer Graphics Forum, 2013, 32, 61-70.	3.0	20
99	Real-time physical modelling of character movements with microsoft kinect. , 2012, , .		30
100	Simulating Multiple Character Interactions with Collaborative and Adversarial Goals. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 741-752.	4.4	38
101	Physically-Based Character Control in Low Dimensional Space. Lecture Notes in Computer Science, 2010, , 23-34.	1.3	3
102	Angular momentum guided motion concatenation. Computer Animation and Virtual Worlds, 2009, 20, 385-394.	1.2	5
103	Emulating human perception of motion similarity. Computer Animation and Virtual Worlds, 2008, 19, 211-221.	1.2	46
104	Simulating interactions of avatars in high dimensional state space. , 2008, , .		34
105	Finding repetitive patterns in 3D human motion captured data. , 2008, , .		9
106	Interaction patches for multi-character animation. , 2008, , .		11
107	Interaction patches for multi-character animation. ACM Transactions on Graphics, 2008, 27, 1-8.	7.2	49
108	Simulating Interactions of Characters. Lecture Notes in Computer Science, 2008, , 94-103.	1.3	0

#	ARTICLE	IF	CITATIONS
109	Simulating competitive interactions using singly captured motions. , 2007, , .		27
110	Tracking the translational and rotational movement of the ball using high-speed camera movies. , 2005, , .		22
111	A spatiotemporal approach to extract the 3D trajectory of the baseball from a single view video sequence. , 0, , .		10