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Assistant Professor
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RESEARCH INTERESTS

➤ Biometric Systems ➤ Visual Surveillance ➤ Multimedia Forensics ➤ Social Security Analytics


SELECTED PROFESSIONAL MEMBERSHIPS AND SERVICES













- Executive Committee Member, **IEEE Kolkata Section**, 2023
- Representative of **IEEE Computational Intelligence Society**, to **IEEE Young Professionals**, 2022
- Member, **IEEE Region 10 Professional Activities Committee**, 2022
- **IEEE Impact Creator**, 2022
- Founding Chair, **IEEE Rourkela Subsection**, 2021
- Member, **IEEE CIS Young Professional subcommittee**, 2020 - 2022
- Senior Member, **IEEE**, 2019 - (Membership number: 92530884)
- Member, **ACM**, 2022 - (Membership number: 4072155)
- Vice-chair, **IEEE CIS Intelligent Systems Applications Technical Committee**, 2019
- Member, **IEEE CIS Emergent Technologies Technical Committee**, 2019
- Life Member, **Computer Society of India**, 2016 - (Membership number: I1504038)
- Associate Editor, **IEEE Transactions on Technology and Society**
- Associate Editor, **IEEE Systems Journal** [Impact factor: 4.802]
- Associate Editor, **Multimedia Tools and Applications, Springer** [Impact factor: 2.577]
- Editorial Board Member, **Engineering Applications of Artificial Intelligence, Elsevier** [Impact factor: 7.802]
- Editorial Board Member, **Multimedia Systems, Springer** [Impact factor: 2.603]
- Associate Editor, **Expert Systems with Applications, Elsevier** [Impact factor: 8.665]
- Associate Editor, **IEEE IT Professional** [Impact factor: 2.59]
- Associate Editor, **Image and Vision Computing, Elsevier** [Impact factor: 3.86]
- Associate Editor, **IEEE Access** (2016 - 2022) [Impact factor: 3.476]; **Expert Systems, Wiley** (2018 - 2019) [Impact factor: 2.812]; **Plos One** (2017 - 2020) [Impact factor: 3.752]
- Advisory Board Member, **AMBER** ("enhanced Mobile BiomEtrics"), a project under Marie Skłodowska-Curie Innovative Training Network, European Commission Research and Innovation, 2017 - 2020.

PUBLICATIONS





Journals (77)

Just Accepted / Early Access [13]

- C. Swain, M.N. Sahoo, A. Satpathy, K. Muhammad, S. Bakshi, and J.J.P.C. Rodrigues, "A-DAFTO: Artificial Cap Deferred Acceptance based Fair Task Offloading in Complex IoT-Fog Networks," *IEEE Transactions on Consumer Electronics*, 2023, DOI: nya. 

- J.K. Rout, K.S. Sahoo, A. Dalmia, **S. Bakshi**, M. Bilal, H. Song, "Understanding large scale network effects in detecting review spammers," *IEEE Transactions on Computational Social Systems*, 2023, DOI: 10.1109/TCSS.2023.3243139. 
- K.K. Jena, S.K. Bhoi, S. Mohapatra, and **S. Bakshi**, "Hybrid deep learning approach for classification of music genres using wavelet and spectrogram analysis," *Neural Computing and Applications*, 2023, DOI: 10.1007/s00521-023-08294-6. 
- G. Kumar, **S. Bakshi**, A.K. Sangaiah, and P.K. Sa, "Experimental evaluation of covariates effects on periocular biometrics: A robust security assessment framework," *ACM Journal of Data and Information Quality*, 2022, DOI: 10.1145/3579029. 
- T.K. Behera, M.A. Khan, **S. Bakshi**, "Brain MR image classification using superpixel-based deep transfer learning," *IEEE Journal of Biomedical and Health Informatics*, 2022, DOI: 10.1109/JBHI.2022.3216270. 
- D.P. Chowdhury, **S. Bakshi**, C. Pero, G. Olague, and P.K. Sa, "Privacy preserving ear recognition system using transfer learning in industry 4.0," *IEEE Transactions on Industrial Informatics*, 2022, DOI: 10.1109/TII.2022.3196343. 
- R.P. Padhy, P.K. Sa, F. Narducci, C. Bisogni, and **S. Bakshi**, "Monocular vision aided depth measurement from RGB images for autonomous UAV navigation," *ACM Transactions on Multimedia Computing, Communications, and Applications*, 2022, DOI: 10.1145/3550485. 
- A. Samantra, P.K. Sa, T.N. Nguyen, A.K. Sangaiah, and **S. Bakshi**, "On the usage of neural POS taggers for Shakespearean literature in social systems," *IEEE Transactions on Computational Social Systems*, 2022, DOI: 10.1109/TCSS.2022.3191340. 
- T.K. Behera, **S. Bakshi**, P.K. Sa, M. Nappi, A. Castiglione, P. Vijayakumar, and B. Gupta, "The NITRDrone dataset to address the challenges for road extraction from aerial images," *Journal of Signal Processing Systems*, 2022, DOI: 10.1007/s11265-022-01777-0. 
- J. Bakas, R. Naskar, M. Nappi, and **S. Bakshi**, "Object-based forgery detection in surveillance video using capsule network," *Journal of Ambient Intelligence and Humanized Computing*, 2021, pp. 1 - 11, DOI: 10.1007/s12652-021-03511-3. 
- S. Mishra, A.K. Sangaiah, M.N. Sahoo, and **S. Bakshi**, "Pareto-optimal cost optimization for large scale cloud systems using joint allocation of resources," *Journal of Ambient Intelligence and Humanized Computing* 2019, pp. 1 - 19, DOI: 10.1007/s12652-019-01601-x. 
- A. Anand, A. Kar, **S. Bakshi**, and M.N.S. Swamy, "Convex combinations of adaptive filters for feedback cancellation in hearing aids," *Journal of Ambient Intelligence and Humanized Computing*, 2017, DOI: 10.1007/s12652-017-0570-9. 
- S.K. Choudhury, P.K. Sa, K.-K.R. Choo, and **S. Bakshi**, "Segmenting foreground objects in a multi-modal background using modified Z-score," *Journal of Ambient Intelligence and Humanized Computing*, 2017, DOI: 10.1007/s12652-017-0480-x. 

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- T.K. Behera, **S. Bakshi**, and P.K. Sa, "A lightweight deep learning architecture for vegetation segmentation using UAV-captured aerial images," *Sustainable Computing: Informatics and Systems* 37, pp. 100841, 2023, DOI: 10.1016/j.suscom.2022.100841. 
- T.K. Behera, **S. Bakshi**, M. Nappi, and P.K. Sa, "Superpixel-based multiscale CNN approach towards multiclass object segmentation from UAV-captured aerial images," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 16, 2023, pp. 1771 - 1784, DOI: 10.1109/JSTARS.2023.3239119. 
- A. Nanda, R.C. Barik, and **S. Bakshi**, "SSO-RBNN driven brain tumour classification with Saliency-K-means segmentation technique," *Biomedical Signal Processing and Control* 81, 2023, pp. 104356, DOI: 10.1016/j.bspc.2022.104356. 
- S. Devi, **S. Bakshi**, and M.N. Sahoo, "Effect of situational and instrumental distortions on the classification of brain MR images," *Biomedical Signal Processing and Control* 79(2), 2023, pp. 104177, DOI: 10.1016/j.bspc.2022.104177. 

2022 [6]

- G. Kumar, F. Narducci, and S. Bakshi, "Knowledge transfer and crowdsourcing in Cyber-Physical-Social systems," *Pattern Recognition Letters* 164, 2022, pp. 210 - 215, DOI: 10.1016/j.patrec.2022.10.027.
- A. Satpathy, M.N. Sahoo, A.K. Sangaiah, C. Swain, S. Bakshi, "CoMap: An efficient virtual network re-mapping strategy based on coalitional matching theory," *Computer Networks* 216, 2022, pp. 109248, DOI: 10.1016/j.comnet.2022.109248.
- T.K. Behera, P.K. Sa, M. Nappi, and S. Bakshi, "Satellite IoT based road extraction from VHR images through superpixel-CNN architecture," *Big Data Research* 30, 2022, pp. 100334, DOI: 10.1016/j.bdr.2022.100334.
- T.K. Behera, S. Bakshi, and P.K. Sa, "Vegetation extraction from UAV-based aerial images through deep learning," *Computers and Electronics in Agriculture* 198, 2022, pp. 107094, DOI: 10.1016/j.compag.2022.107094.
- N.B. Kar, K.S. Babu, and S. Bakshi, "Facial expression recognition system based on variational mode decomposition and whale optimized KELM," *Image and Vision Computing* 123, 2022, pp. 104445, DOI: 10.1016/j.imavis.2022.104445.
- N.K.S. Behera, P.K. Sa, S. Bakshi, and R. Padhy, "Person re-identification: A taxonomic survey and the path ahead," *Image and Vision Computing* 122, 2022, pp. 104432, DOI: 10.1016/j.imavis.2022.104432.

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- T.K. Behera, S. Bakshi, and P.K. Sa, "Aerial data aiding smart societal reformation: Current applications and path ahead," *IEEE IT Professional* 23(3), 2021, pp. 82 - 88, DOI: 10.1109/MITP.2020.3020433.
- D.P. Chowdhury, R. Kumari, S. Bakshi, M.N. Sahoo, and A Das, "Lip as biometric and beyond: a survey," *Multimedia Tools and Applications* 2021, pp. 1 - 35, DOI: 10.1007/s11042-021-11613-5.
- N.K.S. Behera, T.K. Behera, M. Nappi, S. Bakshi, and P.K. Sa, "Futuristic person re-identification over Internet of Biometrics Things (IoBT): Technical potential versus practical reality," *Pattern Recognition Letters* 151, 2021, pp. 163 - 171, DOI: 10.1016/j.patrec.2021.08.007.
- A. Satpathy, M.N. Sahoo, A. Mishra, B. Majhi, J.J.P.C. Rodrigues, and S. Bakshi, "A service sustainable live migration strategy for multiple virtual machines in cloud data centers," *Big Data Research* 25, 2021, pp. 100213, DOI: 10.1016/j.bdr.2021.100213.
- S.K. Baliarsingh, K. Muhammad, and S. Bakshi, "SARA: A memetic algorithm for high-dimensional biomedical data," *Applied Soft Computing* 101, 2021, pp. 107009, DOI: 10.1016/j.asoc.2020.107009.
- J. Bakas, R. Naskar, and S. Bakshi, "Detection and localization of inter-frame forgeries in videos based on macroblock variation and motion vector analysis," *Computers & Electrical Engineering* 89, 2021, pp. 106929, DOI: 10.1016/j.compeleceng.2020.106929.
- C. Swain, M.N. Sahoo, A. Satpathy, K. Muhammad, S. Bakshi, J.P.C. Rodrigues, and V.H.C. de Albuquerque, "METO: Matching theory based efficient task offloading in IoT-fog interconnection networks," *IEEE Internet of Things Journal* 8(16), 2021, pp. 12705 - 12715, DOI: 10.1109/JIOT.2020.3025631.
- G. Kumar, S. Bakshi, P. K. Sa, and B. Majhi, "Non-overlapped blockwise interpolated local binary pattern as periocular feature," *Multimedia Tools and Applications* 80, 2021, pp. 16565 - 16597, DOI: 10.1007/s11042-020-08708-w.
- S. Mishra, M.N. Sahoo, A.K. Sangaiah, and S. Bakshi, "Nature-inspired cost optimization for enterprise cloud systems using joint allocation of resources," *Enterprise Information Systems* 15(2), 2021, pp. 174 - 196, DOI: 10.1080/17517575.2019.1605001.

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- D.P. Chowdhury, S. Bakshi, P.K. Sa, and B. Majhi, "Semantic ear feature reduction for source camera identification," *Multimedia Tools and Applications* 79, 2020, pp. 35315 - 35331, DOI: 10.1007/s11042-019-7665-6.
- N.K.S. Behera, P.K. Sa, and S. Bakshi, "Person re-identification for smart cities: State-of-the-art and the path ahead," *Pattern Recognition Letters* 138, 2020, pp. 282 - 289, DOI: 10.1016/j.patrec.2020.07.030.
- S. Mishra, M.N. Sahoo, S. Bakshi, and J.P.C. Rodrigues, "Dynamic resource allocation in fog-cloud hybrid systems using multi-criteria AHP techniques," *IEEE Internet of Things Journal* 7(9), 2020, pp. 8993 - 9000, DOI: 10.1109/JIOT.2020.3001603.
- S.K. Baliarsingh, S. Vipsita, A.H. Gandomi, A. Panda, S. Bakshi, and S. Ramasubbareddy, "Analysis of high-dimensional genomic data using MapReduce based probabilistic neural network," *Computer Methods and Programs in Biomedicine* 195, 2020, pp. 105625, DOI: 10.1016/j.cmpb.2020.105625.
- D.R. Nayak, R. Dash, X. Chang, B. Majhi, and S. Bakshi, "Automated diagnosis of pathological brain using fast curvelet entropy features," *IEEE Transactions on Sustainable Computing* 5(3), 2020, pp. 416 - 427, DOI: 10.1109/TSUSC.2018.2883822.
- S. Devi, M.N. Sahoo, and S. Bakshi, "A novel privacy-supporting 2-class classification technique for brain MRI images," *Biocybernetics and Biomedical Engineering* 40(3), 2020, pp. 1022 - 1035, DOI: 10.1016/j.bbe.2020.05.005.
- R. Raman, P.K. Sa, S. Bakshi, and B. Majhi, "Kinesiology-inspired estimation of pedestrian walk direction for smart surveillance," *Future Generation Computer Systems* 108, 2020, pp. 1008 - 1026, DOI: 10.1016/j.future.2017.10.033.
- D. Mishra, B. Majhi, S. Bakshi, A.K. Sangaiah, and P.K. Sa, "Single image super resolution for texture images through neighbor embedding," *Multimedia Tools and Applications* 79, 2020, pp. 8337 - 8366, DOI: 10.1007/s11042-017-5367-5.
- I. Rida, N. Al Maadeed, S. Al Maadeed, and S. Bakshi, "A comprehensive overview of feature representation for biometric recognition," *Multimedia Tools and Applications* 79, 2020, pp. 4867 - 4890, DOI: 10.1007/s11042-018-6808-5.
- D.P. Chowdhury, S. Bakshi, P.K. Sa, and B. Majhi, "Wavelet energy feature based source camera identification for ear biometric images," *Pattern Recognition Letters* 130, 2020, pp. 139 - 147, DOI: 10.1016/j.patrec.2018.10.009.




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- A. Nanda, D.S. Chauhan, P.K. Sa, and S. Bakshi, "Illumination and scale invariant relevant visual features with hypergraph-based learning for multi-shot person re-identification," *Multimedia Tools and Applications* 78, 2019, pp. 3885 - 3910, DOI: 10.1007/s11042-017-4875-7.
- I.I. Ganapathi, S. Prakash, I.R. Dave, and S. Bakshi, "Unconstrained ear detection using ensemble based convolutional neural network model," *Concurrency and Computation: Practice and Experience* 32(1), 2019, DOI: 10.1002/cpe.5197.
- R.P. Padhy, X. Chang, S.K. Choudhury, P.K. Sa, and S. Bakshi, "Multi-stage cascaded deconvolution for depth map and surface normal prediction from single image," *Pattern Recognition Letters* 127, 2019, pp. 165-173, DOI: 10.1016/j.patrec.2018.07.012.
- S.K. Baliarsingh, W. Ding, S. Vipsita, and S. Bakshi, "A memetic algorithm using emperor penguin and social engineering optimization for medical data classification," *Applied Soft Computing* 85, 2019, 105773, DOI: 10.1016/j.asoc.2019.105773.
- S. Das, K. Muhammad, S. Bakshi, I. Mukherjee, P.K. Sa, A.K. Sangaiah, and A. Bruno, "Lip biometric template security framework using spatial steganography," *Pattern Recognition Letters* 126, 2019, pp. 102-110, DOI: 10.1016/j.patrec.2018.06.026.
- S.K. Choudhury, R. Padhy, A.K. Sangaiah, P.K. Sa, K. Muhammad, and S. Bakshi, "Scale aware deep pedestrian detection," *Transactions on Emerging Telecommunications Technologies* 30(9), 2019, DOI: 10.1002/ett.3522.




- R. Raman, L. Boubchir, P.K. Sa, B. Majhi, and **S. Bakshi**, “Beyond estimating discrete directions of walk: A fuzzy approach,” *Machine Vision and Applications* 30(5), 2019, pp. 901 - 917, DOI: 10.1007/s00138-018-0939-6. 
- S.K. Choudhury, R.P. Padhy, P.K. Sa, and **S. Bakshi**, “Human detection using orientation shape histogram and cooccurrence textures,” *Multimedia Tools and Applications* 78(10), 2019, pp. 13949 - 13969, DOI: 10.1007/s11042-018-6866-8. 
- S.K. Baliarsingh, S. Vipsita, K. Muhammad, and **S. Bakshi**, “Analysis of high-dimensional biomedical data using an evolutionary multi-objective emperor penguin optimizer,” *Swarm and Evolutionary Computation* 48, 2019, pp. 262 - 273, DOI: 10.1016/j.swevo.2019.04.010. 
- G. Olague, E. Clemente, D.E. Hernandez, A. Barrera, M. Chan-Ley, and **S. Bakshi**, “Artificial visual cortex and random search for object categorization,” *IEEE Access* 7, 2019, pp. 54054 - 54072, DOI: 10.1109/ACCESS.2019.2912792. 
- S. Devi, M.N. Sahoo, K. Muhammad, W. Ding, and **S. Bakshi**, “Hiding medical information in brain MR images without affecting accuracy of classifying pathological brain,” *Future Generation Computer Systems* 99, 2019, pp. 235 -246, DOI: 10.1016/j.future.2019.01.047. 
- S.K. Baliarsingh, S. Vipsita, K. Muhammad, B. Dash, and **S. Bakshi**, “Analysis of high-dimensional genomic data employing a novel bio-inspired algorithm,” *Applied Soft Computing* 77, 2019, pp. 520 - 532, DOI: 10.1016/j.asoc.2019.01.007. 
- R.P. Padhy, S.K. Choudhury, P.K. Sa, and **S. Bakshi**, “Obstacle avoidance for unmanned aerial vehicles in unknown environments using visual features,” *IEEE Consumer Electronics Magazine* 8(3), 74 - 80, 2019, DOI: 10.1109/MCE.2019.2892280. 
- S.S. Barpanda, B. Majhi, P.K. Sa, A.K. Sangaiah, and **S. Bakshi**, “Iris feature extraction through wavelet mel-frequency cepstrum coefficients,” *Optics & Laser Technology* 110, 2019, pp. 13-23, DOI: 10.1016/j.optlastec.2018.03.002. 
- R. Padhy, F. Xia, S. Choudhury, P.K. Sa, and **S. Bakshi**, “Monocular vision aided autonomous UAV navigation in indoor corridor environments,” *IEEE Transactions on Sustainable Computing* 4(1), 2019, pp. 96 - 108, DOI: 10.1109/TSUSC.2018.2810952. 

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- Z. Akhtar, G. Kumar, **S. Bakshi**, and H. Proenca, “Experiments with ocular biometric datasets: A practitioner’s guideline,” *IT Professional* 20(3), 2018, pp. 50 - 63, DOI: 10.1109/MITP.2018.032501748. 
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- I. Rida, S. Al-Meedeed, A. Mahmood, A. Bouridane, and **S. Bakshi**, “Palmprint identification using an ensemble of sparse representations,” *IEEE Access* 6, 2018, pp. 3241 - 3248, DOI: 10.1109/ACCESS.2017.2787666. 
- N.B. Kar, K.S. Babu, A.K. Sangaiah, and **S. Bakshi**, “Face expression recognition system based on ripplelet transform type II and least square SVM,” *Multimedia Tools and Applications* 78(4), 2018, pp. 4789 - 4812, DOI: 10.1007/s11042-017-5485-0. 
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- J. Ahmad, K. Muhammad, **S. Bakshi**, and S.W. Baik, “Object-oriented convolutional features for fine-grained image retrieval in large surveillance datasets,” *Future Generation Computer Systems* 81, 2018, pp. 314 - 330, DOI: 10.1016/j.future.2017.11.002. 
- R. Raman, S.K. Choudhury, and **S. Bakshi**, “Spatiotemporal optical blob reconstruction for object detection in grayscale videos,” *Multimedia Tools and Applications* 77(1), 2018, pp. 741 - 762, DOI: 10.1007/s11042-016-4234-0. 
- J.K. Rout, K.-K.R. Choo, A.K. Dash, **S. Bakshi**, S.K. Jena, and K.L. Williams, “A model for sentiment and emotion analysis of unstructured social media text,” *Electronic Commerce Research* 18(1), 2018, pp. 181 - 199, DOI: 10.1007/s10660-017-9257-8. 

- S.K. Choudhury, P.K. Sa, R.P. Padhy, S. Sharma, and **S. Bakshi**, “Improved pedestrian detection using motion segmentation and silhouette orientation,” *Multimedia Tools and Applications* 77(11), 2018, pp. 13075 – 13114, DOI: 10.1007/s11042-017-4933-1. 
- S.S. Barpanda, P.K. Sa, O. Marques, B. Majhi, and **S. Bakshi**, “Iris recognition with tunable filter bank based feature,” *Multimedia Tools and Applications* 77(6), 2018, pp. 7637 – 7674, DOI: 10.1007/s11042-017-4668-z. 
- **S. Bakshi**, P.K. Sa, H. Wang, S.S. Barpanda, and B. Majhi, “Fast periocular authentication in handheld devices with reduced phase intensive local pattern,” *Multimedia Tools and Applications* 77, 2018, pp. 17595 - 17623, DOI: 10.1007/s11042-017-4965-6. 


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- A. Nanda, P.K. Sa, S.K. Choudhury, **S. Bakshi**, and B. Majhi, “A neuromorphic person re-identification framework for video surveillance,” *IEEE Access* 5(1), 2017, pp. 6471 – 6482, DOI: 10.1109/ACCESS.2017.2686438. 
- J.K. Rout, A. Dalmia, K.-K.R. Choo, **S. Bakshi**, and S.K. Jena, “Revisiting Semi-supervised Learning for Online Deceptive Review Detection,” *IEEE Access* 5(1), 2017, pp. 1319 – 1327, DOI: 10.1109/ACCESS.2017.2655032. 
- J.K. Rout, S. Singh, S.K. Jena, and **S. Bakshi**, “Deceptive review detection using labeled and unlabeled data,” *Multimedia Tools and Applications* 76(3), 2017, pp. 3187 – 3211, DOI: 10.1007/s11042-016-3819-y. 




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- R. Raman, P.K. Sa, **S. Bakshi**, and B. Majhi, “Direction estimation for pedestrian monitoring system in smart cities: An HMM based approach,” *IEEE Access* 4(1), 2016, pp. 5788 – 5808, DOI: 10.1109/ACCESS.2016.2608844. 
- S.K. Choudhury, P.K. Sa, B. Majhi, and **S. Bakshi**, “An evaluation of background subtraction for object detection vis-a-vis mitigating challenging scenarios,” *IEEE Access* 4(1), 2016, pp. 6133 – 6150, DOI: 10.1109/ACCESS.2016.2608847. 



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- **S. Bakshi**, P.K. Sa, and B. Majhi, “A novel phase-intensive local pattern for periocular recognition under visible spectrum,” *Biocybernetics and Biomedical Engineering* 35(1), 2015, pp. 30 – 44, DOI: 10.1016/j.bbe.2014.05.003. 

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- R. Raman, **S. Bakshi**, and P.K. Sa, “Multi-camera localisation: A review,” *International Journal of Machine Intelligence and Sensory Signal Processing* 1(1), 2013, pp. 91 – 109, DOI: 10.1504/IJMISSP.2013.052876. 

Scientific Reports / Magazines (6)

- S Devi, **S. Bakshi**, and MN Sahoo, “NITR-DHH: a T2-weighted brain magnetic resonance image dataset,” *ACM SIGBioinformatics Record* 9(1), 2020, pp. 1 - 1, DOI: 10.1145/3380874.3380875. 
- R. Raman, P.K. Sa, B. Majhi, **S. Bakshi**, “Acquisition and corpus description of NITR conscious walk dataset,” *ACM SIGBioinformatics Record* 7 (1), 2017, pp. 1, DOI: 10.1145/3056351.3056352. 

- R. Raman, P.K. Sa, B. Majhi, **S. Bakshi**, "Acquisition and corpus description of a constrained lip database captured from handheld devices: NITRLipV2 (MobioLip)," *ACM SIGBioinformatics Record* 7 (1), 2017, pp. 2, DOI: 10.1145/3056351.3056353. 
- **S. Bakshi** and P.K. Sa, "Doctoral Dissertation Summary: Periocular Localization and Feature Extraction for Human Recognition," *ACM SIGBioinformatics Record* 6(1), 2016, DOI: 10.1145/2921555.2921556. 
- **S. Bakshi**, R. Raman, P.K. Sa, "NITRLipV1: A Constrained Lip Database Captured in Visible Spectrum," *ACM SIGBioinformatics Record* 6(1), 2016, DOI: 10.1145/2921555.2921557. 
- **S. Bakshi**, "Periocular Localization and Feature Extraction for Human Recognition," *ACM SigMultimedia Records* 7(2), 2015, pp. 17 - 18, DOI: 10.1145/2835398.2835410. 
- **S. Bakshi**, "Report from the 3rd International Conference on Advanced Computing, Networking, and Informatics", *ACM SigMultimedia Records* 7(3). 

Selected Conferences (2)

- R.P. Padhy, S. Ahmad, S. Verma, **S. Bakshi**, and P.K. Sa, "Localization of unmanned aerial vehicles in corridor environments using deep learning," *25th International Conference on Pattern Recognition (ICPR)* 2021, pp. 9423 - 9428, DOI: 10.1109/ICPR48806.2021.9412096. 
- S. Mishra, M.N. Sahoo, and **S. Bakshi**, "User Driven Dynamic Frequency Scaling for Power-Aware Mobile Cloud Terminals," *11th International Conference on Communication Systems and Networks (COMSNET)*, 2018, DOI: 10.1109/COMSNETS.2019.8711477. 

SELECTED EDITORIAL ACTIVITIES IN SCI JOURNALS (12)

- R. Vyas, M. Nappi, A. Del Bimbo, and **S. Bakshi**, Special Issue on Recent trends in Multimedia Forensics, *ACM Transactions on Multimedia Computing, Communications, and Applications*, 2023.
- **S. Bakshi**, I. Bojanova, V. Struc, G.K. Thiruvathukal, and M.D. Marsico, Special Issue on Five Decades of Biometrics and Video Surveillance: Present Technologies and Future Possibilities in the magazine, *IEEE Computer*, 2023.
- M. Nappi, S. Ricciardi, R. Guest, and **S. Bakshi**, Special Issue of 25th ICPR - Computer Vision, Robotics and Intelligent Systems, *Machine Vision and Applications*, 2021.
- M. Nappi, H. Proenca, **S. Bakshi**, and V. Murino, "Guest Editorial Introduction to the Special Issue on Biometrics Based Methods for Healthcare Applications", *Computer Vision and Image Understanding* 224(C), 2022, pp. 103559, DOI: 10.1016/j.cviu.2022.103559.
- M. Nappi, H. Proenca, G. Guo, and **S. Bakshi**, "25th ICPR - Real-Time Visual Surveillance as-a-Service (VSaaS) for Smart Security Solutions," *IET Biometrics* 11, 2022, pp. 277 - 278, DOI: 10.1049/bme2.12089.
- Y. Wu, F. Hao, **S. Bakshi**, and H. Huang, "Editorial: Deep Learning for Big Data Analytics," *ACM/Springer Mobile Networks and Applications* 26, 2021, pp. 2315 - 2317, DOI: 10.1007/s11036-021-01851-0.
- M.D. Marsico, H. Proença, **S. Bakshi**, and A. Das, "Editorial to special issue on novel insights on ocular biometrics," *Image and Vision Computing* 112, 2021, pp. 104227, DOI: 10.1016/j.imavis.2021.104227.
- G. Olague, **S. Bakshi**, J. Á. Borrego, J.N. Mait, A.M. García, and M.E. Testorf, "Optics theory and practice in Iberoamerica: introduction to the feature issue," *Applied Optics* 59(13), 2020, pp. 11B01 - 1B05, DOI: 10.1364/AO.396153.
- E. Cabal-Yeppez, T.D. Carozzi, and **S. Bakshi**, "Special Section on Signal Processing," *Computers & Electrical Engineering* 76 pp. 425-428, 2019, DOI: 10.1016/j.compeleceng.2019.04.009.
- G. Guo, **S. Bakshi**, D.R. Kisku, R. Sanchez-Reillo, and M. Tistarelli, "Biometrics as-a-service: the path ahead?," *IET Biometrics* 7(6), pp. 501, 2018, DOI: 10.1049/iet-bmt.2018.5222.
- K.-K.R. Choo and **S. Bakshi**, "Ubiquitous Visual Surveillance for Public Security," *Multimedia Tools and Applications* 78, pp. 5535, 2019, DOI: 10.1007/s11042-018-7054-6.

- A. Elci, **S. Bakshi**, and M.N.Sahoo, “Special issue on ‘Resilient Networks : Modeling, Design, and Applications,” *Digital Communications and Networks* 4(1), Elsevier, 2018, DOI: 10.1016/j.dcan.2017.10.003.

SELECTED WORKSHOPS AND MEETINGS ORGANIZED

- **S. Bakshi**, U.C. Pati, *2022 International Workshop on Remote Sensing and Societal Applications*, Organised by IEEE Geoscience and Remote Sensing Society (GRSS) Kolkata Chapter and Co-sponsored by IEEE Young Professionals, 28-29 September 2022 [Online].
- P. Terhorst, K. Raja, C. Rathgeb, A. Das, A.F. Sequeira, A. Dantcheva, **S. Bakshi**, R. Ramachandra, N. Damer, Workshop on Fairness in Biometric Systems, in *26th International Conference on Pattern Recognition (ICPR 2022)*, 21 - 25 August 2022, Montreal, Canada.
- **S. Bakshi**, Coordinator, *Short Term Course on ‘Biometric Security: Theory and Applications’*, National Institute of Technology Rourkela, 12-17 March 2018 (funded by ISEA Project, DeitY, Government of India).
- **S. Bakshi**, Coordinator, *Short Term Course on ‘Biometric Security: Theory and Applications’*, National Institute of Technology Rourkela, 15-19 March 2016 (funded by ISEA Project, DeitY, Government of India).
- **S. Bakshi**, Co-convenor, *TEQIP II Short Term Course on ‘Aesthetics of Technical Writing : LaTeX’*, National Institute of Technology Jamshedpur, 10 – 11 Jan 2015.

RECENT SPEAKING / ORGANIZING ENGAGEMENTS

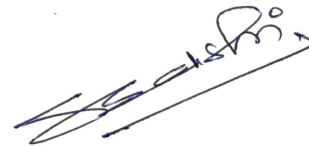
- **Invited talk** on “Plethora Of Computer Vision In Social Applications” on 27 Mar 2023 at *One Day International Webinar* organized by Department of Computer Science, Government Autonomous College Rourkela, India.
- **Invited talk** on “The Rise and Rise of Biometric Systems” on 18 Mar 2023 at *SOA Weekly Academic Lecture series II* organized by Department of Computer Science & Engineering, Siksha ‘O’ Anusandhan University, India.
- **Invited talk** on “Plethora of Computer Vision in Social Applications” on 23 Feb 2023 at *One week FDP on Applications of Machine Learning in Social Science Research* organized by Department of Education, Guru Ghasidas Vishwavidyalaya Bilaspur (A Central University), India during 21 – 25 Feb, 2023.
- **Invited talk** on “The Rise and Rise of Biometric Systems” at the *International Conference of The Mathematical Society-BHU on Recent Trends in Mathematical and Computational Sciences (RTMCS)* during 03-05 Feb, 2023 at DST-Centre for Interdisciplinary Mathematical Science (CIMS), Banaras Hindu University (BHU).
- **Invited talk** on “AI for biometric applications” on 19 Jan 2023 *National Conference on Machine Learning, Deep Learning and IoT* organized by Department of Computer Science and Information Technology, Guru Ghasidas Vishwavidyalaya, India during 19-20 Jan 2023 (sponsored by Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India).
- **Invited talk** on “Deep Learning and Machine Learning Algorithm for Biometrics” on 19 Nov 2022 in *ATAL Faculty Development Program on Deep Learning and Machine Learning Algorithm in Computer Vision* organized by Department of Computer Science and Engineering, Guru Ghasidas Vishwavidyalaya Bilaspur (A Central University), India during 12 -22 November, 2022.
- **Invited talk** on “Effective Research Strategies” on 02 Oct 2022 in *IEEE Region 10 Career and Leadership Aid Program (CLAP)* organized by IEEE Region 10 Young Professionals during 01 - 02 Oct 2022 (in virtual mode).
- **Invited Talk** on “AI for Biometrics and Applications” in *Short Term course on Recent Trends and Applications in Artificial Intelligence* organized by IIITDM Kancheepuram, India during 14 - 19 March, 2022 (funded by All India Council for Technical Education, Government of India).
- **Invited Talk** on “Introduction to Biometric Security” in *Short Term Training Programme on Information Security* during 06 - 12 January 2022 at Anna University, India (funded by All India Council for Technical Education, Government of India).

- **Invited Talk** on “Introduction to Graph Drawing and Tikz Drawing using LaTeX” in *Short Term Training Program on Technical Writing, Presentation and Scientific Research with Advanced Computing Tools: Hands-On Training* during 6-10 December, 2021 at IIITDM Kancheepuram, India (funded by Department of Science and Technology, Government of India).
- **Invited talk** on “Attacks on biometric systems and mitigation techniques” in *Online Faculty Development Programme on Multimedia and Security* during 16-20 December 2020 at National Institute of Technology Patna, India.
- **Invited Talk** on “At the intersection of biometric and surveillance” in *National seminar on Advances in Information Communication and Computing (AICC)*, during 22 Dec 2019 at Government Autonomous College Rourkela, India.
- **Organizing Chair** of 4th International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2016), India, Springer; **Publication chair** of International Conference on Signal, Networks, Computing, and Systems (ICSNCS 2016), Springer, India; **Organizing Chair** of 3rd International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2015), India, Springer; **Publication chair** of International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2014), India;

DECLARATION

I do hereby declare that the above particulars furnished by me are true to the best of my knowledge and belief.

Date: March 27, 2023
Place: Rourkela, Odisha, India



Dr. Sambit Bakshi