



# डॉ. सम्बित बक्शी DR. SAMBIT BAKSHI



## AFFILIATION AND CORRESPONDENCE

## CONTACT

Associate Professor, Computer Science and Engineering  
Head, Centre for Automation Technology  
National Institute of Technology Rourkela  
Odisha - 769 008, India

 [www.sambitbakshi.in](http://www.sambitbakshi.in)  
 [sambitbakshi@gmail.com](mailto:sambitbakshi@gmail.com)  
 [bakshisambit@ieee.org](mailto:bakshisambit@ieee.org)  
 (+91) 661 246 2371 (O), 4371 (Lab)  
 (+91) 97787 06770 (M)

## SHORT BIOGRAPHY

**Sambit Bakshi** is currently with the Department of Computer Science and Engineering, National Institute of Technology Rourkela, India. He also serves as Head of the Centre for Automation Technology at National Institute of Technology Rourkela. His areas of interest include surveillance, biometric security, digital forensics, and social security analytics. He presently serves as associate editor of multiple journals including IEEE Signal Processing Letters, IEEE Transactions on Automation Science and Engineering, Computers and Electrical Engineering, IEEE Transactions on Computational Social Systems, IEEE Transactions on Technology and Society, and IEEE Transactions on Education. He previously served as Associate Editor of IEEE Systems Journal, IEEE IT Professional magazine, IEEE Access, Innovations in Systems and Software Engineering Springer: A NASA Journal, Expert Systems with Applications, Engineering Applications of Artificial Intelligence, Image and Vision Computing, Multimedia Systems, Multimedia Tools and Applications, and Neural Processing Letters, Plos One, and Expert Systems in the past. He is a senior member of IEEE. He is Founding Chair of IEEE Rourkela Subsection and IEEE Kolkata Section Biometrics Council Chapter. He is a distinguished lecturer of IEEE Systems Council for 2023-2025 and distinguished lecturer of IEEE Women in Engineering for 2024-2025. He has published widely in more than 100 journals and conferences.

## JUMP TO...

- EDUCATION
- EMPLOYMENTS
- TEACHING
- RESEARCH INTERESTS
- PROFESSIONAL SERVICES
- EDITORIAL SERVICES
- SPONSORED PROJECTS
- DOCTORAL SUPERVISION
- PUBLICATIONS
- GUEST EDITING
- WORKSHOPS ORGANIZED
- SPEAKING ENGAGEMENTS

## EDUCATION

---

AUGUST 2015 JULY 2011	<b>Ph.D. in Computer Science and Engineering</b> <i>National Institute of Technology Rourkela, India</i> <b>Thesis Title:</b> <i>Periocular Localization and Feature Extraction for Human Recognition</i> CGPA: 9.01/10
JULY 2011 JULY 2009	<b>M. Tech. in Computer Science and Engineering</b> <i>National Institute of Technology Rourkela, India</i> <b>Thesis Title:</b> <i>Development of Robust Iris Localization and Impairment Pruning Schemes</i> CGPA: 9.37/10
2009	<b>Graduate Aptitude Test in Engineering (GATE)</b> <i>in Computer Science and Engineering</i> All India Rank: 1679   Score: 494   Percentile: 95.99
JULY 2009 MAY 2005	<b>B. Tech. in Computer Science and Engineering</b> <i>St. Thomas' College of Engineering and Technology</i> <i>West Bengal University of Technology, India</i> CGPA: 8.85/10
MAY 2005	<b>12th Level / Higher Secondary / Intermediate / High School Leaving Certificate</b> <i>Hindu School, Kolkata, India</i> <i>West Bengal Council of Higher Secondary Education</i> SCORE: 83.20%
MAY 2003	<b>10th level / Matriculation / Madhyamik Examination</b> <i>Hindu School, Kolkata, India</i> <i>West Bengal Board of Secondary Education</i> SCORE: 90.63%

## EMPLOYMENTS AND RESPONSIBILITIES

---

PRESENT SEPTEMBER 2023	<b>Head</b> <i>Centre for Automation Technology</i> <i>National Institute of Technology Rourkela, India</i>
PRESENT JULY 2024	<b>Associate Professor</b> <i>Department of Computer Science and Engineering</i> <i>National Institute of Technology Rourkela, India</i>
PRESENT FEBRUARY 2020	<b>Assistant Professor Grade - I</b> <i>Department of Computer Science and Engineering</i> <i>National Institute of Technology Rourkela, India</i>
FEBRUARY 2020 JULY 2015	<b>Assistant Professor Grade - II</b> <i>Department of Computer Science and Engineering</i> <i>National Institute of Technology Rourkela, India</i>
JUNE 2015 JULY 2014	<b>Ad-hoc Faculty</b> <i>Department of Computer Science and Engineering</i> <i>National Institute of Technology Jamshedpur, India</i>

## TEACHING

---

**Biometric Systems**  
UG + PG, 8 years

**Database Engineering**  
UG, 8 years



## RESEARCH INTERESTS

---

**Biometric Systems**

**Visual Surveillance**

**Multimedia Forensics**

**Social Security Analytics**



## SELECTED PROFESSIONAL SERVICES AND MEMBERSHIPS

---

- Distinguished Lecturer, **IEEE Systems Council**, 2023-2025
- Distinguished Lecturer, **IEEE Women in Engineering**, 2024-2025
- Executive Committee Member, **IEEE Kolkata Section**, 2023
- Founding Chair, **IEEE Kolkata Section Biometrics Council Chapter**, 2023
- **IEEE Featured Author**, 2023
- Representative of **IEEE Computational Intelligence Society** to **IEEE Young Professionals**, 2022
- **IEEE Impact Creator**, 2022 -
- Founding Chair, **IEEE Rourkela Subsection**, 2021
- Senior Member, **IEEE**, 2019 - (Membership number: 92530884)
- Member, **ACM**, 2022 - (Membership number: 4072155)
- Vice-chair, **IEEE CIS Intelligent Systems Applications Technical Committee**, 2019
- Life Member, **Computer Society of India**, 2016 - (Membership number: I1504038)



## SELECTED EDITORIAL SERVICES

---

- Associate Editor, **IEEE Transactions on Consumer Electronics**
- Associate Editor, **IEEE Transactions on Circuits and Systems for Video Technology**
- Associate Editor, **IEEE Signal Processing Letters**
- Associate Editor, **IEEE Transactions on Automation Science and Engineering**
- Associate Editor, **IEEE Transactions on Computational Social Systems**
- Associate Editor, **IEEE Transactions on Education**
- Associate Editor, **Computers and Electrical Engineering**
- Associate Editor, **Multimedia Tools and Applications**, Springer
- Associate Editor, **Neural Processing Letters**, Springer
- Editorial Board Member, **Engineering Applications of Artificial Intelligence**, Elsevier
- Editorial Board Member, **Multimedia Systems**, Springer
- Associate Editor, **Image and Vision Computing**, Elsevier
- Past Associate Editor, **IEEE Transactions on Technology and Society** (2023 - 2024), **IEEE Systems Journal** [Impact factor: 4.4] (2023 - 2024); **Expert Systems with Applications**, Elsevier [Impact factor: 8.5] (2022 - 2023); **IEEE IT Professional** (2021 - 2023) [Impact factor: 2.6]; **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]

## SPONSORED PROJECTS

---

- [P07] **Establishment of IIT Patna Vishlesan I-Hub Foundation extension center at NIT Rourkela**, funding by *IIT Patna Vishlesan- Hub Foundation under NMICPS*, INR 10.97 Lacs, Duration: 24 months, Nov 2022 - Nov 2024, Status: Ongoing.
- [P06] **Computer Vision-based Smart Solutions for UAV Remote Sensing Applications through Semantic Segmentation**, funding by *IIT Patna Vishlesan- Hub Foundation under NMICPS*, INR 8.40 Lacs, Nov 2022 - Nov 2024, Duration: 24 months, Status: Ongoing.
- [P05] **Monocular Depth Analysis Controlled GPS Denied AGV Navigation for Seamless Tracking**, funding by *IIT Hyderabad TiHAN under NMICPS*, INR 19.01 Lacs, (Co-Investigator with Dr. Rahul Raman, IIITDM Kancheepuram), May 2022 - Nov 2023, Duration: 18 months, Status: Ongoing.
- [P04] **IEEE Computer Society Young Professional Lecture Program**, funded by IEEE Computer Society, USD 11,000.00, Feb 2022 - Dec 2022, Duration: 10 months, Status: Completed.
- [P03] **Establishment of Bioinformatics and Computational Biology Centre: Animal Bioinformatics - BIC at National Institute of Technology Rourkela**, funding by *Department of Biotechnology, Ministry of Science and Technology, Government of India*, INR 74.70 Lacs, (Co-Investigator with Dr. Mukesh Kumar Gupta and Dr. Pankaj Kumar Sa), Mar 2021 - Mar 2026, Duration: 60 months, Status: Ongoing.
- [P02] **Applications of drone vision using deep learning**, funding by *Technical Education Quality Improvement Programme (TEQIP) - III*, INR 2.00 Lacs, Jan 2020 - Sep 2020, Duration: 09 months, Status: Completed.
- [P01] **Deep learning applications for computer vision task**, funding by *NITROAA and NVIDIA Corporation*, INR 6.44 Lacs, May 2019 - May 2020, Duration: 12 months, Status: Completed.

## DOCTORAL SUPERVISION

---

- [D05] **Development of Internet of Medical Things (IoMT) Compliant Brain MRI Classification Techniques**, by Swagatika Devi, 2023 (Co-supervision with Dr. Manmath Narayan Sahoo).
- [D04] **Road and Vegetation Extraction from Aerial Images through Semantic Segmentation**, by Tanmay Kumar Behera, 2023.
- [D03] **Compressed Multimedia Forgery Detection through Blind Digital Forensics**, by Jamimamul Bakas, 2022 (Co-supervision with Dr. Ruchira Naskar).
- [D02] **Novel Periocular Recognition under Non-Cooperative Scenarios**, by Gautam Kumar, 2022.
- [D01] **Development of Ear Biometric Systems with Forensic Validation**, by Debbrota Paul Chowdhury, 2021.
- [D00] Currently **Eleven** doctoral research scholars are working on various problems of computer vision.

## Journals (94)

[corresponded articles are marked with \*]

## Just Accepted / Early Access [06]

- [J94] V. Kadha, **S. Bakshi\***, and S.K. Das, “Unravelling Digital Forgeries: A Systematic Survey on Image Manipulation Detection and Localization,” *ACM Computing Surveys*, 2025, DOI: nya. 
- [J93] A. Satpathy, M.N. Sahoo, C. Swain, P. Bellavista, M. Guizani, K. Muhammad, and **S. Bakshi**, and S.K. Ghosh, “Virtual Network Embedding: Literature Assessment, Recent Advancements, Opportunities, and Challenges,” *IEEE Communications Surveys and Tutorials*, 2025, DOI: 10.1109/COMST.2025.3531724. 
- [J92] C. Ray, **S. Bakshi\***, P.K. Sa, and G. Panda, “A resource-efficient deep learning approach to visual-based cattle geographic origin prediction,” *Mobile Networks and Applications*, 2024, DOI: 10.1007/s11036-024-02350-8. 
- [J91] S. Bhunia, **S. Bakshi\***, and I. Mukherjee, “Utilizing attention mechanism with exemplar memory for improving domain adaptive person re-identification,” *Multimedia Tools and Applications*, 2024, DOI: 10.1007/s11042-024-19270-0. 
- [J90] N.K.S. Behera, P.K. Sa, **S. Bakshi\***, and U. Bilotti, “Explainable graph-attention based person re-identification in outdoor conditions,” *Multimedia Tools and Applications*, 2023, DOI: 10.1007/s11042-023-16986-3. 
- [J89] 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. 

## 2024 [16]

- [J88] N.K.S. Behera, P.K. Sa, K. Muhammad, and **S. Bakshi\***, “Large-scale person re-identification for crowd monitoring in emergency,” *IEEE Transactions on Automation Science and Engineering* 22, 2025, pp. 4691 - 4699, DOI: 10.1109/TASE.2023.3318007. 
- [J87] C. Swain, M.N. Sahoo, A. Satpathy, **S. Bakshi**, and S.K. Ghosh, “M-DAFTO: Multi-stage deferred acceptance based fair task offloading in IoT-fog systems,” *IEEE Transactions on Services Computing* 17(6), 2024, pp. 3928 - 3941, DOI: 10.1109/TSC.2024.3436648. 
- [J86] 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* 11(4), 2024, pp. 4994 - 5004, DOI: 10.1109/TCSS.2023.3243139. 
- [J85] 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* 11(4), 2024, pp. 4707 - 4717, DOI: 10.1109/TCSS.2022.3191340. 
- [J84] S. Devi, M.N. Sahoo, and **S. Bakshi**, “Explainable reverse verification of goodness of classification of MRI images by clinical expert,” *IEEE Journal of Biomedical and Health Informatics* 28(6), 2024, pp. 3258 - 3268, DOI: 10.1109/JBHI.2023.3280184. 
- [J83] A. Satpathy, M.N. Sahoo, C. Swain, M. Bilal, **S. Bakshi**, and H. Song, “GAMap: A genetic algorithm based effective virtual data center re-embedding strategy,” *IEEE Transactions on Green Communications and Networking* 8(2), 2024, pp. 791-801, DOI: 10.1109/TGCN.2023.3345542. 
- [J82] T.K. Behera, **S. Bakshi\***, M.A. Khan, and H.M. Albarakati, “A lightweight multiscale-multiobject deep segmentation architecture for UAV-based consumer applications,” *IEEE Transactions on Consumer Electronics* 70(1), 2024, pp. 3740-3753, DOI: 10.1109/TCE.2024.3367531. 
- [J81] S. Gundreddy, Ramkumar R., R. Raman, K. Muhammad, and **S. Bakshi\***, “Perspective distortion model for pedestrian trajectory prediction for consumer applications,” *IEEE Transactions on Consumer Electronics* 70(1), 2024, pp. 947-955, DOI: 10.1109/TCE.2023.3318050. 

- G. Kumar, S. Bakshi\*, M.A. Khan, and H.M. Albarakati, "Unraveling effects of ocular features on the performance of periocular biometrics," *Journal of Information Security and Applications* 83, 2024, pp. 103772, DOI: 10.1016/j.jisa.2024.103772. [J80]
- 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* 28(3), 2024, pp. 1218-1227, DOI: 10.1109/JBHI.2022.3216270. [J79]
- I.I. Ganapathi, S.S. Ali, S. Prakash, S. Bakshi, and N. Werghe, "B3D-EAR: Binarized 3D descriptors for ear-based human recognition," *Expert Systems with Applications* 249(A), 2024, pp. 123580, DOI: 10.1016/j.eswa.2024.123580. [J78]
- 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* 69(4), 2024, pp. 914-926, DOI: 10.1109/TCE.2023.3262995. [J77]
- C. Pero, S. Bakshi\*, M. Nappi, and G. Tortora, "IoT-Driven Machine Learning for Precision Viticulture Optimization" *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 17, 2024, pp. 2437-2447, DOI: 10.1109/JSTARS.2023.3345473. [J76]
- A. Khalid, Z. Mushtaq, S. Arif, K. Zeb, M.A. Khan, and S. Bakshi, "Control schemes for quadrotor UAV: Taxonomy and survey," *ACM Computing Surveys* 56(5), 2024, pp. 1- 32, DOI: 10.1145/3617652. [J75]
- 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* 20(2), 2024, pp. 1 - 22, DOI: 10.1145/3550485. [J74]
- 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* 15, 2024, pp. 1213-1227, DOI: 10.1007/s12652-017-0480-x. [J73]

## 2023 [12]

- 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* 14, 2023, pp. 15375 - 15393, DOI: 10.1007/s12652-019-01601-x. [J72]
- G. Olague, R. Pineda, G. Ibarra-Vazquez, M. Olague, A. Martinez, S. Bakshi, J. Vargas, and I. Reducindo, "Adversarial attacks assessment of salient object detection via symbolic learning," *IEEE Transactions on Emerging Topics in Computing* 11(4), 2023, pp. 1018 - 1030, DOI: 10.1109/TETC.2023.3316549. [J71]
- V.K. Kadha, V.V.N.J.S.L. Nandikattu, S. Bakshi, and S.K. Das, "Forensic analysis of manipulation chains: A deep residual network for detecting JPEG-Manipulation-JPEG," *Forensic Science International: Digital Investigation* 47, 2023, pp. 301623, DOI: 10.1016/j.fsidi.2023.301623. [J70]
- 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* 15(2), 2023, pp. 1 - 25, DOI: 10.1145/3579029. [J69]
- 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* 95, 2023, pp. 197 - 209, DOI: 10.1007/s11265-022-01777-0. [J68]
- 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* 19(5), 2023, pp. 6408 - 6417, DOI: 10.1109/TII.2022.3196343. [J67]
- K.K. Jena, S.K. Bhoi, S. Mohapatra, and S. Bakshi, "A hybrid deep learning approach for classification of music genres using wavelet and spectrogram analysis," *Neural Computing and Applications* 35, 2023, pp. 11223 - 11248, DOI: 10.1007/s00521-023-08294-6. [J66]
- 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. [J65]

- [J64] 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. 
- [J63] 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. 
- [J62] 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. 
- [J61] 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* 14, 2023, pp. 3781 - 3791, DOI: 10.1007/s12652-021-03511-3. 

## 2022 [7]

- [J60] 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. 
- [J59] 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. 
- [J58] 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. 
- [J57] 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. 
- [J56] 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. 
- [J55] 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. 
- [J54] 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. 

## 2021 [8]

- [J53] 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. 
- [J52] 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. 
- [J51] 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. 
- [J50] 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. 
- [J48] 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. 
- [J47] 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. 
- [J46] 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. 

## 2020 [10]

- [J45] 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. 
- [J44] 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. 
- [J43] 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. 
- [J42] 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. 
- [J41] 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. 
- [J40] 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. 
- [J39] 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. 
- [J38] 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. 
- [J37] 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. 
- [J36] 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. 

## 2019 [15]

- [J35] 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. 

## 2018 [11]

- 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. 
- B. Sahu, P.K. Sa, S. Bakshi\*, and A.K. Sangaiah, "Reducing dense local feature key-points for faster iris recognition," *Computers & Electrical Engineering* 70, 2018, pp. 939 - 949, DOI: 10.1016/j.compeleceng.2017.12.048. 
- 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. 
- D.P. Chowdhury, **S. Bakshi\***, G. Guo, and P.K. Sa, "On applicability of tunable filter bank based feature for ear biometrics: A study from constrained to unconstrained," *Journal of Medical Systems* 42(1), 2018, pp. 11, DOI: 10.1007/s10916-017-0855-8. 
- 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. 

#### 2017 [3]

- 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. 

#### 2016 [2]

- 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. 

#### 2015 [1]

- 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. 

#### 2013 [3]

- S. Bakshi\***, P.K. Sa, and B. Majhi, "Optimized periocular template selection for human recognition," *BioMed Research International*, 2013, DOI: 10.1155/2013/481431. 

- S. Bakshi\*, H. Mehrotra, and B. Majhi, "Postmatch pruning of SIFT pairs for iris recognition," [J02] *International Journal of Biometrics (IJBM)*, Vol. 5, No. 2, 2013, pp. 160 - 180, DOI: 10.1504/IJBM.2013.052965.
- R. Raman, S. Bakshi, and P.K. Sa, "Multi-camera localisation: A review," [J01] *Journal of Machine Intelligence and Sensory Signal Processing* 1(1), 2013, pp. 91 - 109, DOI: 10.1504/IJMISP.2013.052876.

## Scientific Reports / Magazines (7)

- S. Devi, S. Bakshi, and M.N. Sahoo, "NITR-DHH: a T2-weighted brain magnetic [SR07] resonance image dataset," *ACM SIGBioinformatics Record* 9(1), 2020, pp. 1 - 1, DOI: 10.1145/3380874.3380875.
- R. Raman, P.K. Sa, B. Majhi, and S. Bakshi, "Acquisition and corpus description of [SR06] NITR conscious walk dataset," *ACM SIGBioinformatics Record* 7 (1), 2017, pp. 1, DOI: 10.1145/3056351.3056352.
- R. Raman, P.K. Sa, B. Majhi, and S. Bakshi, "Acquisition and corpus description of a [SR05] 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 [SR04] Feature Extraction for Human Recognition," *ACM SIGBioinformatics Record* 6(1), 2016, DOI: 10.1145/2921555.2921556.
- S. Bakshi, R. Raman, and P.K. Sa, "NITRLipVi: A Constrained Lip Database Captured in Visible [SR03] Spectrum," *ACM SIGBioinformatics Record* 6(1), 2016, DOI: 10.1145/2921555.2921557.
- S. Bakshi, "Periocular Localization and Feature Extraction for Human Recognition," [SR02] *SigMultimedia Records* 7(2), 2015, pp. 17 - 18, DOI: 10.1145/2835398.2835410.
- S. Bakshi, "Report from the 3rd International Conference on Advanced Computing, [SR01] Networking, and Informatics," *ACM SigMultimedia Records* 7(3).

## Selected Conferences (07)

- R. Pires, D.F. Santos, R.V. Calheiros, J. Papa, I.H. Lee, S. Bakshi, and K. Muhammad, "A [C07] Convolutional Recurrent Mixer Network For Radar Meteorological Image Super-Resolution" *50th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2025*, DOI: 10.1109/ICASSP49660.2025.10887893.
- M. Xiong, J. Liang, Y. Guo, I.H. Lee, S. Bakshi, and K. Muhammad, "PDET: Progressive diversity [C06] expansion transformer for cross-modality visible-infrared person re-identification," *27th International Conference on Pattern Recognition (ICPR) 2024*, DOI: 10.1007/978-3-031-78341-8\_28.
- M.A. Kiasari, K. Muhammad, S. Bakshi, and I.H. Lee, "Hybrid transformer-CNN-based [C05] attention in video turbulence mitigation (HATM)," *27th International Conference on Pattern Recognition (ICPR) 2024*, DOI: 10.1007/978-3-031-78305-0\_16.
- Z. Luo, W. Fu, S. Liu, S. Anwar, M. Saqib, S. Bakshi, and K. Muhammad, "Cefdet: Cognitive [C04] effectiveness network based on fuzzy inference for action detection," *32nd ACM Multimedia Conference (ACM MM) 2024*, DOI: 10.1145/3664647.3681226.
- M.T. Islam, N. Rahim, S. Anwar, M. Saqib, S. Bakshi, and K. Muhammad, "HazeSpace2M: A [C03] dataset for haze aware single image dehazing," *32nd ACM Multimedia Conference (ACM MM) 2024*, DOI: 10.1145/3664647.3681382.
- R.P. Padhy, S. Ahmad, S. Verma, S. Bakshi, and P.K. Sa, "Localization of unmanned aerial [C02] 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 [C01] power-aware mobile cloud terminals," *11th International Conference on Communication Systems and Networks (COMSNET)*, 2018, DOI: 10.1109/COMSNETS.2019.8711477.

- [GE12] 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*, 2024, DOI: 10.1145/3678473.
- [GE11] **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," *IEEE Computer*, 2023.
- [GE10] **S. Bakshi**, M. Nappi, S. Ricciardi, and R. Guest, "Special Issue entitled 25th ICPR - Computer Vision, Robotics and Intelligent Systems," *Machine Vision and Applications* 33, 2022, pp. 60, DOI: 10.1007/s00138-022-01309-7.
- [GE09] 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.
- [GE08] 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.
- [GE07] 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.
- [GE06] 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.
- [GE05] 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. 1B01 - 1B05, DOI: 10.1364/AO.396153.
- [GE04] E. Cabal-Yepez, 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.
- [GE03] 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.
- [GE02] 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.
- [GE01] 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 ORGANIZED

- P.K. Jain, **S. Bakshi**, *Five-Day Short-Term Course on Deep Learning Applications for Smart Cities*, Organised by Department of Computer Science & Engineering, National Institute of Technology Rourkela, sponsored by IEEE Kolkata Section Young Professionals Affinity Group, HDFC Bank, and TIH Vishlesan I-Hub Foundation IIT Patna, 11 - 15 September 2023.
- **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, [\[Link\]](#).
- **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

---

- **Panel Discussion** on “The art of research publishing: A tour for early career researchers” on 19 Apr 2024 at *Panel session with IEEE Transaction on Education (ToE) and IEEE transaction on Learning Technologies (TLT) Editors in Chief and Associate Editors in IEEE Education Week* during 14 - 20 Apr 2024.
- **IEEE Systems Council Distinguished Lecture** on “The Rise and Rise of Biometric Systems” on 22 Dec 2023 at *Short Term Course on Artificial Intelligence and its Application to Smart Systems* organized by Department of Computer Science & Engineering, National Institute of Technology Delhi, India during 20 - 24 Dec 2023.
- **IEEE Systems Council Distinguished Lecture** on “The Rise and Rise of Biometric Systems” on 01 Nov 2023 at *Department of Computer Science & Engineering, IIITDM Kancheepuram* organized by IIITDM Kancheepuram IEEE Student Branch, India.
- **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;



## DECLARATIONS

---

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

**Date:** April 2, 2025

**Place:** Rourkela, Odisha, INDIA

Dr. Sambit Bakshi