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Journal publications

1. Liangzhi Li, **Manisha Verma**, Bowen Wang, Yuta Nakashima, Ryo Kawasaki, Hajime Nagahara, Automated Grading System of Retinal Arterio-venous Crossing Patterns: A Deep Learning Approach Replicating Ophthalmologist's Diagnostic Process of Arteriolosclerosis, PLOS Digital Health, Public Library of Science, 2(11), 2022, e0000174, 10.1371/journal.pdig.0000174, IF NA.
2. Bowen Wang, Liangzhi Li, **Manisha Verma**, Yuta Nakashima, Ryo Kawasaki, Hajime Nagahara, Match them up: visually explainable few-shot image classification, Applied Intelligence, Springer US, 2022, 10.1007/s10489-022-04072-4, **IF 5.019**.
3. Sudhakar Kumawat, **Manisha Verma**, Yuta Nakashima and Shanmuganathan Raman, Depthwise spatio-temporal STFT convolutional neural networks for human action recognition, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE, 44(9), 2022, 4839-4851, 10.1109/TPAMI.2021.3076522, **IF 24.31**.
4. **Manisha Verma** and Balasubramanian Raman, Local Neighborhood Difference Pattern: A New Feature Descriptor for Natural and Textural Image Retrieval, Multimedia Tools and Applications, Springer US, 77(10), 2018, 11843-11866, 10.1007/s11042-017-4834-3, IF 2.577.
5. **Manisha Verma** and Balasubramanian Raman, Local Tri-Directional Patterns: A New Feature Descriptor for Texture and Face Image Retrieval, Digital Signal Processing, Elsevier, 51, 2016, 62-72, 10.1016/j.dsp.2016.02.002, IF 2.92.
6. Madhumanti Dey, Balasubramanian Raman and **Manisha Verma**, A novel colour and texture based image retrieval technique using multi-resolution local extrema peak valley pattern and RGB colour histogram, Pattern Analysis and Applications, Springer London, 19(4), 2016, 1159-1179, 10.1007/s10044-015-0522-y, IF 2.307.
7. **Manisha Verma**, Balasubramanian Raman and Subrahmanyam Murala, Local Extrema Co-occurrence Pattern for Color and Texture Image Retrieval, Neurocomputing, Elsevier, 165, 2015, 255-269, 10.1016/j.neucom.2015.03.015, **IF 5.779**.
8. **Manisha Verma** and Balasubramanian Raman, Center Symmetric Local Binary Co-occurrence Pattern for Texture, Face and Bio-medical Image Retrieval, Journal of Visual Communication and Image Representation, Elsevier, 32, 2015, 224-236, 10.1016/j.jvcir.2015.08.015, IF 2.887.

Conference Publications

1. **Manisha Verma**, Yuta Nakashima, Noriko Takemura, Hajime Nagahara, Multi-label Disengagement and Behavior Prediction in Online Learning, in 23rd International Conference on Artificial Intelligence in Education (AIED), pp. 633-639, July 27–31, 2022, Durham, UK. (CORE **A**)
2. Santosh Kumar Yadav, Guntaas Singh, **Manisha Verma**, Kamlesh Tiwari, Hari Mohan Pandey, Shaik Ali Akbar, Peter Corcoran, YogaTube: A Video Benchmark for Yoga Action Recognition, in IEEE International Joint Conference on Neural Networks (IJCNN), IEEE WCCI, pp. 1-8, July 18-23, 2022, Padua, Italy. (CORE **B**)
3. Liangzhi Li, Bowen Wang, **Manisha Verma**, Yuta Nakashima, Ryo Kawasaki, Hajime Nagahara, SCOUTER: Slot Attention-based Classifier for Explainable Image Recognition, in International Conference on Computer Vision (ICCV), pp. 1046-1055, Oct 11-17, 2021, Montreal, Canada. (virtual) (CORE **A***)
4. **Manisha Verma**, Yuta Nakashima, Hirokazu Kobori, Ryota Takaoka, Noriko Takemura, Tsukasa Kimura, Hajime Nagahara, Masayuki Numao, Kazumitsu Shinohara, Learners' Efficiency Prediction Using Facial Behavior Analysis, in IEEE International Conference on Image Processing (ICIP), pp. 1084-1088, Sept 19-22, 2021, Anchorage-Alaska, USA. (virtual) (CORE **B**)
5. Bowen Wang, Liangzhi Li, **Manisha Verma**, Yuta Nakashima, Ryo Kawasaki, Hajime Nagahara, MTUNet: Few-Shot Image Classification With Visual Explanations, In IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), pp. 2294-2298, Jun 19-25, 2021, Nashville, TN, USA. (virtual)
6. **Manisha Verma**, Sudhakar Kumawat, Yuta Nakashima, Shanmuganathan Raman, Yoga-82: A New Dataset for Fine-grained Classification of Human Poses, IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), pp. 1038-1039, Jun 14-19, 2020, Seattle, WA, USA. (virtual)
7. Liangzhi Li, **Manisha Verma**, Yuta Nakashima, Hajime Nagahara, Ryo Kawasaki, Joint Learning of Vessel Segmentation and Artery/Vein Classification with Post-processing, in Medical Imaging with Deep Learning (MIDL) , Proceedings of Machine Learning Research 121:440–453, Jul 6-9, 2020, Montreal, Canada.
8. Liangzhi Li, **Manisha Verma**, Yuta Nakashima, Hajime Nagahara, Ryo Kawasaki, IterNet: Retinal Image Segmentation Utilizing Structural Redundancy in Vessel Networks, IEEE Winter Conference on Applications of Computer Vision (WACV), pp. 3656-3665, Mar 1-5, 2020, Snowmass Village, CO, USA. (CORE **A**)
9. Sudhakar Kumawat**, Manisha Verma** and Shanmuganathan Raman, LBVCNN: Local Binary Volume Convolutional Neural Network for Facial Expression Recognition from Image

Sequences, in the IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), Jun 16-20, 2019, Long Beach, CA, USA.

10. **Manisha Verma**, Hirokazu Kobori, Yuta Nakashima, Noriko Takemura, and Hajime Nagahara. Facial Expression Recognition with Skip-Connection to Leverage Low-Level Features, In IEEE International Conference on Image Processing (ICIP), pp. 51-55. Sept 22-25, 2019, Taipei, Taiwan. (CORE **B**)
11. **Manisha Verma** and Shanmuganathan Raman, Interest Region based Motion Magnification, 19th International Conference on Image Analysis and Processing (ICIAP), Lecture Notes in Computer Science, Springer, vol. 10484, pp. 27-39, Sept 11-15, 2017, Catania, Italy. (CORE **B**)
12. **Manisha Verma**, Ramyani Ghosh and Shanmuganathan Raman, Saliency Driven Video Motion Magnification, 6th National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG), pp. 89-100, Dec 16-19, 2017, Mandi, India.
13. **Manisha Verma** and Shanmuganathan Raman, Edge-Aware Spatial Filtering Based Motion Magnification, International Conference on Computer Vision and Image Processing and Workshop on Multimedia, (CVIP-WM), vol. 2, pp. 117-128, Sept 9-12, 2017, Noida, India.
14. **Manisha Verma** and Balasubramanian Raman, A Hierarchical Shot Boundary Detection Algorithm using Global and Local Features, International Conference on Computer Vision and Image Processing (CVIP), pp. 389-397, Feb 26-28, 2016, Roorkee, India.
15. **Manisha Verma**, Nitakshi Sood, Partha Partim Roy and Balasubramanian Raman, Script identification in natural scene images: A dataset and texture-feature based performance evaluation, International Conference on Computer Vision and Image Processing (CVIP), pp. 309-319, Feb 26-28, 2016, Roorkee, India.
16. **Manisha Verma** and Balasubramanian Raman, Object Tracking using Joint Histogram of Color and Local Rhombus Pattern, IEEE 4th International Conference on Signal and Image Processing Applications (ICSIPA), pp. 77-82, Oct 19-21, 2015, Kuala Lumpur, Malaysia.
17. Asha Rani, **Manisha Verma** and Balasubramanian Raman, Fusion of Submanifold and Local Texture Features for Palmprint Authentication, IEEE International Conference on Visual Communications and Image Processing (VCIP), pp. 1-4, Dec 13-16, 2015, Singapore. (CORE **B**)
18. **Manisha Verma**, Balasubramanian Raman and Subrahmanyam Murala, Wavelet Based Directional Local Extrema Patterns for Image Retrieval on Large Image Database, in 2nd IEEE International Conference on Advances in Computing and Communication Engineering (ICACCE), pp. 649-654, May 1-2, 2015, Dehradun, India.
19. **Manisha Verma**, Balasubramanian Raman, Subrahmanyam Murala, Multi-resolution local extrema patterns using discrete wavelet transform, in Proceedings of 7th IEEE International Conference on Contemporary Computing (IC3), pp. 577-582, Aug 7-9, 2014, Noida, India.