

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

361045

20
h-index

301761

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. | 4.4 | 3 |
| 2 | Interaction-Aware Decision-Making for Automated Vehicles Using Social Value Orientation. IEEE Transactions on Intelligent Vehicles, 2023, 8, 1339-1349. | 9.4 | 14 |
| 3 | 3D car shape reconstruction from a contour sketch using GAN and lazy learning. Visual Computer, 2022, 38, 1317-1330. | 2.5 | 16 |
| 4 | GAN-based reactive motion synthesis with class-aware discriminators for human-human interaction. Computers and Graphics, 2022, 102, 634-645. | 1.4 | 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. | 2.7 | 14 |
| 6 | PyTorch-based implementation of label-aware graph representation for multi-class trajectory prediction. Software Impacts, 2022, 11, 100201. | 0.8 | 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. | 4.4 | 6 |
| 9 | Formation control for UAVs using a Flux Guided approach. Expert Systems With Applications, 2022, 205, 117665. | 4.4 | 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. | 4.5 | 15 |
| 11 | Spatio-Temporal Manifold Learning for Human Motions via Long-Horizon Modeling. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 216-227. | 2.9 | 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. | 4.4 | 4 |
| 14 | Spoofing detection on hand images using quality assessment. Multimedia Tools and Applications, 2021, 80, 28603-28626. | 2.6 | 3 |
| 15 | Two-stage human verification using HandCAPTCHA and anti-spoofed finger biometrics with feature selection. Expert Systems With Applications, 2021, 171, 114583. | 4.4 | 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. | 5.6 | 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. | 2.9 | 11 |
| 22 | Filtering techniques for channel selection in motor imagery EEG applications: a survey. Artificial Intelligence Review, 2020, 53, 1207-1232. | 9.7 | 98 |
| 23 | Cumuliform cloud formation control using parameter-predicting convolutional neural network. Graphical Models, 2020, 111, 101083. | 1.1 | 1 |
| 24 | Unifying Person and Vehicle Re-Identification. IEEE Access, 2020, 8, 115673-115684. | 2.6 | 5 |
| 25 | Resolving hand-object occlusion for mixed reality with joint deep learning and model optimization. Computer Animation and Virtual Worlds, 2020, 31, e1956. | 0.7 | 4 |
| 26 | A Privacy-Preserving Efficient Location-Sharing Scheme for Mobile Online Social Network Applications. IEEE Access, 2020, 8, 221330-221351. | 2.6 | 7 |
| 27 | High-speed multi-person pose estimation with deep feature transfer. Computer Vision and Image Understanding, 2020, 197-198, 103010. | 3.0 | 5 |
| 28 | Sparse metric-based mesh saliency. Neurocomputing, 2020, 400, 11-23. | 3.5 | 8 |
| 29 | A Unified Deep Metric Representation for Mesh Saliency Detection and Non-Rigid Shape Matching. IEEE Transactions on Multimedia, 2020, 22, 2278-2292. | 5.2 | 5 |
| 30 | Editorial: Special Issue on Machine Vision with Deep Learning. International Journal of Computer Vision, 2020, 128, 771-772. | 10.9 | 4 |
| 31 | Abnormal Infant Movements Classification With Deep Learning on Pose-Based Features. IEEE Access, 2020, 8, 51582-51592. | 2.6 | 45 |
| 32 | Multi-task deep learning with optical flow features for self-driving cars. IET Intelligent Transport Systems, 2020, 14, 1845-1854. | 1.7 | 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. | 2.6 | 54 |
| 36 | Multiview discriminative marginal metric learning for makeup face verification. Neurocomputing, 2019, 333, 339-350. | 3.5 | 12 |

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| 37 | Illumination-Aware Multi-Task GANs for Foreground Segmentation. IEEE Access, 2019, 7, 10976-10986. | 2.6 | 25 |
| 38 | A generic framework for editing and synthesizing multimodal data with relative emotion strength. Computer Animation and Virtual Worlds, 2019, 30, e1871. | 0.7 | 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. | 1.1 | 9 |
| 40 | Curvature-based sparse rule base generation for fuzzy rule interpolation. Journal of Intelligent and Fuzzy Systems, 2019, 36, 4201-4214. | 0.8 | 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. | 1.0 | 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. | 1.8 | 9 |
| 52 | CCEsk: A Chinese Character Educational System Based on Kinect. IEEE Transactions on Learning Technologies, 2018, 11, 342-347. | 2.2 | 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 |

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| 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. | 2.7 | 13 |
| 59 | High-quality compatible triangulations and their application in interactive animation. Computers and Graphics, 2018, 76, 60-72. | 1.4 | 6 |
| 60 | From A to Z: Wearable technology explained. Maturitas, 2018, 113, 40-47. | 1.0 | 126 |
| 61 | Action Recognition From Arbitrary Views Using Transferable Dictionary Learning. IEEE Transactions on Image Processing, 2018, 27, 4709-4723. | 6.0 | 51 |
| 62 | DanceDJ: A 3D Dance Animation Authoring System for Live Performance. Lecture Notes in Computer Science, 2018, , 653-670. | 1.0 | 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. | 2.6 | 27 |
| 65 | Inverse dynamics based on occlusion-resistant Kinect data: Is it usable for ergonomics?. International Journal of Industrial Ergonomics, 2017, 61, 71-80. | 1.5 | 21 |
| 66 | Manifold Regularized Experimental Design for Active Learning. IEEE Transactions on Image Processing, 2017, 26, 969-981. | 6.0 | 6 |
| 67 | Posture-based and action-based graphs for boxing skill visualization. Computers and Graphics, 2017, 69, 104-115. | 1.4 | 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. | 4.4 | 119 |
| 69 | Validation of an ergonomic assessment method using Kinect data in real workplace conditions. Applied Ergonomics, 2017, 65, 562-569. | 1.7 | 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. | 0.1 | 7 |
| 74 | TSK Inference with Sparse Rule Bases. Advances in Intelligent Systems and Computing, 2017, , 107-123. | 0.5 | 14 |
| 75 | Usability of Corrected Kinect Measurement for Ergonomic Evaluation in Constrained Environment. International Journal of Human Factors Modelling and Simulation, 2017, 5, 1. | 0.1 | 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. | 1.8 | 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. | 3.0 | 58 |
| 86 | Discriminative Semantic Subspace Analysis for Relevance Feedback. IEEE Transactions on Image Processing, 2016, 25, 1275-1287. | 6.0 | 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. | 2.9 | 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. | 1.8 | 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. | 0.7 | 1 |
| 94 | Human motion variation synthesis with multivariate Gaussian processes. Computer Animation and Virtual Worlds, 2014, 25, 301-309. | 0.7 | 3 |
| 95 | Interactive Formation Control in Complex Environments. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 211-222. | 2.9 | 25 |
| 96 | Real-Time Posture Reconstruction for Microsoft Kinect. IEEE Transactions on Cybernetics, 2013, 43, 1357-1369. | 6.2 | 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. | 1.8 | 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. | 2.9 | 38 |
| 101 | Physically-Based Character Control in Low Dimensional Space. Lecture Notes in Computer Science, 2010, , 23-34. | 1.0 | 3 |
| 102 | Angular momentum guided motion concatenation. Computer Animation and Virtual Worlds, 2009, 20, 385-394. | 0.7 | 5 |
| 103 | Emulating human perception of motion similarity. Computer Animation and Virtual Worlds, 2008, 19, 211-221. | 0.7 | 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. | 4.9 | 49 |
| 108 | Simulating Interactions of Characters. Lecture Notes in Computer Science, 2008, , 94-103. | 1.0 | 0 |

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| 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 |