

PUBLICATIONS SUMMARY

Category	Published/ Accepted	Under Review/ Revision
Refereed Journal Papers	151	10
Refereed Conference Papers	75	06
Books Edited	10	00
Total	236	16

LIST OF REPRESENTATIVE PUBLICATIONS

A. Refereed International Journal Papers: Q1 (JCR 2022, published in June 2023)

1. Puneet Kumar, Gaurav Bhat, Omkar Ingale, Daksh Goyal and **Balasubramanian Raman**, Affective Feedback Synthesis Towards Multimodal Text and Image Data, *ACM Transactions on Multimedia Computing, Communications and Applications*, Vol. 19, No. 6, pp. 1-23, 190, 2023.
2. Ridhi Arora and **Balasubramanian Raman**, BUS-Net: Breast Tumour Detection Network for Ultrasound Images using Bi-directional ConvLSTM and Dense Residual Connections, *Journal of Digital Imaging (Springer)*, Vol. 36, No. 2, pp. 627-646, 2023.
3. Rahul Kumar, Robin Singh Bhadoria, Naman Bhoj, Manoj Kumar Srivastav and **Balasubramanian Raman**, A Machine Learning Framework for Security and Privacy Issues in Building Trust for Social Networking, *Cluster Computing(Springer)*, <https://doi.org/10.1007/s10586-022-03787-w>, 2022.
4. Vishesh Tanwar, **Balasubramanian Raman** and Rama Bhargava, Crypt-OR: A privacy preserving distributed cloud computing framework for object-removal in the encrypted images, *Journal of Network and Computer Applications (Elsevier)*, Vol. 208, 103514, 2022.
5. Puneet Kumar and **Balasubramanian Raman**, A BERT Based Dual-Channel Explainable Text Emotion Recognition System, *Neural Networks (Elsevier)*, Vol. 150, pp. 392-407, 2022.
6. M. Tanveer, A.H. Rashid, Rahul Kumar and **Balasubramanian Raman**, Parkinson's Disease Diagnosis with Deep and Shallow Neural Networks: Survey and Comprehensive Evaluation, *Information Processing and Management (Elsevier)*, Vol. 59, No. 3, pp. 1-50, 102909, 2022.
7. Nidhi Saxena and **Balasubramanian Raman**, Pansharpening scheme using bi-dimensional empirical mode decomposition and neural network, *ACM Transactions on Multimedia Computing, Communications and Applications*, Vol. 18, No. 4, pp. 1-22, 108, 2022.
8. Himanshu Buckchase and **Balasubramanian Raman**, GraSP: Local Grassmannian Spatio - Temporal Patterns for Unsupervised Pose Sequence Recognition, *ACM Transactions on Multimedia Computing, Communications and Applications*, Vol. 18, No. 3, pp. 1-23, 79, 2022.
9. Amitesh Singh Rajput and **Balasubramanian Raman**, Privacy-Preserving Distribution and Access Control of Personalized Healthcare Data, *IEEE Transactions on Industrial Informatics*, Vol. 18, No. 8, pp. 5584-5591, 2022.
10. Rahul Kumar, Ankur Gupta, Harkirat Singh Arora and **Balasubramanian Raman**, IBRDM: An Intelligent Framework for Brain Tumor Classification Using Radiomics-and DWT Based Fusion, *ACM Transactions on Internet Technology*, Vol. 22, No. 1, pp. 1-30, 9, 2021.

11. Ridhi Arora, Vipul Bansal, Himanshu Buckchash, Rahul kumar, Vinodh J Sahayasheela, Narayanan Narayanan, Ganesh N Pandian, and **Balasubramanian Raman**, AI-based Diagnosis of COVID-19 Patients using X-ray Scans with Stochastic Ensemble of CNNs, *Physical and Engineering Sciences in Medicine (Springer)*, **Vol. 44**, No. 4, pp. 1257-1271, 2021.
12. Rahul Kumar, Brajesh Kumar Kaushik, **Balasubramanian Raman** and Gaurav Sharma, A Hybrid Dehazing Method and Its Hardware Implementation for Image Sensors, *IEEE Sensors Journal*, **Vol. 21**, No. 22, pp. 25931-25940, 2021.
13. Himanshu Buckchase and **Balasubramanian Raman**, Towards Zero Shot Learning of Geometry of Motion Streams and Its Application to Anomaly Recognition, *Expert Systems With Applications (Elsevier)*, **Vol. 177**, pp. 1-12, 114916, 2021.
14. Amitesh Singh Rajput, Vishesh Kumar Tanwar and **Balasubramanian Raman**, Z-score based secure biomedical model for effective skin lesion segmentation over eHealth cloud, *ACM Transactions on Multimedia Computing, Communications and Applications*, **Vol. 17**, No. 2s, Article 65, 2021.
15. Rahul Kumar, **Balasubramanian Raman** and Brajesh Kumar Kaushik, Efficient Method and Architecture for Real-Time Video Defogging, *IEEE Transactions on Intelligent Transportation Systems*, **Vol. 22**, No.10, pp. 6536-6546, 2021.
16. Amitesh Rajput and **Balasubramanian Raman**, A privacy-preserving protocol for efficient nighttime haze removal using cloud based automatic reference image selection and color transfer as a service, *Computer Communications (Elsevier)*, **Vol. 150**, pp. 703-718, 2020.
17. Sahil Garg, Song Guo, Vincenzo Piuri, Kim-Kwang Raymond Choo and **Balasubramanian Raman**, Edge-Cloud Interplay Based on SDN and NFV for Next-Generation IoT Applications, *IEEE Internet of Things Journal*, **Vol. 7**, No. 7, pp. 5690-5694, 2020.
18. Amitesh Rajput, **Balasubramanian Raman** and Javed Imran, Privacy-preserving human action recognition as a remote cloud service using RGB-D sensors and deep CNN, *Expert Systems with Applications (Elsevier)*, **Vol. 152**, 113349, 2020.
19. Vishesh Tanwar, **Balasubramanian Raman**, Amitesh Rajput and Rama Bhargava, CryptoLesion: A Privacy-preserving Model for Lesion Segmentation using Whale Optimization over Cloud, *ACM Transactions on Multimedia Computing Communications and Applications*, **Vol. 16**, No. 2, Article No.: 50, pp 1-23, 2020.
20. Debanjan Sadhya, Kanjar De, **Balasubramanian Raman** and Partha Pratim Roy, Efficient Extraction of Consistent Bit Locations from Binarized Iris Features, *Expert Systems with Applications (Elsevier)*, **Vol. 140**, 112884, 2020.
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22. Vivekraj V K, Debashis Sen and **Balasubramanian Raman**, Video Skimming: Taxonomy and Comprehensive Survey, *ACM Computing Surveys*, **Vol. 52**, No. 5, Article 106, 2019.
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24. Debanjan Sadhya, Kanjar De, **Balasubramanian Raman** and Partha Pratim Roy, Development of a clustering based fusion framework for locating the most consistent IrisCodes bits, *Information Sciences (Elsevier)*, **Vol. 491**, pp. 1-15, 2019.

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26. Anjali Gautam, **Balasubramanian Raman** and Shailendra Raghuvanshi, A Hybrid Approach for the Delineation of Brain Lesion from CT Images, *Biocybernetics and Biomedical Engineering (Elsevier)*, **Vol. 38**, No.3, pp. 504-518, 2018.
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28. Priyanka Singh, Nishant Agarwal and **Balasubramanian Raman**, Secure Data Deduplication using Secret Sharing Schemes over Cloud, *Future Generation Computer Systems (Elsevier)*, **Vol. 88**, pp. 156-167, 2018.
29. Rajkumar Saini, Barjinder Kaur, Priyanka Singh, Pradeep Kumar, Partha Pratim Roy, **Balasubramanian Raman** and Dinesh Singh, Dont Just Sign Use Brain Too: A Novel Multimodal Approach for User Identification and Verification, *Information Sciences (Elsevier)*, **Vols. 430-431**, pp. 163-178, 2018.
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31. Priyanka Singh, **Balasubramanian Raman** and Nishant Agarwal, Towards Encrypted Video Tampering Detection and Localization Based on POB Number System Over Cloud, *IEEE Transactions on Circuits and Systems for Video Technology*, **Vol.28**, No.9, pp.2116 - 2130, 2018.
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35. Gaurav Bhatnagar, Jonathan Wu and **Balasubramanian Raman**, Discrete Fractional Wavelet Transform and its Application to Multiple Encryption, *Information Sciences (Elsevier)*, **Vol. 223**, No. 2013, pp. 297-316, 2013.
36. Subrahmanyam Murala, R. P. Maheshwari and **R. Balasubramanian**, Local Tetra Patterns: A New Feature Descriptor for Content Based Image Retrieval, *IEEE Transactions on Image Processing*, **Vol. 21**, No. 5, pp. 2874-2886, 2012.
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42. Gaurav Bhatnagar and **Balasubramanian Raman**, A new Robust Reference Watermarking Scheme based on DWT-SVD, *Computer Standards and Interfaces (Elsevier)*, **Vol. 31**, No. 5, pp. 1002-1013, 2009.

B. Refereed International Journal Papers: Q2 (JCR 2022, published in June 2023)

43. Anushka Joshi, **Balasubramanian Raman**, C. Krishna Mohan and Linga Reddy Cenkeramaddi, Application of a New Machine Learning Model to Improve Earthquake Ground Motion Predictions, Accepted for publication in *Natural Hazards (Springer)*, 2023.
44. Puneet Kumar, Sarthak Malik and **Balasubramanian Raman**, Interpretable Multimodal Emotion Recognition using Hybrid Fusion of Speech and Image Data, Accepted for publication in *Multimedia Tools and Applications (Springer)*, 2023.
45. Kishore Babu Nampalle, Shriansh Manhas and **Balasubramanian Raman**, Medical image security and authenticity via dual encryption, *Applied Intelligence (Springer)*, <https://doi.org/10.1007/s10489-023-04550-3>, 2023.
46. Gaurav Bhardwaj, Utkarsh A. Mishra, N. Sukavanam **Balasubramanian Raman**, Neural Network Temporal Quantized Lagrange Dynamics with Cycloidal Trajectory for a Toe-Foot Bipedal Robot to climb stairs, *Applied Intelligence (Springer)*, **Vol. 53**, pp.10995-11018, 2023.
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49. Anjali Gautam and **Balasubramanian Raman**, Brain Strokes Classification by Extracting Quantum Information from CT Scans, *Multimedia Tools and Applications (Springer)*, **vol. 82**, pp. 15927-15943, 2023.
50. Rahul Kumar, Ridhi Arora, Vipul Bansal, Vinodh J Sahayasheela, Himanshu Buckchash, Javed Imran, Narayanan Narayanan, Ganesh N Pandian and **Balasubramanian Raman**, Classification of COVID-19 from Chest X-ray images using Deep Features and Correlation Coefficient, *Multimedia Tools and Applications (Springer)*, **Vol. 81**, pp.27631-27655, 2022.

51. Ankur Gupta, Rahul Kumar, Harkirat Singh Arora and **Balasubramanian Raman**, C-CADZ: Computational Intelligence System for Coronary Artery Disease Detection Using Z-Alizadeh Sani Dataset, *Applied Intelligence (Springer)*, **Vol. 52**, No. 3, pp. 2436-2464, 2022.
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59. Javed Imran and **Balasubramanian Raman**, Evaluating Fusion of RGB-D and Inertial Sensors for Multimodal Human Action Recognition, *Journal of Ambient Intelligence and Humanized Computing (Springer)*, **Vol. 11**, pp. 189-208, 2020 (JCR 2021).
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78. Priyanka Singh, **Balasubramanian Raman** and Manoj Misra, Just Process Me, Without Knowing Me: A Secure Encrypted Domain Processing based on Shamir Secret Sharing and POB Number System, *Multimedia Tools and Applications (Springer)*, **Vol. 77**, No. 10, pp. 12581-12605, 2018.

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