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URL: http:www.kuvempu.ac.in/department/mca.php

Education

M.Tech. Computer Science & Technology, University of Mysore.

Ph.D. Computer Science & Technology, Gulbarga University.

Employment

2001 - 2003

Lecturer, Department of MCA & Computer Science, Kuvempu University.

2003 - 2017

Assistant Professor, Department of MCA & Computer Science, Kuvempu University.

2017 -2020

Associate Professor, Department of MCA & Computer Science, Kuvempu University.

1 2020 - Present

Professor, Department of MCA & Computer Science, Kuvempu University.

Teaching Experience

Twenty four Years of Teaching Experience at Post-Graduate Level

Academic Programs Taught: Master of Computer Applications (MCA), M.Sc. Computer Science, M.Tech. Industrial Mathematics & Computer Applications.

Courses Taught: Machine Learning, Deep Learning, Artificial Intelligence, Digital Image Processing, Software Engineering, Computer Vision and Pattern Recognition, Object Oriented Analysis and Design (OOAD), C++, Analysis and design of Algorithms, Computer Graphics.

Research Supervision

Titles of Ph.D. thesis awarded under my supervision:

- 1. PraveenKumar P U: 3D Reconstruction and Feature extraction technique for Underwater Images (2012)
- 2. **Joyothi K:** 3D Face Reconstruction and Recognition using Stereo Images based on Computer Vision Techniques (2014)
- 3. Nagaraj S: A Study on Local Binary Patterns Descriptor and Its Applications in Computer Vision (2015)
- 4. **Too Kipyego Boaz :** A Novel Approach to Grading and Sorting of Fruits using Evolutionary Computational Techniques(2016)
- 5. Mohana S H: Novel Approaches for Extraction of Text Information from Images(2015)
- 6. Arun Kumar H D: Video Traffic Analysis for Abnormal Events Detection and Classification(2017)
- 7. Thontadari C: Word Spotting in Offline Handwritten Documents(2018)
- 8. Yogish Naik G R: An Appearance based Face Recognition Techniques using Fuzzy-Symbolic Approach(2018).
- 9. Sneha Kugunavar: Development of Content Based Image Retrieval Techniques for Medical Images, (2020).
- 10. Shrinivasa S R: A Novel Approach for Scene Image Classification (2024).
- 11. Prasantha M C:Analysis of DNA Sequences using Machine Learning Approaches (2024)
- 12. Vidyasagar S D: Vision based Lane Departure Warning Approach for Advanced Driver Assistance (2025).
- 13. Divya Rani R: Computer Vision based Techniques for Human Action Recognition (2025)

The Five Ph.D. candidates have registered and pursuing Ph.D. Program.

Supervising M.Sc. Graduates for research oriented projects.

Sponsored Research Projects

Principal Investigator- Prabhakar C.J

- Building 3D Models of Underwater Objects, Naval Research Board (NRB), DRDO, New Delhi, India, 2008, INR 30.00 lakhs (Completed).
- Representation of Facial Features Using Symbolic Data with Application to Face Recognition, All India Council for Technical Education (AICTE), New Delhi, India, 2008, INR 6.60 lakhs (Completed).
- A new symbolic Factorial Discriminant Analysis algorithm for Face Recognition under variable lighting, University Grants Commission (UGC), New Delhi, India, 2007, INR 0.38 lakhs (Completed).

Publications

Refereed International Journals

- 1. Combining Handcrafted Spatio-Temporal and Deep Spatial Features for Effective Human Action Recognition. Human-Centric Intelligent Systems, Vol. 5, pp. 123–150, Springer Nature, 2025.
- 2. Revolutionary Enhanced Lane Departure Detection Techniques for Autonomous Vehicle Safety using ADAS. International Journal of Electronics and Communication Engineering, Vol. 11, No. 9, pp. 22-35, 2024.
- 3. Vision Transformer-based Model for Human Action Recognition in Still Images. Journal of Computational Analysis and Applications (JoCAAA), Vol. 33, No. 08, pp. 522-531, 2024.
- 4. Rectification of Curved Scene Text Based on B-Spline Curve Fitting. Indian Journal of Science and Technology, Vol. 17, Issue 32, pp. 3305-3317, 2024.
- 5. Lane Departure Analysis: Bibliometric Methods and Trends., International Research Journal of Multidisciplinary Scope (IRJMS), 2024; 5(1): 593-606

6. Correction and Recognition of Oriented Scene Text Using Convolutional Neural Networks. International Journal of Engineering Research & Technology (IJERT), Vol. 05, Issue 05, pp. 7-14, 2023.

- 7. Combining Handcrafted and Deep Features for Scene Image Classification. International Journal of Data Acquisition and Processing., Vol. 38 (3)., pp 2158-2173., ISSN: 1004-9037., https://sjcjycl.cn/ DOI: 10.5281/zen-odo.98549488.,2023.
- 8. Segmentation-Based Scene Text Recognition on Low Quality Natural Scene Images., International Journal of Engineering Inventions., Volume 12, Issue 5.,e-ISSN: 2278-7461,.,PP: 17-23.,2023.
- 9. Scene image classification based on visual words concatenation of local and global features.International Journal of Multimedia Tools Appl 81, 1237–1256 (2022).Springer Nature. https://doi.org/10.1007/s11042-021-11354-5.
- 10. Convolutional neural networks for the diagnosis and prognosis of the coronavirus disease pandemic.International Journal of Visual Computing for Industry, Biomedicine, and Art, Springer Nature.2021.
- 11. Content-Based Medical Image Retrieval Using Delaunay Triangulation Segmentation Technique. Journal of Information Technology Research (JITR), 14(2), 48-66. http://doi.org/10.4018/JITR.2021040103.
- 12. "Fuzzy Face Recognition Based on Skin Texture Fusion Model".International Journal of Engineering and Advanced Technology (IJEAT)ISSN: 2249 8958, Volume-8 Issue-6, August 2019.
- 13. "Symbolic representation of edge let features for face Recognition: a novel approach"., International Journal of Scientific Research in Computer Science Applications and Management Studies., ISSN 2319 1953., (2018).
- 14. Segmentation free Word Spotting for Handwritten Documents Using Bag of Visual Words Based on Co-HOG Features, International Journal of Information Retrieval Research (IJIRR).
- 15. Detection and Tracking of Lane Crossing Vehicle in Traffic Video for Abnormality Analysis, International Journal of Computer Science and Information Technology(IJCSIT), (Communicated).
- 16. "Vehicle Abnormality Detection and Classification Using Model Based Tracking ",International Journal of Advanced Research in Computer Science (IJARCS),vol 8, issue 4, 2017.
- 17. "Segmentation Based Word Spotting Method for Handwritten Documents", International Journals of Advanced Research in Computer Science and Software Engineering (IJARCSSE), vol. 7, no. 6, pages 34-40, 2017.
- 18. Bag of Visual Words for Word Spotting in Handwritten Documents Based on Curvature Features, International Journal of Computer Science & Information Technology (IJCSIT), vol. 9, no. 4, pages 77-92, 2017.
- 19. "Model based Technique for vehicle tracking in Traffic video using spatial local features", Machine Learning and Applications: An International Journal (MLAIJ), Volume 3, issue 2, 2016.
- 20. "Scale space Co-occurrence HOG features for word spotting in handwritten document image", International journal of computer vision and image processing(IJCVIP), Volume 6, issue 2,pp 71-86 2016.
- 21. "Moving vehicle detection in traffic video using modified SXCS-LBP texture descriptor", International journal of computer vision and image processing(IJCVIP), Volume 5, issue 2,pp 14-32 2015.
- 22. "Extraction of Scene Text Information from Video", International Journal of Image, Graphics and Signal Processing (IJIGSP), Volume 1, pp 15-26,2016.
- 23. "Automatic Detection of Surface Defects on Citrus Fruit based on Computer Vision Technique", International Journal of Image, Graphics and Signal Processing (IJIGSP), Volume 7, issue 9, pp. 11-19, 2015.
- 24. "Localization of Overlaid Text based on Noise Inconsistencies", Advanced Computational Intelligence: An International Journal (ACII), Volume 2, issue 2, pp. 1-14, 2015.
- 25. "Segmentation and Alignment of Multi-Oriented and Curved Text Lines from Document Images, International Journal of Machine Intelligence (Bioinfo Publications), Volume 6, issue 1, pp. 426-434, 2015.
- 26. "Low-Level Features for Image Retrieval based on Extraction of Directional Binary Patterns and its Oriented Gradients Histogram", International Journal of Computer Applications, Volume 2, issue 1, pp. 13-28, 2015.

27. "Fusion of Intensity Image and Stereo Depth Map for Face Recognition based On Curvelet Transform", International Journal of Intelligence Systems, vol. 3, Issue.1, pp 41-48, March 2014.

- 28. "Multi modal Face Recognition Using Block Based Curvelet Features", International Journal of Computer Graphics and Animation (IJCGA) Vol.4, No.2,pp 21-37, April 2014.
- 29. "Parallax Effect Free Mosaicing of Underwater Video Sequence Based on Texture Features", Signal and Image Processing: An International Journal (SIPIJ), volume 5, issue 5, pp. 13- 25, 2014.
- 30. "A Novel Technique for Grading of Dates using Shape and Texture Features", Machine Learning and Applications: An International Journal (MLAIJ), Volume 1, issue 2, pp. 15-29, 2014.
- 31. "Stem-Calyx Recognition of an Apple using Shape Descriptors", Signal and Image Processing: An International Journal (SIPIJ), Volume 5, issue 6, pp. 17-31, 2014.
- 32. "Face Recognition based on Texture Analysis using Robust Local Binary Pattern", Journal of Machine Learning Technologies. ISSN: 2229-3981 and ISSN: 2229-399X, Vol. 3, Issue 1,pp 97-102, December 2013.
- 33. "Feature Tracking of Objects in Underwater Video Sequences", ACEEE International Journal on Information Technology, vol. 02, no. 01, pp 42-46, March 2012.
- 34. "3D Surface Reconstruction of Underwater Objects", International Journal of Computer Applications, pp 31-37, August 2012.
- 35. "A Self Adaptability based Stereo Correspondence of Face Images using Wavelets", International Journal of Computer Applications, Vol 1, pp 17-20, August 2012.
- 36. "An Image Based Technique for Enhancement of Underwater Images", International Journal of Machine Intelligence, vol. 3, issue 4, pp. 217-224, 2011.
- 37. "Context Aware Rapid Application Development Simulator Toolkit for Ubiquitous Computing", International Journal on Computer Engineering and Information Technology, ISSN 0974-2034, pp.1-7, Volume 22(1), December 2010.
- 38. "Symbolic Kernel Fisher Discriminant Method with a New RBF Kernel Function for Face Recognition", International Journal of Machine Vision and Graphics, Vol. 14, No. 4, pp. 383-404, Poland, 2009.
- 39. "Symbolic Factorial Discriminant Analysis for illumination Invariant Face Recognition", International Journal of Pattern Recognition and Artificial Intelligence, World Scientific Publisher, Vol. 22, No. 3, pp. 371-387, 2008.
- 40. "Extraction and Recognition of non Linear Interval type features using Symbolic KDA Algorithm with application to Face Recognition", Research Letters in Signal Processing, Hindawi Publishing Corporation, pp. 1-5, Volume 2008, Article ID 486247.
- 41. "Acquiring Non Linear Subspace for Face Recognition using Symbolic Kernel PCA Method", Journal of Symbolic Data Analysis Vol. 4, pp. 15-26, 2006.

Refereed International/National Conference Proceedings

- 1. "ViTHAR: Vision Transformers for Human Action Recognition in Videos", International Conference on Multimedia Processing, Communications and Information Technology MPCIT 2024, Shivamogga, India, 2024.
- "Scalable and Efficient SSD-Based Lane Detection Model for Autonomous Vehicle Systems", International Conference on Multimedia Processing, Communications and Information Technology - MPCIT 2024, Shivamogga, India, 2024.
- 3. "Human Action Recognition in Videos Using Inception-v4 Deep Learning Model", International Conference on Advances in Information Technology (ICAIT), Chikkamagaluru, India, 2024.
- 4. "Comparative Study of Vision-based Deep Learning Techniques for Human Action Recognition in Videos", International Conference on Applied Artificial Intelligence (AAI), July 2 4, 2024 at the Shoolini University, Solan, Himachal Pradesh, India.

5. "Correction and Recognition of Oriented Scene Text using Constitutional Neural Network., international conference on Engineering innovation-ICEI-2023.,2.June.2023.

- 6. "A Vision Based Lane Detection Approach Using Vertical Lane Finder Method", International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (IEEE).14-15 October 2022
- 7. "Human Action Recongnition by Concatenation of Spatio-Temporal 3D SIFTand Co-HOG Descriptor Using Bag of Visual Words"., International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (IEEE).14-15 October 2022
- 8. "Scene image classification using SIFT and co-HOG descriptor"., International Conference on Digital Information Security and Computing Technologies., ICDISCT 2022 Volume 1., ISBN:978-93-5620-321-1.08, April, 2022.
- 9. "Curvelet based CRLBP Texture Descriptor for Facial Expression Recognition", International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT 2015), Bapuji Institute of Engineering and Technology (BIET), Davangere, Karnataka, October 2015.
- 10. "Curvelet based Multi-resolution Analysis of Face Images for Recognition using Robust Local Binary Pattern Descriptor", Proceeding of International Conference on Recent Trends in Signal Processing, Image Processing and VLSI (ICrtSIV), pp 331-338, February 2014.
- 11. "Shearlet Based Multiresolution Analysis of 2D and 3D Face Images for Multimodal Recognition", Second International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA-14), published in Elsevier, Article No. 68, NMIT, Bangalore, 2014.
- 12. "Extraction of Texture based Features of Underwater Images using RLBP Descriptor", Third International Conference on Frontiers in Intelligent Computing Theory and Applications (FICTA-14), Springer AISC-328, pp. 263-272, Bhubaneswar Engineering College, Bhubaneswar, Odisha,India.
- 13. "Extraction of Shape Features Using Multifractal Dimension for Recognition of Stem-Calyx of an Apple", Third International Conference on Frontiers in Intelligent Computing Theory and Applications (FICTA-14), Springer AISC-328, pp. 357-365, Bhubaneswar Engineering College, Bhubaneswar, Odisha,India.
- 14. "Extraction of Curvelet based RLBP features for Representation of Facial Expression", International Conference on Contemporary Computing and Informatics (IC₃I- 14), IEEE Xplore, pp. 845- 850. J C College of Engineering, Mysore, Karnataka, India.
- 15. "Quality Assessment of Stereo Images using Reduced Reference Based on Saliency Region", International Conference on Contemporary Computing and Informatics (IC3I- 14), IEEE Xplore, pp. 503- 508. J C College of Engineering, Mysore, Karnataka, India.
- 16. "Localization of Curved Scene Text in Video based on Fuzzy Cur ve Tracing of Extracted Planar Surface", Ninth Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP 2014), ACM, pp. 1-17, Indian Institute of Science (IISc), Bangalore, Karnataka, India.
- 17. "Detection and Localization of Kannada Caption in Video", Proceedings of National Conference on Advances in Signal Processing, Communications and Networking (NCASPCN-13), ISBN:978-81-927765-0-7, pp. 1-7, August 2013, SSIT, Tumkur, Karnataka.
- 18. "A Novel Approach for Detection and Localization of Caption in Video based on Pixel Pairs", Proceedings of National Conference on Challenges in Research and Technologies in Coming Decades(CRT-2013), pp. 1-6, IET Publication, September, 2013, SDM Institute of Technology, Ujire, Karnataka.
- 19. "Complete Local Binary Pattern for Representation of Facial Expression Based On Curvelet Transform", Proceedings of International Conference on Multimedia Processing, Communication and Information Technology (MPCIT-2013),pp. 48-56, 2013, J.N.N. College of Engineering, Shimoga, Karnataka.
- 20. "Text Block Detection and Segmentation for Mobile Robot Vision System Applications", Proceedings of International Conference on Multimedia Processing, Communication and Information Technology (MPCIT-2013),pp. 251-256, 2013, J.N.N. College of Engineering, Shimoga, Karnataka.
- 21. "Surface Defect Detection and Grading of Apples", Proceedings of International Conference on Multimedia Processing, Communication and Information Technology (MPCIT-2013),pp. 57-64, 2013, J.N.N. College of Engineering, Shimoga, Karnataka.

22. "Multimodal Face Recognition from Depth and Intensity Curvelet Features", Proceedings of International Conference on Multimedia Processing, Communication and Information Technology (MPCIT-2013), pp. 125-130, 2013, J.N.N. College of Engineering, Shimoga, Karnataka.

- 23. "Stereo Correspondence for Underwater Images Using Adaptive Weight-Based Cross-Correlation", Proceedings of Second International Conference on Advances in Computing, Communications and Informatics (ICACCI 2013), IEEE Xplore, held at J C College of Engineering, Mysore on 22-25, August 2013, pages 348-353,2013.
- 24. "LBP-SURF Descriptor with Color Invariant and Texture Based Features for Underwater Images", Proceedings of the Eighth Indian Conference on Vision, Graphics and Image Processing (ICVGIP 2012), ACM, Article No.- 23, held at IIT Bombay on 16-19 December, 2012.
- 25. "A wavelet-based multiresolution approach to stereo matching of face images", Proceedings of IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), held at Ramanathapuram, IEEE Xplore, Pages 316 320, 23-25 Aug. 2012.
- 26. "Quantitative Evaluation of Feature Trackers for Underwater Video Sequences", Proceedings of International Conference on Signal, Image and Video Processing (ICSIVP-2012), held at IIT Patna, pages 186-191, January 2012.
- 27. "Restoration of Degraded Underwater Images", National Conference on Recent Advances on Soft Computing on Knowledge discovery(SCKD2k12), Tirupathi, January 19-21, 2012
- 28. "Performance Evaluation of Image Denoising Techniques based on Adaptive Thresholding of Wavelet Coefficients", Proceedings of National Conference on Signal and Image Processing (NCSIP 2012), pp.52-56, Excel Publishers, February 9-10, 2012, Gandhigram Rural Institute, Dindigul District, Tamilnadu.
- 29. "Defect Detection in Apples using Grow-Cut and Multi-Threshold Based Segmentation", Proceedings of the National Conference on Computer Networks and Soft Computing (NCNS-12), pp. 208-212, vol. 1, issue 1, November 2012, SSIT, Tumkur.
- 30. "Strawberry Classification based on Size Feature", Proceedings of National Conference on Advanced Computing and Computations (NCACC-12), pp. 251-256, April 2012, Kuvempu University, Karnataka.
- 31. "Iris Segmentation Using Contour Method", Proceedings of National Conference on Advanced Computing and Computations (NCACC-12), pp. 241-245, April 2012, Kuvempu University, Karnataka.
- 32. "Adaptive Support Weight Based Stereo Correspondence algorithm for Face Images", International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT-2012), Springer LNEE, Vol. 248, pp 479-485, 2012.
- 33. "3D Sparse Reconstruction of Face Images Based on Stereo Rectification", Proceedings of International Conference on Emerging Trends in Engineering-May-2011,pp. 185-189, NITTE College of Engneering, NITTE.
- 34. "Underwater image denoising using adaptive wavelet subband thresholding", Proceedings of International Conference on Signal and Image Processing (ICSIP-2010), 322 327, IEEE Xplore, 15-17 Dec. 2010, Chennai, India.
- 35. "Fractal Compression" Proceedings of National Conference on Advanced Computing and Wireless Networks, 62-65, April 2010, HKBK College of Engineering, Bangalore.
- 36. "3D Surface Reconstruction of Underwater Objects", Abstract Proceedings of Seventh Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP-2010), December 12-15, 2010, Chennai, India.
- 37. "Restoration of Degraded Underwater Images", Abstract Proceedings of International Conference on Mathematical Computing and Management, 17-19 June, 2010, Kerala, India.
- 38. "A New Kernel function to extract Non Linear Interval type Features Using Symbolic Kernel Fisher Discriminant Method with Application to Face Recognition" International Symposium on Biometrics, ISBAST -2008, pp. 1-7, Karachi, IEEE Computer Society, 2008.

39. "Symbolic FDA method for Face Recognition under variable lighting", International Conference on Visual Information Engineering-2006, September, 26-28, Bangalore, IEEE Xplore, 2006.

- 40. "Face Recognition using Symbolic KDA in the Framework of Symbolic Data Analysis", International Conference on Advance Pattern Recognition-2006 (ICAPR 2006), Indian Statistical Institute, Kolkata. pp. 56-61, World Scientific, 2006.
- 41. "Independent Component Analysis of symbolic data for face Recognition", International Conference on Intelligent Systems and Control-2006, pp. 9-11, Karpagam college of engineering, Coimbatore, 2006.
- 42. "Face Recognition Technique using Two Dimensional Symbolic Discriminant Analysis Algorithm", Proceedings of the Third Workshop on Computer Vision, Graphics and Image Processing (WCVGIP-2006), IIIT Hyderabad.
- 43. "Face Recognition Technique using Symbolic kernel PCA Method", Proceedings of the International Conference on Cognition and Recognition (COGREC-05), Mysore, pp. 801-805, Allied Publishers, 2005.
- 44. "Recognition of Expression based Faces in Fourier Space", Proceedings of the National Conference on GAMCA-2004, Kuvempu University.
- 45. "General Packet Radio Service GPRS: Architecture, Protocols, Routing and Services", Proceedings of the MobiComNet-2004, 101-107, Vellore Institute of Technology, Vellore.

Book Chapters in Edited Books

- 1. "Moving Vehicle Detection in Traffic Video Using Modified SXCS-LBP Texture Descriptor", Book entitled Managerial Issues in Digital Transformation of Global Modern Corporations, IGI Global Publisher, pages 257-273, 2021.
- "Segmentation-Free Word Spotting in Handwritten Documents Using Scale Space Co-HoG Feature Descriptors", Book entitled Applications of Advanced Machine Intelligence in Computer Vision and Object Recognition: Emerging Research and Opportunities, IGI Global Publisher, pages 219-247, 2020.
- 3. "Comparative Study of Stereo Correspondence Techniques for Underwater Images", Book entitled Applications of Artificial Intelligence in Electrical Engineering, IGI Global Publisher, pages 230-261, 2020.
- 4. "Bag of Visual Words Based on Co-HOG Features for Word Spotting in Handwritten Documents", Book entitled Advencements in Computer Vision and Image Processing (ACVIP), IGI Global Publisher,pages 162-189,2018.
- 5. "An overview of text information extraction form images", edited book entitled "Handbook of Research on Advanced Image Processing Techniques and Applications", Published by IGI Global Inc., USA. Editor(s) Dr. Suresh Kumar Nagarajan, School of Computer Engineering, VIT University, Vellore, Tamilnadu, India, pages 32-60, 2016.
- 6. "Computer Vision based techniques for surface defect detection of apples", edited book entitled "Recent Advances in Computer Vision and Image Processing: Methodologies and Applications", Published by IGI Global Inc., USA. Editor(s) Dr. Rajeev Srivastava, Dr. S. K. Singh and Dr. K. K. Shukla, Institute of Technology, Banaras Hindu University (ITBHU), Varanasi, UP, India, pages 111-121, 2013.
- 7. "Image Enhancement and Restoration Methods for Underwater Images", edited book entitled "Recent Advances in Computer Vision and Image Processing: Methodologies and Applications", to be Published by IGI Global Inc., USA. Editor(s) Dr. Rajeev Srivastava, Dr. S. K. Singh and Dr. K. K. Shukla, Institute of Technology, Banaras Hindu University (ITBHU), Varanasi, UP, India, pages 93-110,2013.
- 8. "3D Reconstruction of Underwater Natural Scenes and Objects using Stereo Vision" edited book entitled "3D Surface Geometry and Reconstruction: Developing Concepts and Applications" published by IGI Global Inc., USA. Editor Umesh C. Pati, NIT Rourkela, pages 114 136, 2012.
- 9. "Analysis of Face Space for Recognition using Interval-Valued Subspace Technique", edited book entitled "Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies", pages 108-126, Editor: Vijay Mago and Nitin Bhatia, IGI Global Inc., USA,2012.

10. "Color Invariant Feature Detection and Matching in Underwater Stereo Images", Signal and Image Processing, Springer LNEE, Editors: Mohan S, S Suresh Kumar, pages 609-619, 2012.

- 11. "Stereo Correspondence for Underwater Video Sequence using Graph Cuts", Frontiers of Intelligent Computing: Theory and Applications, Springer AISC 199, Editors: Suresh Chandra Satapathy, Siba K. Udgata, Shabendra Narayan Biswal,pages 683-690, 2012.
- 12. "Segment-based Stereo Correspondence of Face Images Using Wavelets", Signal and Image Processing, Springer LNEE, Editors: Mohan S, S Suresh Kumar, pp. 79-89, 2012.
- 13. "Adaptive Support Weight Based Stereo Correspondence Algorithm for Face Images", Emerging Research in Electronics, Computer Science and Technology, Springer LNCS, pp. 479-485,2012.
- 14. "Face Recognition using Symbolic KPCA Plus Symbolic LDA in the framework of Symbolic Data Analysis: Symbolic Kernel Fisher Discriminant Method", Advanced Concepts for Intelligent Vision Systems, Springer LNCS, Editors: Jacques Blanc-Talon, Salah Bourennane, Wilfried Philips, Dan Popescu, Paul Scheunders, pp. 982 993, 2008.
- 15. "Modeling Uncertainty in Representation of Facial Features for Face Recognition", Face Recognition Book Chapter, edited by: Kresimir Delac and Mislav Grgic, ISBN 978-3-902613-03-5, pp.183-218, I Tech Education and Publishing, Vienna, Austria, June 2007.
- 16. "Face Recognition Technique using Symbolic LDA Method", Computer Vision, Graphics and Image Processing, Springer LNCS 4338, Editors: Prem K. Kalra, Shmuel Peleg, pp. 641-649,2006.
- 17. "Face Recognition Technique using Symbolic PCA Method", Computer Vision, Graphics and Image Processing, Springer LNCS, Editors: Sankar K. Pal, Sanghamitra Bandyopadhyay, Sambhunath Biswas, pp. 266-271, 2005.

Workshops, Seminars & Training Courses

Three days workshop on "Machine Learning and Its Applications" organized by Department of Computer Science and MCA, Kuvempu University, during 21st March to 23rd March 2024. Faculty Training programme on "Artificial Intelligence Course," organized by Kuvempu University, on 21st Feb 2023.

Two-day Workshop on "Machine Learning and Deployable Artificial Intelligence" organized by the Department of Computer Science and MCA, Kuvempu University, during 29th March to 30th March 2022.

One week workshop on "Mathematics of Machine Learning and Data Sciences with Applications organized by Department of P.G. Studies and Research in Computer Science, Kuvempu University, 18th March to 24th March 2021.

One day National level Seminar on "Emerging Trends in Electronics (NSETE-2016)" organized by Department of P.G. Studies and Research in Electronics, Kuvempu University, 15th March 2016.

One Week National level Workshop on "Advanced Technologies in Computer Science" organized by Department of P.G. Studies and Research in Computer Science, Kuvempu University, 22nd -27th February 2016.

Three days National level Workshop on "Pattern Classifiers" held at Department of PG.. Studies and Research in Computer Science, Kuvempu University, 26th -28th March 2015.

Second NKN Annual Workshop on "Enhancing Research Collaborations Through NKN" Three days workshop sponsored by NKN, Government of India, held at IISc, Bangalore, 17th -19th October 2013.

One-day seminar on Information Science and Technology, conducted by Karnataka State Higher Education Council, Bangalore, 6th September 2011.

Two day inter-university subject based conference on Mathematics / Computer Science, conducted by Rani Channamma University, Belagavi, sponsored by Vision Group on Science and Technology, Bangalore, 21st May 2011 to 22nd May 2011.

Two days workshop on Vision Group of Mathematics and Computer Science sponsored by Department of Science and Technology Government of Karnataka, Kuvempu University, 19th March to 20th March 2010.

UGC Sponsored Refresher Course in ICT organized by Academic Staff College, Karnatak University, Dharwad, 17th Aug 2010 to 06th Sep 2010.

Two days workshop on program content development of M.Sc. Computer Science, KSOU, Mysore, 3rd Dec 2009 to 4th Dec 2009.

Workshop -II, organized by Pravara Rural Engineering College, Loni, Maharashtra, 11th Dec 2008 to 14th Dec 2008.

UGC Sponsored Orientation Program organized by Academic Staff College, Bangalore University, Bangalore, 22nd Jan 2007 to 21st Feb 2007.

UGC sponsored training programme in Computer Hardware and Networking, organized by Kuvempu University, 10th Oct 2006 to 12th Oct 2006.

Three Days Training Programme on Campus Network Management by M/s C.M.C. Limited, Bangalore, at Jnana Sahyadri, Kuvempu University, 3rd Mar 2005 to 5th March 2005.

AICTE Sponsored Staff Development Programme, organized by Dept. of Computer Science and Engineering, P.E.S.College of Engineering, Mandya, Karnataka, 12th July 2004 to 24th July 2004.

UNESCO and NBHM Sponsored National Instructional Workshop on Industrial Mathematics, organized by The Maharaja Sayajirao University of Baroda, Vadodara, 1st Dec, 2003 to 7th Dec 2003.

Research Papers Presented & Participated in Conferences

Ninth Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP - 2014), December 2014, ACM, Indian Institute of Science (IISc), Bangalore, Karnataka, India.

International Conference on Cognition and Recognition (ICCR-2011), December 9 - 10, 2011, University of Mysore, Mysore, 2011.

International Joint Colloquium on Emerging Technologies in Computer Electrical and Mechanical - CEM 2011, December 27 - 28, 2011, JNNCE, Shimoga, 2011.

National Seminar on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), February 15-16,2010, Bidar, Karnataka.

National Conference on Advanced Computing and Wireless Networks (ACWiN-2010), April 29-30, 2010, Bangalore, Karnataka.

Karnataka science & Technology second Conference organized by DST, Gulbarga, 23rd Sep 2009 to 24th Sep 2009.

International Conference on Advances in Mathematics: Historical Developments and Engineering Applications, December 19-22, 2007, Dept. of Mathematics & Computer Science, G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarkand, India.

The Sixth International Conference on Advances in Pattern Recognition (ICAPR-2007), January 2-4,2007, ISI, Kolkata.

5th Indian Conference on Computer Vision Graphics and Image Processing (ICVGIP-2006), December 13-16, 2006, Madurai, Tamilnadu.

7th Asian Conference on Computer Vision (ACCV-2006), January 22-25, 2006, Hyderabad, India.

3rd Workshop on Computer Vision, Graphics and Image Processing, January 12-13, 2006, Hyderabad, India.

First International Conference on Pattern Recognition and Machine Intelligence (PREMI'05), December 20-22,2005, ISI, Kolkata.

International Conference on Cognition and Recognition(ICCR-2005), December 22-23, 2005, Mandya, Karnataka.

National Conference on Mobile Computing and Networking (MobiComNet-2004), September 30-October 02, 2004, Vellore, Tamilnadu.

Abroad Visit

Visited France to present Research Paper in International Conference on Advanced Concepts for Intelligent Vision systems (ACIVS-08) during October 20-24, 2008, held at Juan-Les-pins, France.

Award

The DST has awarded Travel grant to present Research Paper in International Conference on Advanced Concepts for Intelligent Vision systems (ACIVS-08) during October 20-24, 2008, held at Juan-Les-pins, France.

Ph.D. Thesis

🗷 Prabhakar C.J.: A Study on Face Recognition Techniques using Symbolic Data Analysis.

Department of Computer Science, Gulbarga University, 2009.

Supervisor: Professor Prakash S. Hiremath

Professional Services

Technical Program Committee Member for International Conference on Applied Artificial Intelligence (AAI 2024), Shoolini University, Solan, Himachal Pradesh, India, July 2024.

Technical Program Committee Member for International Workshop on Artificial Intelligent and Image Processing (IWAIIP), Universitas Muhammadiyah Yogyakarta, Indonesia, Dec 2023.

Technical Program Committee Member for International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT), University of Bahrain, Bahrain, Nov 2023.

Technical Program Committee Member for IEEE Industrial Electronics and Applications Conference (IEACon), Penang, Malaysia, Nov 2023.

Technical Program Committee Member for Seventeenth International Conference on Sensor Technologies and Applications, Porto, Portugal, Sept 2023.

Technical Program Committee Member for International Conference on Intelligent Computing, Automation and Applications (ICAA2022), Hangzhou, July 2022.

Technical Program Committee Member for International Conference on Information System & amp;Information Technology (ICISIT-2022), Yogyakarta, Indonesia, July 2022.

Technical Program Committee Member for International Conference on Internet n Intelligent Computing, Automation and Applications (ICAA2022), July 2022.

Technical Program Committee Member for 2nd International Conference on Electronic and Electrical Engineering and Intelligent System (ICE3IS 2022), Universitas Muhammadiyah Yogyakarta, Indonesia. Jan 2022.

Technical Program Committee Member for International Conference on Information Technology, Advanced Mechanical and Electrical Engineering (ICITAMEE 2021), Universitas Muhammadiyah Yogyakarta, Indonesia, August 2021.

Technical Program Committee for IEEE Industrial Electronics and Applications Conference (IEACon), Georgetown, Penang, Malaysia, Nov 2021.

Technical Program Committee for International Conference on Sustainable Advanced Computing -ICSAC 2021, Department of Computer Science, CHRIST (Deemed to be University), Bangalore, August 2021.

Technical Program Committee Member for SmartTechCon, March 2021.

Technical Program Committee Member for Symposium on Emerging Topics in Computing and Communications (SETCAC&39;20) co-affiliated with the Fourth International Conference on Computing and Network Communications (CoCoNet&39;20), Chennai, India, Oct 2020.

Technical Program Committee Member for International Conference on Machine Intelligence and Data Science Applications (MIDAS) 2020, School of Computer Science, University of Petroleum and Energy Studies, Dehradun, India, March 2020.

Technical Program Committee Member for TBDS, 2018.

Technical Program Committee Member for International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT-2018), PES College of Engineering, Mandya, July 2018.

Technical Program Committee Member for International Conference on Internet of Things, Big Data and Security(IoTBDS 2017), Porto, Portugal, April 2017.

Technical Program Committee Member for International Conference on Advances in Computing, Communications and Informatics (ICACCI 17) (http://icacci-conference.org/2017/)Manipal Institute of Technology, Manipal, Karnataka, India, Sept, 2017.

Technical Program Committee Member for International Conference on Contemporary Computing and Informatics (iC₃I 2016), Amity University, Noida, India, Dec 2016.

Technical Program Committee Member for International Conference on AR4MET-2016, Batam, Indonesia.

Technical Program Committee Member for International Conference on ICACIE-2016.

Technical Program Committee Member for International Conference on ICACCI-2016, Aluva, Kochi, India.

Technical Program Committee Member for International Conference on IWICP-2015.

Technical Program Committee Member for International Conference on SETCAC-2015, Trivandrum, Kerala.

Technical Program Committee Member for International Conference on SPICES 2015, NITC, Calicut, India.

Technical Program Committee Member for International Conference on SIPR-2015.

Technical Program Committee Member for International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT - 2015), Bapuji Institute of Engineering and Technology (BIET), Davangere, Karnataka, October 2015.

Technical Program Committee Member for Third International Symposium on Pattern Recognition and Image Processing (PRIP - 2014), Galgotias College of Engineering, Greater Noida, Delhi on 24-27, September 2014.

Technical Program Committee Member for International Conference on FICTA -2014 and CSI-2014.

Technical Program Committee Member for International Conference on ICNCS -2014, Department of CSE, Vignan University.

Technical Program Committee Member for International Conference on Contemporary Computing and Informatics (IC₃I), 27-29 November 2014, Sri Jayachamarajendra College of Engineering, Mysore.

Technical Program Committee Member for National Conference on Recent Advances in Information Technology, 15-16 February 2014, Solapur University, Solapur, Maharastra.

Technical Program Committee Member for National Workshop on Recent Developments in Digital Image Analysis(RDDIA-14), 30th May 2014, Gulbarga University, Gulbarga.

Session chair for International Conference on Multimedia Processing, Communication and Information Technology (MPCIT-2013), held on 19-21, December, 2013, J.N.N. College of Engineering, Shimoga, Karnataka.

Editor for Proceedings of National Conference on Advances in Electronics and Communication Technology (NCAECT-2012), May 18th, 2012, Dept. of Electronics, Kuvempu University, Karnataka.

Editor for Proceedings of National Conference on Advanced Computing and Computations (NCACC-12), April 2012, Dept. of Computer Science, Kuvempu University, Karnataka.

Session Chair for National Conference on Biotechnology and Society (NCBS-2012), April 19 - 20th, 2012, Dept. of Biotechnology, Kuvempu University, Karnataka.

Session Chair for National Conference on Advances in Electronics and Communication Technology (NCAECT-2012), May 18th, 2012, Dept. of Electronics, Kuvempu University, Karnataka.

Technical Program Committee Member of National Conference on Recent Trends and Challenges in Computer Applications - 2011, Organized by Department of Computer Science, University of Mysore, Mysore.

Session Chair for International Conference on Cognition and Recognition (ICCR-2011), December 9 - 10th, 2011, Dept. of Computer Science, University of Mysore, Karnataka.

Technical Program Committee Member and Session chair of National Seminar on Recent Trends in Image Processing and Pattern Recognition, Bidar, Feb. 15-16, 2010

Program Committee Member of National Level Workshop on Information Technology and Cloud Computing, Bidar, Dec. 24, 2010

Organizing Committee Member of Inter-University Subject based Conference on Mathematics and Computer Science - 2010, Sponsored by Vision Group of Science and Technology, Karnataka, held at Department of Computer Science, Kuvempu University, Mar. 19-20, 2010

Organizing Committee Member of Two day inter-university subject based conference on Mathematics and Computer Science, conducted by the Vision Group Mathematics & Computer Science, kuvempu university, shimoga, 19th Mar 2010 to 20th Mar 2010.

Organizing Committee Member of Workshop on Linear Algebra and its Applications, Department of Computer Science, Kuvempu University, Dec. 26-30, 2009

Organizing Committee Member of Training Programme on Computer Concepts, Operating System and Internet, Department of Computer Science, Kuvempu University, Dec. 3-5, 2009

Organizing Committee Member of National Conference on Geometry, Analysis, Fluid Mechanics and Computer Applications, Kuvempu University, Dec. 9-11, 2004

Technical Program Committee Member of International Conference on Human-Machine Interface (ICHMI-2004), IISc Bangalore, Dec. 13-15, 2004

Invited Talks

1. Special Lecture on E-Commerce, Refresher Course in ICT organized by Academic Staff College, Karnatak University, Dharwad, 27/06/2012.

- 2. Special Lecture on E-Commerce, UGC Sponsored Refresher Course in ICT organized by Academic Staff College, Karnatak University, Dharwad, 30/09/2011.
- 3. Invited talk on Underwater Object Recognition, U.G.C sponsored two day state level seminar on Computer Trends & Techniques: Past present & Future held on October 14 15th, 2011, N.V College, Gulbarga.
- 4. Special Lecture on Recent Trends in Computer Applications, Two day state level seminar held on March 31st April 1st, 2010, H.P.P.C. Government First Grade College, Challekere, Chitradurga District.

Reviewer

- 1. International Journal of Computer Vision and Image Processing (IJCVIP), Published by IGI Global, USA
- 2. International Journal of Computational and Mathematical Methods in Medicine, Hindawi Publishing Corporation, USA
- 3. International Journal of Ocean University of China, Springer Publications, China
- 4. International Journal of Computer Applications, Published By FCS(Foundation of Computer Science, USA)
- 5. International Journal of Machine Intelligence, Published By Bioinfo Publications, USA
- 6. International Journal of Electronic Imaging, Published By SPIE, USA
- 7. Book Chapters of Edited Book Entitled "3D Surface Geometry and Reconstruction: Developing Concepts and Applications" published by IGI Global Inc., USA. Editor Umesh C. Pati, NIT Rourkela.
- 8. Book Chapters of Edited Book Entitled "Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies", Editor: Vijay Mago and Nitin Bhatia, IGI Global Inc., USA.
- 9. International Symposium on Emerging Topics in Computing and Communications (SETCAC'15), Indian Institute of Information Technology and Management-Kerala (IIITM-K).
- 10. International Workshop on Advances in Image Processing, Computer Vision, and Pattern Recognition (IWICP-2015), Indian Institute of Information Technology and Management-Kerala (IIITM-K).
- 11. International Conference on Computing in Mechanical Engineering (ICCME-2015), Kerala.
- 12. International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT-2015), PES College of Engineering, Mandya.
- 13. International Workshop on Signal Processing, Image Processing and Pattern Recognition (SIPR5), Kochi, Kerala.
- 14. International Conference on Advances in Computing, Communications and Informatics (ICACCI 2014), IEEE Xplore, Galgotias College of Engineering, Greater Noida, Delhi on 24-27, September 2014.
- 15. International Conference on Networks and Soft Computing(ICNSC-14), 19-20, August-2014, Vignan University, Andhra Pradesh.
- 16. Third International Symposium on Pattern Recognition and Image Processing (PRIP 2014), Springer, Galgotias College of Engineering, Greater Noida, Delhi on 24-27, September 2014.
- 17. Third International Symposium on Intelligent Informatics (ISI14), Springer, Galgotias College of Engineering, Greater Noida, Delhi on 24-27, September 2014.
- 18. Special Session on Advanced research in 'Computer Vision, Image and Video Processing', Third International Conference on Frontiers in Intelligent Computing Theory and Applications (FICTA-14), Springer AISC, Bhubaneswar Engineering College, Bhubaneswar, Orissa.

19. International Conference on Advances in Computing, Communications and Informatics (ICACCI - 2013), IEEE Xplore, held at J C College of Engineering, Mysore on 22-25, August 2013.

- 20. National Seminar on Recent Trends in Image Processing and Pattern Recognition, Feb. 15-16, 2010
- 21. International Conference on Human-Machine Interface (ICHMI-2004), IISc Bangalore, Dec. 13-15, 2004

University Services

- 1. 2024-present: Chairman, Department of Studies in Computer Science, Kuvempu University, Karnataka
- 2. 2024-Present: Chairman, P.G. Board of Studies in Computer Science, Kuvempu University, Karnataka
- 3. 2023-Present: Director, School of Physical science, Kuvempu University, Karnataka
- 4. 2016-2017: Co-Ordinator, Department of Studies in Electronics, Kuvempu University, Karnataka
- 5. 2016-2017: Chairman, Board of Examiners, M.Sc Electronics, Kuvempu University, Karnataka
- 6. **2014-2015**: Chairman, Board of Examiners, M.Sc.(IT) and B.Sc. (IT) Courses, Directorate of Distance Education, Kuvempu University, Karnataka
- 7. 2014-Present: Faculty Advisor, University Boys Hostel, Kuvempu University, Karnataka
- 8. 2012-2014: Co-Ordinator, Department of Studies in Computer Science, Kuvempu University, Karnataka
- 9. 2011-Present: Chairman, P.G. Board of Studies in Computer Science, Kuvempu University, Karnataka
- 10. 2012-2014: Co-Ordinator, University Central Computing Facility (UCCF), Kuvempu University, Karnataka
- 11. 2013-2014: Chairman, Board of Examiners, MCA and M.Sc. Courses, Kuvempu University, Karnataka
- 12. 2003-Present: Member, Board of Examiners, MCA and M.Sc., Kuvempu University
- 13. 2009-2010: Chairman, Board of Examiners, MCA and M.Sc. Courses, Kuvempu University, Karnataka
- 14. 2006-2007: Chairman, Board of Examiners, MCA and M.Sc. Courses, Kuvempu University, Karnataka
- 15. 2003-2008: Member, Board of Studies in Mathematics, Kuvempu University
- 16. 2006-2007: Member, Board of Examiners, MCA and M.Sc. Courses, Karnatak University
- 17. 2007-2008: Member, Board of Examiners, MCA and M.Sc. Courses, Bangalore University
- 18. 2009-2010: Member, Board of Examiners, MCA and M.Sc. Courses, Gulbarga University
- 19. 2010-2011: Member, Board of Examiners, MCA and M.Sc. Courses, Mangalore University
- 20. 2009-2011: Member, Board of Examiners, Electronics Courses, Kuvempu University

References

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