

Research Publications

Total Paper published in SCI/SCIE Journal: 14

Total Paper published in Scopus indexed Journal: 19

Total Paper Published in Conference: 40

Total Paper Published as Book Chapters: 4

Total Articles Published in Magazines: 3

Journal Papers

- [1] Aquib Ansari, **D. K. Singh**, Ruchi Jayaswal “Using Postural Data and Recurrent Learning to Monitor Shoplifting Activities in Megastores”, Wiley Concurrency and Computation: Practice and Experience, Vol pp. (August 2023) [**Accepted, SCI Indexed, IF=2.0**]
- [2] Aquib Ansari, **D. K. Singh**, Vibhav Prakash Singh, “Detecting Abnormal Behavior in Megastore for Crime Prevention using a Deep Neural Architecture”, International Journal of Multimedia Information Retrieval, Vol pp. (July 2023). [preprint online, **SCI Indexed, IF=2.553**]
- [3] Mayank Kumar Rusia, and Dushyant Kumar Singh, “An Improved Deep Transfer Learning Approach to Identify the Human Face Mask in Real-Time Considering the COVID-19 Pandemic,” Springer Multimedia Tools and Applications, Vol pp. (June 2023). [preprint online, **SCI Indexed, IF=2.757**]
- [4] Aquib Ansari, **D. K. Singh**, Vibhav Prakash Singh, “Detecting Abnormal Behavior in Megastore for Intelligent Surveillance through 3D Deep Convolutional Model”, SCIENDO Journal of Electrical Engineering, Vol pp. (March 2023) [**SCI Indexed, IF=0.840**]
- [5] Lalit Kumar, **D. K. Singh**, “A Comprehensive Survey on Generative Adversarial Networks used for synthesizing multimedia content”, Springer Multimedia Tools and Applications, Vol pp. (March 2023). [preprint online, **SCI Indexed, IF=2.757**]
- [6] Aquib Ansari, **D. K. Singh**, “Optimized parameter tuning in a recurrent learning process for shoplifting activity classification”, Cybernetics and Information Technologies, Vol 23.1 pp. 141-160 (March 2023). [**Scopus Indexed**]
- [7] Shruti Pallawi, **D. K. Singh**, “Study of Alzheimer’s Disease Brain Impairment and methods for its early diagnosis: A Comprehensive Survey”, International Journal of Multimedia Information Retrieval, Vol pp. (February 2023). [preprint online, **SCI Indexed, IF=2.553**]
- [8] Neelam Dwivedi, **D. K. Singh**, D. S. Kushwaha, “A Novel Approach for Suspicious Activity Detection with Deep Learning”, Springer Multimedia Tools and Applications, Vol pp. (January 2023). [preprint online, **SCI Indexed, IF=2.757**]

- [9] Shruti Pallawi, **D. K. Singh**, “Review and Analysis of Deep Neural Network Models for Alzheimer's Disease Classification using Brain MRI”, *Cognitive Computation and Systems*, Vol 5.1 pp. 1-13 (Feb 2023). [**Scopus Indexed**]
- [10] Mayank Kumar Rusia, **D. K. Singh**, “Deep Architecture Based Face Spoofing Identification in Real-Time Application”, *Inderscience International Journal of Biometrics*, Vol 15.2 pp. 134-152 (January 2023). [**Scopus Indexed, ESCI**]
- [11] Aquib Ansari, **D. K. Singh**, “Identifying human activities in megastores through postural data to monitor shoplifting events”, *Springer Neural Computing and Applications*, Vol 35.9 pp. 6515-6528 (Nov 2022). [**SCI Indexed, IF=5.102**]
- [12] Lalit Kumar, **D. K. Singh**, “Hardware Response and Performance Analysis of Multicore Computing Systems for Deep Learning Algorithms”, *Cybernetics and Information Technologies*, Vol 22.3 pp. 68-81 (June 2022). [**Scopus Indexed**]
- [13] **D. K. Singh**, “Recognizing Elderly Peoples by Analyzing their Walking Pattern using Body Posture Skeleton”, *Springer International Journal of System Assurance Engineering and Management*, Vol pp. 1-8 (December 2022) [Preprint online, **Scopus Indexed**]
- [14] Mayank Kumar Rusia, **D. K. Singh**, “A Color-Texture-based Deep Neural Network Technique to Detect Face Spoofing Attacks”, *Cybernetics and Information Technologies*, Vol 22.3 pp. 127-145 (September 2022). [**Scopus Indexed**]
- [15] Mayank Kumar Rusia, **D. K. Singh**, “A Comprehensive Survey on Techniques to Handle Face Identity Threats: Challenges and Opportunities”, *Springer Multimedia Tools and Applications*, Vol 82.2 pp. 1669–1748 (May 2022). [**SCI Indexed, IF=2.757**]
- [16] Aquib Ansari, **D. K. Singh**, “A Review of Machine Learning Approaches for Human Detection through Feature Based Classification”, *International Journal of Computing and Digital Systems*, Vol 12.1 pp. 569-586 (March 2022). [**Scopus Indexed**]
- [17] Aquib Ansari, **D. K. Singh**, “ESAR, An Expert Shoplifting Activity Recognition System”, *Cybernetics and Information Technologies*, Vol 22.1 pp. 190-200 (March 2022). [**Scopus Indexed**]
- [18] Neelam Dwivedi, **D. K. Singh**, D. S. Kushwaha, “Employing Data Generation for Visual Weapon Identification using Convolutional Neural Networks”, *Springer Multimedia Systems*, Vol 28.1 pp. 347-360 (October 2021) [**SCI Indexed, IF = 1.935**]
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- [20] Aquib Ansari, **D. K. Singh**, “An expert video surveillance system to identify and mitigate shoplifting in megastores”, *Springer Multimedia Tools and Applications*, Vol 81.16 pp. 22497-22525 (September 2021). [**SCI Indexed, IF=2.757**]

- [21] **D. K. Singh**, “3D-CNN based Dynamic Gesture Recognition for Indian Sign Language Modeling”, Elsevier Procedia Computer Science, Vol 189 pp. 76-83 (July 2021) [**Scopus Indexed**]
- [22] Aquib Ansari, **D. K. Singh**, “Monitoring Social Distancing through Human Detection for Preventing/Reducing COVID Spread”, Springer International Journal of Information Technology, Vol 13.3 pp. 1255-1264 (June 2021). [**Scopus Indexed**]
- [23] Aquib Ansari, **D. K. Singh**, “Significance of Color Spaces & their Selection for Image Processing: A Survey”, Recent Advances in Computer Science and Communications, Benthamscience, Vol 15.7 pp. 946-956 (July 2022). [Accepted, **Scopus Indexed**]
- [24] Aquib Ansari, **D. K. Singh**, “Human Detection Techniques for Real Time Surveillance: A Comprehensive Survey”, Springer Multimedia Tools and Applications, Vol 80.6 pp. 8759-8808 (Nov 2020). [**SCI Indexed, IF=2.757**]
- [25] Neelam Dwivedi, **D. K. Singh**, D. S. Kushwaha, “An Approach for Unattended Object Detection through Contour Formation using Background Subtraction”, Elsevier Procedia Computer Science, Vol 171C pp. 1979-1988 (Jan 2020) [**Scopus**]
- [26] Komal Bajaj, **D. K. Singh**, Aquib Ansari, “Autoencoders Based Deep Learner for Image Denoising”, Elsevier Procedia Computer Science, Vol 171C pp. 1535-1541 (Jan 2020) [**Scopus**]
- [27] **D. K. Singh**, Sumit Paroothi, Mayank Kumar Rusia, Aquib Ansari, “Human Crowd Detection for City Wide Surveillance”, Elsevier Procedia Computer Science, Vol 171C pp. 350-359 (Jan 2020) [**Scopus**]
- [28] Neelam Dwivedi, **D. K. Singh**, D. S. Kushwaha, “Orientation Invariant Skeleton Feature (OISF): A new feature for Human Activity Recognition”, Springer Multimedia Tools and Applications, Vol 79 pp. 21037-21072 (April 2020). [**SCI Indexed, IF=2.757**]
- [29] **D. K. Singh**, D. S. Kushwaha, “Automatic Intruder Combat System: A way to Smart Surveillance”, Defense Science Journal Vol 67.1 pp. 50-58 (January 2017). [**SCI Indexed, IF=0.730**] DOI : 10.14429/dsj.67.10286
- [30] Pushkar P. Goswami, Diwakar Paswan, **D. K. Singh**, “Detecting moving objects in traffic surveillance video”, International Journal of Control Theory and Applications, Vol 9.17, pp 8423-8430 (2016) [**Scopus**]
- [31] **D. K. Singh**, D. S. Kushwaha, “Analysis of face feature based human detection techniques”, International Journal of Control Theory and Applications, Vol 9.22, pp 173-180 (2016) [**Scopus**]
- [32] Pushkar Protik Goswami, **D. K. Singh**, “A hybrid approach for real-time object detection and tracking to cover background turbulence problem”, Indian Journal of Science and Technology, Vol 9.45 (2016) [**Scopus**]
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Conference Proceedings

- [1] Lalit Kumar, **D. K. Singh**, “Performance Evaluation of Video-to-Video Synthesis GAN models on Cityscapes Dataset”, 14th ICCCNT - 2023, IIT Delhi, (India), 6-8 July 2023. [IEEE, **Scopus**]
- [2] Rakesh Kumar Rai, **D. K. Singh**, “Cognitive State Classification Using a Single-channel Headset: An EEG Analysis Approach”, 14th ICCCNT - 2023, IIT Delhi, (India), 6-8 July 2023. [IEEE, **Scopus**]
- [3] Lalit Kumar, **D. K. Singh**, “Comparative analysis of Vid2Vid and Fast Vid2Vid Models for Video-to-Video Synthesis on Cityscapes Dataset”, IC2E3 - 2023, NIT Uttarakhand, Srinagar Garhwal, Uttarakhand (India), 8-9 June 2023. [IEEE, **Scopus**]
- [4] Rakesh Kumar Rai, **D. K. Singh**, “EEG-Based Binary Classification of Brain State of Activities Level Using a Single-Sensor Headset”, 2nd International Conference ‘Women Researchers in Electronics and Computing - 2023’, NIT Jalandhar, Punjab (India), 21-23 April 2023. [Springer, **Scopus**]
- [5] Aquib Ansari, **D. K. Singh**, “Deep-3DConvNet: A network to detect Abnormal Activities at Megastores”, IBSSC-2022, IEEE section Mumbai, NIMS, Mumbai (India), 08-10 Dec 2022. [IEEE, **Scopus**]
- [6] **D. K. Singh**, Aquib Ansari, Shruti Pallawi “Computer Vision based Visual Activity Classification through Deep Learning Approaches”, Tensymp-2022, IEEE Bombay Section, IIT Bombay, Mumbai (India), 01-03 July 2022. [IEEE, **Scopus**]
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- [9] Aquib Ansari, **D. K. Singh**, “An Expert Eye for Identifying Shoplifters in Mega Stores”, 4th ICICC-2021, University Of Delhi, New Delhi (India), 20-21 Feb 2021. [Springer AISC, **Scopus**]
- [10] **D. K. Singh**, Anshu Kumar, Aquib Ansari, “Robust Modelling of Static Hand Gestures using Deep Convolutional Network for Sign Language Translation”, ICCIS-2021, Sharda University, Greater Noida (India), 19-20 Feb 2021. [IEEE, **Scopus**]

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- [12] Komal Bajaj, **D. K. Singh**, Aquib Ansari, “Autoencoders Based Deep Learner for Image Denoising”, CoCoNet-2019, IIIT Kerala, Trivandrum (India), 18-21 Dec 2019 [**Elsevier, Scopus**]
- [13] Neelam Dwivedi, **D. K. Singh**, D. S. Kushwaha, “An Approach for Unattended Object Detection through Contour Formation using Background Subtraction”, CoCoNet-2019, IIIT Kerala, Trivandrum (India), 18-21 Dec 2019 [**Elsevier, Scopus**]
- [14] Aquib Ansari, **D. K. Singh**, “An Approach for Human Machine Interaction using Dynamic Hand Gesture Recognition”, CICT-2019, IIIT Allahabad, Prayagraj, U.P. (India), 06-08 Dec 2019 [**IEEE, Scopus**]
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- [17] Saima Naz, **D. K. Singh**, “Review of Machine Learning Methods for Windows Malware Detection”, 10th ICCCNT – 2019, IIT Kanpur, Kanpur (India), 6-8 July 2019 [**IEEE, Scopus**]
- [18] Janpreet Singh, Harjeet Singh, **D. K. Singh**, “A Novel Approach based on Gesture Recognition through Video Capturing for Sign Language”, 2nd ICICICT – 2019, VJEC Kannur, Kerala (India), 5-6 July 2019 [**IEEE, Scopus**]
- [19] Singh Rupal H., S. R. Mohanty, Nand Kishor, **D. K. Singh**, “Comparison of Empirical Mode Decomposition and Wavelet Transform for Power Quality Assessment in FPGA”, PEDES-2018, IIT Madras, Chennai (India), 18-21 Dec 2018 [**IEEE, Scopus**]
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- [22] Neelam Dwivedi, **D. K. Singh**, “Review of Deep Learning Techniques for Gender Classification in images”, ICHSA-2018, BML Munjal University, Gurgaon (India), 07-09 Feb 2018 [**Springer, Scopus**]
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- [25] Sonu Sharma, Radhika Agrawal, Snehil Srivastava, **D. K. Singh**, “Review of Human Detection Techniques in Night Vision”, WiSPNET 2017, SSN College of Engineering, Chennai (INDIA), 22-24 March 2017 [**IEEE, Scopus**]
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- [29] Pushkar Protik Goswami, **D. K. Singh**, “A hybrid approach for real-time object detection and tracking to cover background turbulence problem”, Shannon100 3rd ICCS, LPU Jalandhar, Punjab (India), 8-9 April 2016
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- [33] **D. K. Singh**, “Recognizing Hand Gestures for Human Computer Interaction”, ICCSP-2015, Melmaruvathur, TM (India), April 2015. [**IEEE, Scopus**]
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Book Chapters

- [1] **D. K. Singh**, “Human Action Recognition in Video”, Advance Informatics for Computing Research, Springer Nature Singapore, Vol 955, pp 54-66, 2018 [**SCOPUS, ISI Proceedings**]
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Magazines

- [1] **D. K. Singh**, An article titled “Understanding Machine Vision by Human Activity Recognition” in January 2018 issue of CSI Communications, Vol 41.10, Pg 31-32
- [2] **D. K. Singh**, An article titled “Medical Imaging & Processing” in September 2016 issue of CSI Communications, Vol 40.6, Pg 10-12
- [3] **D. K. Singh**, An article titled “Object Detection: A key component in Image & Video Processing” in September 2015 issue of CSI Communications, Vol 39.6, Pg 9-10