


## Curriculum Vitae

<b>Name</b>	<b>Dr. Om Prakash</b>		
<b>Designation</b>	Assistant Professor		
<b>Department</b>	Computer Science and Engineering		
<b>Campus</b>	University Campus Srinagar Garhwal		
<b>Telephone</b>	01370-267795		
<b>Mobile</b>			
<b>Email id</b>	omprakash8@hnbgu.ac.in		
<b>Educational Qualification</b>	Doctor of Philosophy		
<b>Teaching Experience</b>	12 Years	<b>Research Experience</b>	13
<b>Area of Interest</b> 1. Computer Vision 2. Image and Video Processing 3. Applications of Wavelet Transforms 4. Machine Learning 5. Thermography 6. Medical Image Processing			
<b>Member of Editorial Board</b> Guest Editor, Special issue on “Visual and Sensory Data Processing for Real Time Intelligent Surveillance System” of Multimedia Tools and Applications.			
<b>Conference/Symposium/Workshop Attended</b> 1. 11 <sup>th</sup> Asian Conference on Intelligent Information and Database Systems (ACIIDS 2019), Yogyakarta, Indonesia, 8-11 April 2019. 2. Second International Conference on Advances in Computing, Control and Communication Technology (IAC3T), University of Allahabad, India, 21-23 Sept 2018. 3. A 4-week Faculty Induction Programme held during May 28-June 23, 2018 organized by Quality Assurance and Academic Development (CQAAD), Nirma University, Ahmedabad, India. 4. International Conference on Emerging Trends in Communication, Computing and Electronics (IC3E-2018) held during 13-15 April 2018 in the Department of Electronics and Communication, University of Allahabad, Allahabad, India (Springer).			

5. International Conference on Advances in Computing, Control and Communication Technology (IAC3T-2016), University of Allahabad, Allahabad, India, 25-27 March 2016.
6. International Conference on Recent cognizance in wireless communication & image processing (ICRCWIP2014), Jaipur, India, 16-17 January 2015.
7. The 2014 International Conference on Control, Automation and Information Sciences (ICCAIS-2014) organized by Gwangju Institute of Science and Technology, Gwangju, South Korea, 02-05 December 2014.
8. 5th International Conference on Computational Vision and Robotics (ICCV-2014), organized by IIMT Research Group, Bhubaneswar, India, 10 August, 2014.
9. ICEIT National Conference on Advances in Mobile Communications, Networking and Computing held on 27-28 September 2013, at India International Centre, 40, Max Mueller Marg, New Delhi, India.
10. IEEE 2nd International Conference on Image Information Processing (ICIIP-2013) held on 09-11 December 2013, organized by Jaypee University of Information Technology, Waknaghat, Himanchal Pradesh, India.
11. 2013 IEEE Conference on Information and Communication Technologies (ICT-2013) held on 11-12 April 2013, at Noorul Islam Centre for Higher Education, Kanyakumari, Tamil Nadu, India.
12. UGC sponsored Special Summer School on Globalization, held on 25 May to 14 June 2013 organized by Academic Staff College, University of Allahabad, Allahabad, India.
13. UGC sponsored Refresher Course in Information and Communication Technology held on 20 September to 10 October 2013 organized by Academic Staff College, University of Allahabad, Allahabad, India.
14. 3-Day Workshop on Wavelets and its Applications (WoW 2012), this workshop was held from 13-15 July 2012 and organized by PDPM IIITDM Jabalpur, Madhya Pradesh, India.
15. National Seminar on Trends in Computer Vision, this seminar was held on 25 February 2012 at IETE, Allahabad Centre, India.
16. Indian Conference on Vision Graphics and Image Processing (ICVGIP 2010), this conference was held from 12-15 December 2010 at Indian Institute of Technology, Chennai, India.
17. National Seminar on Impact of Physics on Biological Science, Sponsored by UGC, New Delhi, this seminar was held on 26 August, 2010 at Department of Physics, Ewing Christian College (An Autonomous Constituent College of University of Allahabad), Allahabad, India.
18. Indian Conference on Vision, Graphics and Image Processing (ICVGIP 2008), this conference was held from 12-15 December 2008 at Indian Institute of Technology, Bhubaneswar, India.

**Publications:**

### International Journals

1. AratiKushwaha, Ashish Khare, **Om Prakash**, Manish Khare, "Dense Optical Flow based Background Subtraction Technique for Object Segmentation in moving camera Environment," IET Image Processing, Oct 2020 (DOI: 10.1049/iet-ipr.2019.0960 ) (SCI).
2. Mounika B. Reddy, **Om Prakash**, Ashish Khare, "Keyframe extraction using Pearson Correlation Coefficient and Color Moments," Multimedia Systems, Nov 2019, Issue 3/2020, Springer. (SCI).
3. Mounika B. Reddy, **Om Prakash**, Ashish Khare, "Video Superpixels Generation through Integration of Curvelet transform and Simple Linear Iterative Clustering", Multimedia Tools and Applications, vol. 78, pp. 25185–25219, March 2019, Springer. (SCI)
4. **Om Prakash**, Chang Min Park, Ashish Khare, Moongu Jeon, JeonghwanGwak, "Multiscale Fusion of Multimodal Medical Images using Lifting Scheme based Biorthogonal Wavelet Transform," Optik, vol. 182, pp.995-1014, April 2019, Elsevier (SCI).
5. Manish Khare, **Om Prakash** and Rajneesh Kumar Srivastava, "Combining Zernike moment and Complex wavelet transform for Human object classification," Int. J. Computational Vision and Robotics, vol.18, no.2, May 2018, pp.140-167, Inderscience Publishers. (Scopus)
6. **Om Prakash**, JeonghwanGwak, Manish Khare, Ashish Khare, Moongu Jeon, "Human detection in complex real scenes based on combination of biorthogonal wavelet transform and Zernike moments," Optik, vol. 157, pp. 1267-1281, March 2018, Elsevier (SCI).
7. Richa Srivastava, **Om Prakash** and Ashish Khare, "Local Energy based Multimodal Medical Image Fusion in Curvelet Domain," IET Computer Vision, vol.10, issue 6, pp. 513-527, 2016. IET digital library.(SCI)
8. **Om Prakash** and Ashish Khare, "Tracking of moving object using energy of Biorthogonal wavelet transform," Chiang Mai Journal of Science, vol.42, no.3, pp. 783-795, July 2015, Chiang Mai University. (SCI)
9. **Om Prakash** and Ashish Khare, "Medical Image Denoising based on Soft thresholding using Biorthogonal Multiscale Wavelet Transform," International Journal of Image and Graphics, vol. 14, no. 1 & 2, pp. 1450002 (30 pages), March 2014, World Scientific. (Scopus)
10. Alok Kumar Singh Kushwaha, Chandra Mani Sharma, Manish Khare, **Om Prakash** and Ashish Khare, "Adaptive real-time motion segmentation technique based on statistical background model," Imaging Science Journal, vol. 62, no.5, pp. 285-302, 2014, Royal Photographic Society.(SCI)
11. Rajiv Singh, Richa Srivastava, **Om Prakash** and Ashish Khare, "Multimodal medical image

fusion in Dual tree complex wavelet domain using maximum and average fusion rules,” Journal of Medical Imaging and Health Informatics, vol. 2, no. 2, pp. 168-173, June 2012, American Scientific Publishers. (SCI).

### **Book Chapters**

1. Nguyen B.T., **Prakash O.**, Vo A.H. (2021) Attention Mechanism for Fashion Image Captioning. In: Huang YP., Wang WJ., Quoc H.A., Giang L.H., Hung NL. (eds) Computational Intelligence Methods for Green Technology and Sustainable Development. GTSD 2020. Advances in Intelligent Systems and Computing, vol 1284. Springer, Cham. [https://doi.org/10.1007/978-3-030-62324-1\\_9](https://doi.org/10.1007/978-3-030-62324-1_9) (Scopus).
2. Ho T.K.K., Gwak J., **Prakash O.**, Song JI., Park C.M. (2019) Utilizing Pretrained Deep Learning Models for Automated Pulmonary Tuberculosis Detection Using Chest Radiography. In: Nguyen N., Gaol F., Hong TP., Trawiński B. (eds) Intelligent Information and Database Systems. ACIIDS 2019. Lecture Notes in Computer Science, vol 11432. Springer. (Scopus)
3. Lee S., Gwak J., **Prakash O.**, Khare M., Khare A., Jeon M. (2019) Comparative Study on Person Re-identification Using Color and Shape Features-Based Body Part Matching. In: Khare A., Tiwary U., Sethi I., Singh N. (eds) Recent Trends in Communication, Computing, and Electronics. Lecture Notes in Electrical Engineering, vol 524. Springer, Singapore (Scopus)
4. Jeong H., Gwak J., Park C., Khare M., **Prakash O.**, Song JI. (2019) Enabling More Accurate Bounding Boxes for Deep Learning-Based Real-Time Human Detection. In: Khare A., Tiwary U., Sethi I., Singh N. (eds) Recent Trends in Communication, Computing, and Electronics. Lecture Notes in Electrical Engineering, vol 524. Springer, Singapore (Scopus)
5. Kushwaha A., **Prakash O.**, Srivastava R.K., Khare A. (2019) Dense Flow-Based Video Object Segmentation in Dynamic Scenario. In: Khare A., Tiwary U., Sethi I., Singh N. (eds) Recent Trends in Communication, Computing, and Electronics. Lecture Notes in Electrical Engineering, vol 524. Springer, Singapore (Scopus)
6. Reddy Mounika B., **Prakash O.**, Khare A. (2019) Fusion of Zero-Normalized Pixel Correlation Coefficient and Higher-Order Color Moments for Keyframe Extraction. In: Khare A., Tiwary U., Sethi I., Singh N. (eds) Recent Trends in Communication, Computing, and Electronics. Lecture Notes in Electrical Engineering, vol 524. Springer, Singapore (Scopus)
7. **Prakash O.**, Khare A. (2015) CT and MR Images Fusion Based on Stationary Wavelet Transform by Modulus Maxima. In: Sethi I. (eds) Computational Vision and Robotics. Advances in Intelligent Systems and Computing, vol 332. Springer, New Delhi
8. **Prakash O.**, Khare M., Srivastava R.K., Khare A. (2015) Tracking of Deformable Object in

Complex Video Using Steerable Pyramid Wavelet Transform. In: Sethi I. (eds) Computational Vision and Robotics. Advances in Intelligent Systems and Computing, vol 332. Springer, New Delhi

9. **Prakash O.**, Khare M., Binh N.T., Khare A. (2016) Human Object Detection in Images Using Shift-Invariant Stationary Wavelet Transform. In: Afzalpulkar N., Srivastava V., Singh G., Bhatnagar D. (eds) Proceedings of the International Conference on Recent Cognizance in Wireless Communication & Image Processing. Springer, New Delhi

#### **International Conference Proceedings**

1. Bao T. Nguyen , **Om Prakash**, Anh H. Vo, (2020), Attention Mechanism for Fashion Image Captioning, accepted in the 5th International Conference on Green Technology and Sustainable Development (GTSD 2020), HCMC University of Technology and Education, Ho Chi Minh City, Vietnam to be held on 27-28 Nov 2020.
2. B. Reddy Mounika, **Om Prakash**, Ashish Khare, "Key Frame Extraction using Uniform Local Binary Pattern," 2018 Second International Conference on Advances in Computing, Control and Communication Technology (IAC3T), University of Allahabad, Allahabad, 21-23 Sept 2018.
3. Abhishek Srivastava, Pronaya Bhattacharya, Arunendra Singh, AtulMathur, **Om Prakash**, Rajeshkumar Pradhan," A Distributed Credit Transfer Educational Framework based on Blockchain," 2018 Second International Conference on Advances in Computing, Control and Communication Technology (IAC3T), University of Allahabad, Allahabad, 21-23 Sept 2018.
4. **Om Prakash**, Alok Kumar Singh Kushwaha, Moongu Jeon "An approach towards Object Tracking based on Rotation Invariant Moments of Complex Wavelet Transform," in International Conference on Advances in Computing, Control and Communication Technology (IAC3T-2016), University of Allahabad, Allahabad, 25-27 March 2016.
5. AratiKushwaha, Ashish Khare, **Om Prakash**, Jong-In Song, Moongu Jeon "3D Medical Image Fusion using the Dual Tree Complex Wavelet Transform," in IEEE 4th International Conference on Control, Automation and Information Sciences (ICCAIS-2015), Changshu, China, 29-31 October 2015.
6. Manish Khare, **Om Prakash**, Rajneesh Kumar Srivastava, Ashish Khare, "Contourlet Transform based Human Object Tracking", Proceeding of 27<sup>th</sup>SPIE Electronic Imaging, Vol. 9410 (Visual Information Processing and Communication VI), 08-12 February, 2015, San Francisco, USA.
7. Om Prakash, Manish Khare, Ashish Khare, "Biorthogonal Wavelet Transform Based Classification of Human Object Using Adaboost Classifier," Proceedings of IEEE 3rdInternational Conference on Control, Automation and Information Sciences (ICCAIS-2014),

- Gwangju Institute of Science and Technology (GIST), South Korea, pp.194-199, 02-05 December 2014.
8. Manish Khare, **Om Prakash**, Rajneesh Kumar Srivastava, Ashish Khare, "Daubechies Complex Wavelet Transform Based Approach for Multiclass Object Classification," Proceedings of IEEE 3rd International Conference on Control, Automation and Information Sciences (ICCAIS-2014), Gwangju Institute of Science and Technology (GIST), South Korea, 206-211, 02-05 December 2014.
  9. Prashant Srivastava, **Om Prakash**, Ashish Khare, "Content-Based Image Retrieval Using Moments of Wavelet Transform," Proceedings of IEEE 3rd International Conference on Control, Automation and Information Sciences (ICCAIS-2014), Gwangju Institute of Science and Technology (GIST), South Korea, pp. 159-164, 02-05 December 2014.
  10. **Om Prakash**, Arvind Kumar, Ashish Khare, "Pixel-level Image fusion Scheme based on Steerable Pyramid Wavelet Transform using absolute Maximum fusion rule," Proceedings of IEEE International Conference on Issues and Challenges in Intelligent Computing Techniques (ICICT-2014), Ghaziabad, India, pp. 770-775, 07-08 February, 2014.
  11. **Om Prakash**, Manish Khare, Rajneesh Kumar Srivastava and Ashish Khare, "Multiclass Image Classification using Multiscale Biorthogonal Wavelet Transform," Proceedings of IEEE International Conference on Image Information Processing (ICIIP-2013), Jaypee University of Information Technology, Wagnaghat, Shimla, Himachal Pradesh, India, pp. 131-135, 9-11 December, 2013.
  12. **Om Prakash**, Richa Srivastava and Ashish Khare, "Biorthogonal Wavelet Transform based Image Fusion using Absolute Maximum Fusion Rule," Proceedings of IEEE International Conference on Information and Communication Technologies (ICT 2013), Kanyakumari, India, pp. 577-582, 11-12 April, 2013.
  13. Alok K Singh Kushwaha, **Om Prakash**, Ashish Khare, Mahesh H. Kolekar, "Rule based human activity recognition for surveillance system," Proceedings of 4th International conference on Intelligent Human Computer Interaction, IIT Kharagpur, India, pp.466-471, 27-29 December, 2012, Elsevier Procedia.
  14. Rajiv Singh, Richa Srivastava, **Om Prakash** and Ashish Khare, "Mixed scheme based multimodal medical image fusion using Daubechies complex wavelet transform," Proceedings of IEEE/OSA/IAPR International conference on Informatics, Electronics and Vision, Dhaka, Bangladesh, pp. 304-309, 18-19 May, 2012.
  15. Rajiv Singh, Richa Srivastava, **Om Prakash** and Ashish Khare, "DTCWT based Multimodal Medical Image Fusion," Proceedings of International Conference on Signal, Image and Video

Processing (ICSIVP-2012), IIT Patna, Patna, India, pp. 403-407, 13-15 January, 2012.

**National Conference Proceedings**

1. **Om Prakash**, Manish Khare and Ashish Khare, “Image denoising technique based on soft thresholding of biorthogonal wavelet coefficients,” Proceedings of ICEIT conference on Advances in Mobile Communications, Networking and Computing, Delhi, India, pp. 155-159, 27-28 September, 2013.
2. **Om Prakash** and Ashish Khare, “An approach towards object tracking in video based on complex wavelet transform,” Proceedings of National Seminar on Impact of Physics on Biological Sciences, Allahabad, India, pp. 82-87, 26 August, 2010.