

## Academic Profile

Name : Dr. Mrs. Prema T. Akkasaligar

Date of Birth : 08.12.1971.

Sex : Female

Nationality : Indian

Office Address : Department of Computer Science and Engineering,  
BLDEA's Dr. P. G.H. College of Engg and Tech,  
Vijaypur, Karnataka, India.

Permanent Address : W/o Dr. Sharan Badiger,  
H.No.12, BLDEA's Doctor's Quarters,  
BLDEA's Campus, Sholapur Road,  
Vijaypur ,Pin.- 586103, Karnataka, India

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Qualification : B.E. (Computer Science) – Jan -1995,  
M.E. (Computer Science) – April -1999,  
First Class with Distinction.  
Ph.D. (Computer Science) at Gulbarga  
University, Kalburgi - May 2013.

Present Post Held : P.G. Coordinator & Professor in Department of  
Computer Science & Engg., BLDEA's Dr.  
P.G.H. College of Engg., Vijaypur.

Teaching Experience : 25 years

U.G./P.G. Teacher : B.E.(C.S.E.),M.Tech. (C.S.E.) & M.C.A. of  
BLDEA's Dr. P.G.H. Engg., College, Vijaypur.

### ***Research Experience:***

I have completed my **Ph.D.** in the Department of PG Studies and Research in Computer Science, Gulbarga University, Gulbarga, Karnataka. The title of my Ph.D. thesis is “**A study of Speckle Noise Reduction in Medical Ultrasound Images**”. My areas of interest are Image processing, Computer vision and Pattern recognition.

### **Award and Honor**

Received the **Karnataka State Level Award for Research Publications (ARP)** by Vision Group of Science and Technology (VGST), Department of Information Technology, Biotechnology and Science & Technology, Government of Karnataka, India for the year **2019-2020**. Received felicitation from Dr.C.N. Ashwath Narayan, Honorable Minister of Higher Education ,GoK, on **29th April 2022** at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Jakkur, Bengaluru.

### **International Collaborative Project**

Selected for **National Level AICTE – UKIERI** Technical Leadership Development Program for the year 2019-2020. It is a one year educational research program jointly organized by **DUDLEY College of Technology, United Kingdom** and AICTE India, known as UK India Education and Research Initiative. On successful completion of the change project, received the **CMI Level 5** Certificate in Leadership and Management from Government of United Kingdom.

### **Funded Project Guidance :**

1. Guide for Project “ Smart Water Tank ” . It is sponsored by IEEE Bangalore Section-Student Humanitarian Technology Project Funding -2020 with a grant of **Rs. 5000/-** in the year 2019-2020.
2. Guide for Project “ IOT based health monitoring System ” . It is sponsored by FOSS VTU Group with a grant of **Rs. 5000/-** in the year 2018-19.

3. Guide for Project “ Human Computer Interaction using Hand Gestures and color bands” . It is sponsored by FOSS VTU Group with a grant of **Rs. 5000/-** in the year 2017-18.
4. Guide for Project “E- Attendance”. It is sponsored by Karnataka New Age Incubation Network (KBITS) Karnataka with a grant of **3 Lakhs** in the year 2015-16.
5. Guide for Project “ Density Aware Person Detection and Tracking in Crowd“. It is sponsored by Karnataka New Age Incubation Network (KBITS) Karnataka with a grant of **3 Lakhs** in the year 2014-15.

## **Achievements:**

1. Expert member of **Trilingual Glossary of Engineering (English -Hindi-Kannada)** , jointly organized by Commission for Scientific and Technical Terminology, Department of Higher Education, Govt of India, and Dept. Mechanical engineering at BLDEA CET, Vijayapur, from 18<sup>th</sup> April to 22<sup>nd</sup> April 2022.
2. Chair person/mentor of national level evaluation panel of Grand Finale “ **Toycathon-2021** “ held during 22nd to 24th June 2021, organised by Ministry of Education’s Innovation Cell with support from All India Council for Technical Education(AICTE), Ministry of Women and Child Development, Ministry of Commerce and Industry, Ministry of MSME, Ministry of Textiles and Ministry of Information and Broadcasting.
3. Received mentor certificate from National Initiative for Technical Teachers Training (**NITTTR**) and AICTE New Delhi, for mentoring faculties of AICTE approved colleges.
4. Received **mentor certificate** from **NPTEL** for mentoring students for the course “ Problem Solving through Programming in C” for the session July to December 2019.
5. Received **mentor certificate** from **NPTEL** for mentoring students for the course “ Problem Solving through Programming in C” for the session January to December 2020.
6. **BRONZE** certificate by Income Tax Department for the year 2017-2018.
7. Highest Research Publications of the year 2018 awarded by BLDEA’s VP Dr. PGH Engineering College, Vijayapur.
8. Appreciation certificate by **LEAD** programme of Deshpande foundation on account of International Womens Day 2019.

9. BEST Publisher of the Department for the Year 2017-2018 awarded by BLDEA's VP Dr. PGH Engineering College, Vijayapur.
10. BRONZE certificate by Income Tax Department for the year 2016-2017 .

***Webinar Organized:***

1. Webinar organised on topic titled “ Women Empowerment ” by Resource person Dr. Archana Keerti Chowdhary, Principal, IPS Academy Institute of Engineering and Science, Indore, India, on 29th December 2020 under IEEE Women in Engineering, Society of IEEE North Karnataka Subsection and IEEE Student Branch B.L.D.E.A's V. P. Dr. P. G. Halakatti College of Engineering and Technology, Vijayapur.
2. Webinar organised on topic titled “ Dreaming of Startup and The First Step Towards it” by Resource person Er.Sachin Hubballi, Co-Founder and CEO, TECHasitis India, Bagalkot, Karnataka,India, on 3<sup>rd</sup> February 2022.

***Ph.D. Guidance :***

Awarded Ph.D.(CSE) Degree to Research Scholar Mrs. Sunanda Biradar under the guidance of Dr.Prema T. Akkasaligar for Thesis Titled “ Analysis of Medical Ultrasound Images for Renal calculus and Polycystic kidney disease” at 20<sup>th</sup> VTU Convocation held on 3<sup>rd</sup> April 2021.

***International Journal Publications:***

1. Sunanda Biradar , **Prema T. Akkasaligar** and Sumangala Biradar “ **Feature Extraction and Classification of Digital Kidney Ultrasound Images: A Hybrid Approach**” , Pattern Recognition and Image Analysis, vol. 32 (2),Pleiades Publishing Ltd, Springer Nature, 2022, pp.363-372. DOI:10.1134/S1054661822020043 (Q3, SJR 2020-0.26), ISSN 1054-6618
2. **Prema T. Akkasaligar** and Sumangala Biradar “**Selective Medical Image Encryption Using DNA Cryptography**” Information Security Journal: A Global Perspective, Taylor & Francis, Volume 29(2), 2020, pp. 91-101, DOI:10.1080/19393555.2020.1718248 (Q2, SJR 2020-0.31)
3. **Prema T. Akkasaligar** and Sunanda Biradar “**Automatic Segmentation and Analysis of Renal Calculi in Medical Ultrasound Images**”, Pattern Recognition and Image Analysis, vol. 30 (4),Pleiades Publishing Ltd, Springer Nature , 2020, pp.748-756. DOI:10.1134/S1054661820040021 (Q3, SJR 2020-0.26)

4. **Prema T. Akkasaligar** and Shambhavi T, Soumaya P, **Review of IOT based health monitoring system**, International Journal of Research in Advent Technology, Special issue, Feb 2019, pp. 95-99.
3. **Prema T. Akkasaligar**, Sunanda Biradar, Sharan Badiger, Rohini Pujari, **“Review on Classifications of Medical Ultrasound Images of Kidney”**, International Journal of Computer Sciences and Engineering, Vol.-6, Issue-7, July 2018, pp. 1565-1568.
4. Hugar Avinash, **Prema T. Akkasaligar**, Patil Sadhana, Porwal Aishwarya, Guchhatti Sachin, **Human-computer interaction using hand gestures and color bands**, International Journal for Research in Engineering Application and Management, Vol. 4, Special Issue -ICSGUPTSM- 2018, , pp. 189-190, June 2018, ISSN: 2454-9150, IF=5.646, UGC Jr. No. 64077
5. **Prema T. Akkasaligar** and Biradar Sunanda **Analysis of polycystic kidney disease in medical ultrasound images**, International Journal of Medical Engineering and Informatics, Vol.10, pp. 49-64, February 2018, Inderscience publishing, ISSN 1755-0653, UGC Jr. No. 23115, ( Q4, SJR 2020-0.12.)
6. Sharan Badiger, and **Prema T. Akkasaligar**, **Human Immuno Deficiency Virus Infection and Cardiac Autonomic Neuropathy”**, World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, Vol.11, No. 1, 2017, pp.43-48, ISSN: 2010-3778.
7. **Prema T. Akkasaligar** and Patil Ramesh, **Survey on Secure Data Sharing in Cloud using Revocable Storage Identity Based Encryption”**, Int. J. Innovative and Emerging Research in Engineering, Vol.4, Issue 4, April 2017, pp. 103-107, World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, Vol.11, No. 1, 2017, pp.43-48, ISSN: 2394-3343 IF=2.14.
8. **Prema T. Akkasaligar** and Math Usharani, **Review of Analysis of ECG Image**, International Journal of Engineering and Applied Sciences and Technology, Vol. 1, Issue 10, ISSN:2455-2143, pp.130-138, Aug-Sept 2016, IF=2.14.
9. **Prema T. Akkasaligar** and Pattenshetty Sourabh, **Automatic Attendance Monitoring System**, in Int. J. of Engineering and Applied Science. and Technology, Vol.1, Issue 8, ISSN No. 2455-2143, pp.287-293, June-July 2016, IF=2.14.
10. Badiger SR, **Prema T. Akkasaligar**, **Neurological Manifestations in Patients with HIV Infection in the Era of Combined Antiretroviral Therapy**, World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, Vol.10, No.2, 2016, pp.93-97, ISSN: 2010-3778.

11. **Prema T. Akkasaligar** and Shruti K. **Abnormality Detection in Kidney Ultrasound Imaging**, Int. J. of Engineering and Computer Science, Vol. 4, Issue 7, pp.13151-13154, July 2015, ISSN: 2319-7242, IF=4.3098.
12. **Prema T. Akkasaligar** and Farat Mulla, **A Survey on Data Encryption using DNA Technique**, Int. J. of Advanced Technology in Engineering and Science, 1(3), pp.243-251, April 2015, ISSN: 2348-7550, IF=2.870.
13. **Prema T. Akkasaligar** and Badiger SR , **Medical Imaging Techniques in Clinical Medicine**, World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, Vol.8, No.11, 2014, pp.812-817, ISSN: 2010-3778
14. **Prema T. Akkasaligar** and Badiger SR , **Visual Enhancement of Ultrasound Images using Despeckling Filters**, Int. J. of Computer Information Systems, 8(1), March- 2014.
15. **Prema T. Akkasaligar** and Biradar Sunanda, **Classification of Medical Ultrasound Images of Kidney**, Int'l. J. of Computer Applications (ISSN:0973 – 93- 80884-01-6), Special Issue on ICICT 2014, No. 3, pp. 24-28.
16. **Prema T. Akkasaligar** and Badiger SR ,**A study of Cardio Pulmonary Changes during Upper Gastrointestinal Endoscopy**, World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, pp. 757-766, 7(11), 2013, ISSN: 2010-3778 .
17. Badiger SR, **Akkasaligar P.T.** and Narone U, **“Hyperglycemia and Stroke”**, Int. J. of Stroke Research, pp.1-6, 1(1), 2013, ISSN: 10.5923.
18. Badiger SR, **Prema T. Akkasaligar** and Biradar MS, **Electrocardiography- Pericarditis, Pericardial Effusion and Cardiac Tamponade**, Int. J. of Internal Medicine, pp.37-41, 1(4),2012, ISSN: 2326-1072.
19. Hiremath P.S., **Prema T. Akkasaligar** and Badiger SR, **Linear Regression Model for Gaussian Noise Estimation and Removal for Medical Ultrasound Images**, Int. J. of Computer Applications, pp.11-15, 50(3), July 2012, (Impact Factor=0.821), ISSN: 0975-8887.

20. Hiremath P. S., **Prema T. Akkasaligar** and Badiger S. R., **Removal of Gaussian Noise in Despeckling Medical Ultrasound Images**, The Int. J. of Computer Science and Applications, pp. 25-35,1(5), July 2012, ISSN: 2278-1080.
21. Badiger S. R., **Prema T. Akkasaligar**, **Microalbuminuria in Human immunodeficiency Virus Infection and Acquired Immunodeficiency**, World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, Vol. 6 No. 8, pp.375-380, 2012, ISSN: 2010-3778.
22. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, **Speckle Reducing Contourlet Transform for Medical Ultrasound Images**, World Academy of Science, Engineering and Technology- Int. J. of Computer and Information Engineering , Vol. 5, No. 8, pp. 932-939, August 2011 , , ISSN: 2010-3778, (Scopus indexed).
23. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, **Performance Comparison of Wavelet Transform and Contourlet Transform based methods for Despeckling Medical Ultrasound Images**, Int. J. of Computer Applications, pp.34-41, 26(9), July 2011, ( Impact Factor=0.814), ISSN: 0975-8887.
24. Badiger S. R., **Prema T. Akkasaligar**, **Microalbuminuria in Essential Hypertension** , World Academy of Science, Engineering and Technology, Int. J. of Medical Health Sciences, Vol.5, No. 12, 2011, pp.716-720, ISSN: 2010-3778.
25. Hiremath P. S., **Prema T. Akkasaligar** and Badiger S. R., **Visual enhancement of Digital Ultrasound Images using Multiscale Wavelet Domain**, Int. J. of Pattern Recognition and Image Analysis, pp.303-315, 20(3), July 2010, (Scopus indexed), ISSN 1054-6618, UGC Jr. No. 37083.

***International Conference Publications:***

1. **Prema T. Akkasaligar**, Sunanda Biradar and Varsharani patil , Sharan Badiger, Sana Mulla, **“Alzheimer Disease Detection ”** , International Conference on Artificial Intelligence and Soft Computing (ICAISC-2021), February 11<sup>th</sup> to 13<sup>th</sup> 2021, pp.458-468, ISBN:978-93-88929-53-0,
2. **Prema T. Akkasaligar**, Ramesh Patil, Pradnya Awati, Janhavi Deshpande, Geeta Nidoni, **“ e-SEVA for LPG Delivery”**, IEEE Bangalore Humanitarian Technology Conference (B-HTC-2020), 8<sup>th</sup> to 10<sup>th</sup> October 2020, pp.1-5, DOI: 10.1109/B-HTC50970.2020.9297990 .

3. **Prema T. Akkasaligar**, Shashidar G. Koolagudi , Sunanda Biradar, Poornima Hotagi and Sharan Badiger, “**Highlighting Nerves in Images for Ultrasound Guided Regional Anesthesia**”, IEEE Bangalore Humanitarian Technology Conference (B-HTC-2020), 8<sup>th</sup> to 10<sup>th</sup> October 2020, pp.93-97, DOI: 10.1109/B-HTC50970.2020.9297990
4. **Prema T. Akkasaligar**, Sumangala Biradar, “**Medical Image Compression and Encryption using Chaos Based DNA Cryptography**”, IEEE Bangalore Humanitarian Technology Conference (B-HTC-2020), 8<sup>th</sup> to 10<sup>th</sup> October 2020, pp. 261-265, DOI: 10.1109/B-HTC50970.2020.9297990.
5. **Prema T. Akkasaligar**, Sunanda Biradar and Rohini Pujari, “**Internet of Things based Smart Secure Home System**”, 2<sup>nd</sup> International conference on Intelligent Data Communication Technologies and Internet of Things, (ICICI-2019), 12-13 Sept. 2019 at JCT College of Engineering and Technology, Coimbatore, Tamilnadu, India, pp.348-355.
6. **Prema T. Akkasaligar**, Sumangala Biradar, “*Medical Image Encryption with Integrity using DNA and Chaotic Map*”, 2<sup>nd</sup> International conference on Recent Trends in Image Processing and Pattern Recognition, 21-22 December 2018, pp. at Solapur, Maharashtra, India, pp. 143-153.
7. **Prema T. Akkasaligar**, Sunanda Biradar, “Segmentation of Kidney Stones in Medical Ultrasound Images”, 2<sup>nd</sup> International conference on Recent Trends in Image Processing and Pattern Recognition, 21-22 December 2018, at Solapur, Maharastra, India pp. 200-208
8. **Prema T. Akkasaligar**, Sunanda Biradar and Veena Kumbar “Kidney Stone Detection in Computed Tomography Images” IEEE International Conference on Smart Technologies for Smart Nation (SmartTechCon)”, ,17-19 August 2017, Reva University, Bangalore, pp.886-889, IEEE ISBN : 978-1-5386-0568-4.
9. **Prema T. Akkasaligar** and Usharani Math “Digitized ECG Image Analysis” IEEE International Conference on Smart Technologies for Smart Nation (SmartTechCon)”, Reva University, Bangalore, 17-19 August 2017, pp.897-900, IEEE ISBN : 978-1-5386-0568-4.



10. **Prema T. Akkasaligar** and Biradar Sumangala, “ Secure Medical Image Encryption based on intensity level using Chao’s theory and DNA Cryptography” International Conference on Computational Intelligence and Computing Research-2016, on 15-17 Dec. 2016, at Chennai, Tamilnadu, pp.958-963, IEEE ISBN : 978-1-5090-0612-0.
11. **Prema T. Akkasaligar** and Biradar Sunanda “Diagnosis of Renal Calculus Disease in Medical Ultrasound Images”, International Conference on Computational Intelligence and Computing Research-2016, on 15-17 Dec. 2016, at Chennai, Tamilnadu, pp.948-952, IEEE ISBN : 978-1-5090-0612-0.
12. Dharwadkar NV, **Prema T. Akkasaligar** and Nagthan SS, Adaptive Data Hiding using Cluster based PVD and LSB, Second Int’l. Conf. on Emerging Research in Computing, Information, Communication and Applications (ERCICA-2014), 01-02 August 2014, NMIT Bangalore, India, 857-863, IEEE ISBN: 978- 935-1072-638.
13. **Prema T. Akkasaligar** and Biradar SD, Classification of Medical Ultrasound Images of Kidney, in proc. of International Conference on Information, Communication and Technology (ICICT- 2014) , 5-6 May 2014, PESITM Shimoga, Karnataka, India, 32-36, (ISBN: 978-81-926416-1-4).
14. **Prema T. Akkasaligar** and Unnibhavi S, Identification of Kidney in Medical Ultrasound Images, Proc. of 5<sup>th</sup> SARC-IRF Int’l. Conf., Bangalore, India, on 4<sup>th</sup> May 2014 , 85-90, (ISBN: 978-93-84209-13-1).
15. **Prema T. Akkasaligar** and Malagavi G, Detection of Cysts in Medical Ultrasound Images of Ovary, Proc. of 5<sup>th</sup> SARC-IRF Int. Conf., Bangalore, India, on 4<sup>th</sup> May 2014, 57-62, (ISBN: 978-93-84209-13-1).
16. Hiremath P.S., **Prema T. Akkasaligar** and Badiger SR, The Cycle Spinning Based Contourlet Transform for Despeckling Medical Ultrasound Image, Proc. Int. Conf. on Trends in Information Technology and Applications – 2010, Ajman University, U.A.E., 11<sup>th</sup>-13<sup>th</sup> December 2010, 72-76.
17. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, Despeckling Medical Ultrasound Images Using the Contourlet Transform, Proc. 4<sup>th</sup> Indian Int. Conf. on Artificial Intelligence 2009, Tumkur, Karnataka, India, 16<sup>th</sup>-19<sup>th</sup> December 2009, 1814-27.

18. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, Despeckling Medical Ultrasound Images Using the Contourlet Approximation, Proc. 2<sup>nd</sup> Int. Conf. on Signal and Image Processing - 2009, Mysore , Karnataka, India, 12<sup>th</sup>-14<sup>th</sup> August 2009, 139-45.
19. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, Despeckling Medical Ultrasound Images using Laplacian Pyramid Transform, Proc. Int'l. Conf. on Systemics, Cybernetics and Informatics - 2009, Hyderabad, Andhra Pradesh, India, 7<sup>th</sup>-10<sup>th</sup> January 2009, 304-07.
20. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, Performance Evaluation of Wavelet Based Thresholding for Despeckling Medical Ultrasound Images, Proc. 2<sup>nd</sup> Int. Conf. on Cognition and Recognition - 2008, Mysore , Karnataka, India, 10<sup>th</sup>-12<sup>th</sup> April 2008, 574-79.
21. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, An Optimal Wavelet Filter for Despeckling Echocardiographic Images, Proc. Int. Conf. Computational Intelligence and Multimedia Applications – 2007, Sivakasi, Tamilnadu, India, 13<sup>th</sup>-15<sup>th</sup> December 2007,245- 49.

### ***Book chapters***

1. **Prema T. Akkasaligar**, Biradar S., Pujari R. (2020) Internet of Things Based Smart Secure Home System. In: Hemanth D., Shakya S., Baig Z. (eds) Intelligent Data Communication Technologies and Internet of Things. ICICI 2019. Lecture Notes on Data Engineering and Communications Technologies, vol. 38. Springer Nature, pp. 348-355, (ISBN: 978-3-030-34080-3).
2. **Prema T. Akkasaligar**, Biradar Sunanda, “Automatic Kidney Cysts Segmentation in Digital Ultrasound Images”. Chapter 4, In: Shukla A. (eds) Medical Imaging Methods. Springer Nature Singapore Ple. Ltd., 2019, pp.97-117, (ISBN 978-981-13-9121-7).
3. **Prema T. Akkasaligar**, Biradar Sunanda,(2019), Segmentation of Kidney Stones in Medical Ultrasound Images". Chapter 18, In: Santosh K., Hegadi R. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2018. Communications in Computer and Information Science, vol 1036, part 2, Springer Nature Singapore Ple. Ltd. 2019, pp. 200-208, (ISBN 978-981-13-9181-1).

4. **Prema T. Akkasaligar**, Biradar Sumangala. (2019) Medical Image Encryption with Integrity Using DNA and Chaotic Map. Chapter 13, In: Santosh K., Hegadi R. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2018. Communications in Computer and Information Science, vol 1036. part 2, Springer Nature Singapore Ple. Ltd. pp. 143-153,(ISBN 978-981-13-9181-1).
5. **Prema T. Akkasaligar, Sunanda Biradar**, Automatic Segmentation of Kidney Cysts in Medical Ultrasound Images, in UGC Sponsored National Conference on Recent Trends in Image Processing & Pattern Recognition, Eds. K.C.Santosh, Mallikarjun Hangarge , KRE Society Publisher, April 2-3,2016, (ISBN:-978-93-5267-599-9).
6. **Prema T. Akkasaligar, Sumangala Biradar**, Multiple Image Encryption using Chens Hyper Chaotic Map, Biological and Logical Operators, in UGC Sponsored National Conference on Recent Trends in Image Processing & Pattern Recognition, Eds. K.C.Santosh, Mallikarjun Hangarge , KRE Society Publisher, April 2-3,2016, (ISBN:-978-93-5267-599-9).
7. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, Speckle Noise Reduction in Medical Ultrasound Images, in Advancements and Breakthroughs in Ultrasound Imaging, Ed.: Gunti Gunarathne, InTech Publisher, Croatia, 201- 241, June 2013, (ISBN:978-953-51-1159-7, DOI:10.5772/56519 ).
8. Hiremath P. S., **Prema T. Akkasaligar** and Badiger SR, Speckle Removal in Medical Ultrasound Images Using the Contourlet Transform”, in “Computer Vision and Information Technology Advances and Application, Eds. K.V.Kale, S.C.Mehrotra, R.R.Manza, I.K.International Publishing, 92-99, 2010, (ISBN:978-93-80026-95-4).
9. Hiremath P. S., **Prema T. Akkasaligar**, Comparison of Wavelet Based Despeckling of Medical Ultrasound Images”, in Advances in Computer Vision and Information Technology, Eds. K.V.Kale, S.C.Mehrotra, R.R.Manza International Publishing, 2008, pp.1026-1033,(ISBN:978-81-89866-74-7).

### Citation Indices:

	All	Since 2017
<u>Citations</u>	362	225
<u>h-index</u>	11	8
<u>i10-index</u>	12	8

### Member of International Conference Committee :

- 1) GUC Sponsored National Conference on Recent Trends in Image Processing and Pattern Recognition ( RTIPPR-2016), 2-3 April 2016, Bidar, Karnataka,India.
- 2) Int. Conf. on Radiology and Imaging (ICRI - 2016), Nov. 25-26, 2016, Istambul, Turkey.
- 2) Int. Conf. on Computer Analysis of Image and Patterns (ICCAIP- 2015). Mar. 26-27, 2015, Madrid, Spain.
- 3) Int. Conf. on Radiology and Imaging (ICRI - 2014), Nov. 28-29, 2014, Istambul, Turkey.
- 4) Int. Conf. on Computer Analysis of Image and Patterns (ICCAIP- 2014), Mar. 26-27, 2014, Madrid, Spain.

### Life Member:

- 1) Computer Society of India. (Membership No. : 00144847)
- 2) Indian Society of Technical Education, India. (Membership No. : LM 43021)
- 3) Institution of Engineers India. (Membership No. : AM 092990-8)
- 4) International Association of Computer Science and Information Technology, Singapore. (Membership No. : 80333473)

### Editorial Board:

International Journal of Engineering and Technology, Singapore.

Sumerianz Journal of Biotechnology

**Reviewer of Journals:**

- 1) International Journal of Computers and Technology
- 2) Asian Journal of Computer and Information Systems
- 3) International Journal of Information Technology
- 4) International Journal of Engineering Sciences and Management – A Multidisciplinary Publication of VTU

**Peer Reviewer:**

1. International conference on mobile networks and wireless communication -2021
2. 2016 Int.Conf. on Current Research and Applications in Electrical Science- 2016, PDA College of Engg., Kalburgi, 04-05 Oct. 2016.
3. 2011 3<sup>rd</sup> International conference on Machine Learning and Computing, Singapore, February 26-28, 2011.
4. 2013, Journal of Electrical and Electronics Engineering Research.

**Participated as Resource Person :**

1. Resource person in TWO Days FDP on “**E- Content Development Using MOODLE**”, Jointly organized by Depts of Computer Science Engineering & Information Science Engineering&Computer Applications, BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur during 19-20 July 2019.
2. **Session Chair** in 2<sup>nd</sup> International Conference on Recent Trends in Commerce,Economics, Management and Information Technology -2018, 11<sup>th</sup> October 2018, Vijayapur, Karnataka, India.
3. **Session Chair** in International Conference on Recent Trends in Image Processing and Pattern Recognition ( RTIPPR-2018), 21-22 December 2018, Solapur, Maharastra, India.
4. All India Workshop on **Applications of MATLAB in Research** an Jointly organized by Institute of Engineer India & Dept. of Information Science & Engineering, BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur and delivered Talk on

**“Medical Imaging Techniques in clinical Medicine” and Medical Image Processing using MATLAB** from 25<sup>th</sup> April 2017 -26<sup>th</sup> April 2017.

5. Faculty Development Programme on “ Research Literacy and Trends in Scholarly Communications” Jointly organized by Library and Information Centre & Dept. of Civil Engineering, BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur from 23<sup>rd</sup> Jan to 28<sup>th</sup> Jan 2017 and delivered a Talk on **“Research Topic Identification and Research Design ”** on 24<sup>th</sup> Jan. 2017
6. One week Bridge Course on “Object Oriented Programming with C++” organized by Dept. of CSE, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur, from 06-02-2016 to 10-02-2016
7. One week Bridge Course on “C Programming with Data Structures” organized by Dept. of CSE, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur, from 01-08-2016 to 06-08-2016
8. Session Chair in GUC Sponsored National Conference on Recent Trends in Image Processing and Pattern Recognition ( RTIPPR-2016), 2-3 April 2016, Bidar, Karnataka, India.
9. Short Term Training Programme on C Programming” organized by CCTEK Sub centre Govt. Polytechnic, Bijapur during 06 -12-2013 to 10 -12-2013.

### **Workshops/Seminars Organised :**

1. One day seminar on Report and Research Article Writing is conducted on 27<sup>th</sup> Feb 2019, for all the post-graduation students of various departments of BLDEA’s V.P.Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur.
2. The Computer Literacy Program is organized for Excellent Kannada Medium Primary School Students of 6<sup>th</sup> standard for three days from 29<sup>th</sup> to 31<sup>st</sup> October 2018.

3. UGC sponsored National Workshop on “Recent Developments in Digital Image Analysis” (RDDIA-2014) at Dept. of Computer Science, Gulbarga University, Gulbarga, on 30<sup>th</sup> May 2014.
4. One day Seminar on “Practical Approach to Cloud Computing” at Dept. of Computer science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur on 16<sup>th</sup> April, 2014.
5. Two days workshop on “Research Issues in Data Mining” at Dept. of Computer science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur during 26 -10-2013 to 27 -10-2013.

#### **Guest Lecture Delivered :**

1. Guest lecture on “Database Management Systems” is delivered on 14<sup>th</sup> March, 2019 at Smt. Kumudaben Darbar College of Commerce, Science and Management Studies, Vijayapur.
2. Guest lecture on “Data Structure using C” is delivered on 10<sup>th</sup> November, 2018 at Basava Engineering School of Technology, Zalaki, Vijayapur, Karnataka.

#### **Participated :**

1. Online **Orientation Training Programme for Mentors** from 4<sup>th</sup> to 8<sup>th</sup> January 2021 under National Initiative for Technical Teachers Training (NITTTT) and AICTE New Delhi.
2. Online one week International STTP on “**Advanced Applications in Artificial Intelligence and Machine Learning**” organized by MMCOE and MMIT, at Pune, from 2<sup>nd</sup> Aug 2021 to 6<sup>th</sup> Aug 2021.
3. Online 5 days Faculty Development Programme on “**Inculcating Universal Human Values in Technical Education**” organized by AICTE , from 16<sup>th</sup> Aug 2021 to 20<sup>th</sup> Aug 2021.
4. Online One Week Faculty Development Programme on “**Applications of Artificial Intelligence in Digital Histopathology Images**” organized by Dept. E&C , NITK Suratkal, Manguluru , from 13<sup>th</sup> Dec 2021 to 17<sup>th</sup> Dec 2021.
5. Online One Week Faculty Development Programme on “**Artificial Intelligence**” organized by Model Engineering College and AICTE ATAL, from 22<sup>nd</sup> Feb 2021 to 26<sup>th</sup> Feb 2021.
6. Online One Week Faculty Development Programme on “**Medical Image Processing and Deep Learning Technologies**” organized by Panimalar Institute of Technology and AICTE ATAL, from 21<sup>st</sup> Sept 2021 to 25<sup>th</sup> Sept 2021.
7. Online 3-days Faculty Development Programme on “**Author Workshop on Scopus Metrics Analysis**” organized by BLDE (DU), Vijayapur, from 28<sup>st</sup> June 2021 to 30<sup>th</sup> June 2021.

8. Online One Month Faculty Development Programme on “**Programming for Everybody (getting started with Python)**” organized by Michigan University offered through COURSERA, from 1<sup>st</sup> JULY 2021 to 30<sup>th</sup> JULY 2021
9. Online 5 days STTP on “**Signal Analysis, Machine Learning and its Applications Using Python and MATLAB**” organized by dept. of E&T with IETE-RAIT, from 1<sup>st</sup> June 2020 to 5<sup>th</sup> June 2020.
10. Online National Level One Week Faculty Development Programme on “**Machine Learning Based Project Architecture Design**” organized by BEC Bagalkot, sponsored TEQIP III at Bagalkot, from 15<sup>th</sup> June 2020 to 19<sup>th</sup> June 2020.
11. Online NPTEL certification for Accreditation and Outcome Based Learning form Aug 2019 to Oct 2019.
12. One Week Faculty Development Programme on “**IOT Trends and Strategies with Machine Learning**” organized by VTU Centre for PG Studies, sponsored TEQIP 1.3 at Kalaburgi, from 30<sup>th</sup> Dec 2019 to 1<sup>st</sup> Jan 2020.
13. One Week Faculty Development Programme on “**Peadagogy For Higher Education**” Jointly organized by the IQAC and Academic Affairs Committee at BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur during 22<sup>nd</sup> to 26<sup>th</sup> July 2019.
14. One day a blended mode workshop on “**Moodle Learning Management System**” held at the BLDEA’s VP Dr. PG Halakatti College Of Engineering and Technology, Bijapur, on 15 March 2019, organized by the Teaching Learning Centre (ICT) at IIT Bombay.
15. Two days workshop on “**Linux for All**” Organized by Department of Electronics and Communication Engineering, BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur during 15<sup>th</sup>-16<sup>th</sup> February 2019.
16. One day Workshop on “**Engineering Innovation**” clic and BLDEA’s CET, at BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur on 8<sup>th</sup> March 2019.
17. One day workshop on “**Balance for Better**” Organized by Department of Electrical and Electronics Engineering, at BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur on 22<sup>nd</sup> March 2019.
18. VGST Sponsored One Week Faculty Development Programme on “**Design and Implementation of Hardware Accelerators and Protocol on FPGA**” Organized by the Department of Electrical and Electronics Engineering, at BLDEA’s V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur during 13<sup>th</sup> to 17<sup>th</sup> December 2018.



19. Two days Workshop on **Organizing Research with Reference Management tools** Jointly organized by Research & Development Cell and Library and Information Centre, BLDEA's V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur from 25<sup>th</sup> May 2018 -26<sup>th</sup> May 2018.
20. One day Workshop on **“New Model Curriculum for First Year B.E./B.Tech –CBCS Detailed Syllabus (2018-19) as per Outcome Based Education (OBE) format Course Outcomes (CO) and Blooms Taxonomy”**, organized by Visvesvaraya Technological University, Belagavi on 17<sup>th</sup> May 2018.
21. One Week Faculty Development Programme on **“Machine Learning Using Python”** Jointly organized by Visvesvaraya Technological University & Dept. of Information Science & Engineering, BLDEA's V.P. Dr.P.G.Halakatti College of and Technology, Vijayapur from 28<sup>th</sup> April 2018 -3<sup>rd</sup> May 2018.
22. One day Seminar on **“Excelling in Academics through IEEE”** Jointly organized by Library and Information Centre and BLDEA's CET IEEE student branch, BLDEA's V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur on 2<sup>nd</sup> February 2018.
23. One Week Faculty Development Programme on **“Usage of ICT Tools ”** organized by Dept. of Computer Science & Engineering, BLDEA's V.P. Dr.P.G.Halakatti College of and Technology, Vijayapur from 29<sup>th</sup> Jan 2018 -3<sup>rd</sup> Feb 2018(Awarded with A+ Grade).
24. All India Workshop on **Applications of MATLAB in Research** Jointly organized by Institute of Engineer India & Dept. of Information Science & Engineering, BLDEA's V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur from 24<sup>th</sup> April 2017 -30<sup>th</sup> April 2017.
25. One day Seminar on **“Recent Trends in Information and Communications Technology”** (RTICT-2017) at Dept. of Computer Science, Gulbarga University, Gulbarga, on 6<sup>th</sup> Jan. 2017.
26. One Week Faculty Development Programme on **“ Research Literacy and Trends in Scholarly Communications”** Jointly organized by Library and Information Centre & Dept. of Civil

Engineering, BLDEA's V.P. Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur from 23<sup>rd</sup> Jan to 28<sup>th</sup> Jan 2017.

27. One day Workshop on "ISRO Satellite Remote Sensing based Societal Applications on the Web", organized by Dept. of Civil Engg., BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur, on 30-08-2016.
28. One day Seminar on "Pledge for Parity", organized by Dept. of Civil Engg., BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur, on 08-03-2016.
29. Two days National Workshop on "Trends in Research Publications" Jointly organized by Library and Information Centre & Dept. of Mechanical Engineering, BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur during 12<sup>th</sup> to 13<sup>th</sup> April 2016.
30. ISTE approved One Week STTP on "Recent Advances in Electronics and Communication" at Dept. of Electronics and Communication and Engineering, BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur, during 4<sup>th</sup> to 9<sup>th</sup> April 2016.
31. One day workshop on "Pledge for Parity" at Dept. of Civil Engineering, BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur on 8<sup>th</sup> March 2016.
32. Four months online course on "Introduction to Computer Programming" organized by Dept. of Computer Science and Engineering, IIT, Bombay during 16<sup>th</sup> July 2015 to 21<sup>st</sup> December 2015.
33. One day workshop "Patents and Various Intellectual Properties" at Institute Research&Development cell, at BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Vijayapur, on 1<sup>st</sup> Aug. 2015.
34. One day workshop on "Counselling and Stress Management" at Dept. of Computer science and Engineering, BLDEA's V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur on 29<sup>th</sup> July 2015.

35. One Week Faculty Development Programme on “Research Methodology and Issues” at Dept. of Computer science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur during 8<sup>th</sup> to 12<sup>th</sup> June 2015.
36. UGC sponsored National Workshop on “Recent Developments in Digital Image Analysis” (RDDIA-2014) at Dept. of Computer Science, Gulbarga University, Gulbarga, on 30<sup>th</sup> May 2014.
37. One day workshop “Sarvotumukhi” on the eve of World Women’s Day, at BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur, on 8<sup>th</sup> Mar. 2014
38. One day workshop on “SHE- Stree Holistic Empowerment” at Dept. of Computer science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur on 16<sup>th</sup> March 2013.
39. Two days “Orientation Programme for Academic Counsellors” at IGNOU Regional Centre, Bijapur, during 9-10 March 2013.
40. One day Seminar on “Recent Advances in Computer Applications” at Dept. of Computer science, Karnataka State Women’s University, Bijapur, on 27<sup>th</sup> February 2012.
41. UGC sponsored National Workshop on “Research Methodology in Computer Science” at Dept. of Computer Science, Gulbarga University, Gulbarga, on 29<sup>th</sup> March 2012.
42. Two days workshop on “ LaTeX and its Pratical Approach” at Dept. of Computer science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur during 5-6 May 2012.
43. Workshop on “Art of writing a Technical paper, its publication and Emotional Engineering ” at A.G.Patil College of Engineering and Technology, Sholapur on 6<sup>th</sup> September 2010.

44. Two Days Workshop on “Aerospace Science and Technologies” conducted as part of AEROFEST 2010 jointly organized by CSIR-National Aerospace Laboratories, Bangalore and BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering and Technology, Bijapur during 19-21 Feb. 2010.
45. Three Days Workshop on “Research Methodologies and Report Writing” at GIT Belgaum 20organized by VTU e-learning centre, 25-26 May 2009.
46. STTP on “Estimation of System Parameters by Inverse Modelling” , at Department of Civil Engineering BLDEA’s Dr. P.G.Halakatti Engineering College, Bijapur, 16-20 March 2009.
47. Seminar on “Women Empowerment and Personality Development ”, at BLDEA’s Dr. P.G.H. Engg, college, Bijapur, on 4<sup>th</sup> March 2009.
48. International Conference on Systematics, Cybernetics and Informatics – 2009,at Hyderabad, Andhra Pradesh, India, 7-10 January 2009.
49. National Women’s Science Congress-2008, at Bijapur, Karnataka,7-9 November 2008.
50. IBM Academic Initiative -2008, at Bijapur,Karnataka, 2-3 May 2008.
51. Second International Conference on Cognition and Recognition 2008, at Mysore , Karnataka, India, 10-12 April 2008.
52. International Conference on Computational Intelligence and Multimedia Applications 2007, at Sivakasi, Tamilnadu, India, 13-15 December 2007.
53. International Conference on Advances in Computer Vision and Information Technology – 2007 at Aurangabad, Maharashtra, , 28-30 November 2007.

54. IEEE International Conference on Signal and Image Processing 2006, at Hubli, Karnataka,India,7 – 9 Dec. 2006.
55. Pre-conference Tutorial session titled “Biometrics Technology and applications”, at BVB CET, Hubli, Karnataka, 7 – 9 Dec. 2006.
56. Pre-conference Tutorial session titled “ Level sets theory and applications to image analysis”, at BVB CET, Hubli, Karnataka, 7 – 9 Dec. 2006.
57. Workshop on MATHEMATICAL Tools for Engineering Analysis-MATHEA at BVB CET , Hubli, Karnataka,10-12 Mar.2006.
58. International Conference on Cognition and Recognition 2005, at Mysore, Karnataka,India,22-23 Dec. 2005.
59. Workshop on “Digital Image Processing”, at BVB CET, Hubli, Karnataka, India, 16-21<sup>st</sup> Aug. 2005.
60. STTP on “Software Testing, Quality and Performance Engineering” at MSRIT, Bangalore, Karnataka,India, 20<sup>th</sup> Jan– 31<sup>st</sup> Jan. 2003.
61. Workshop on “OOPS WITH C++”, at SDM CET, Dharwad , Karnataka,India,12<sup>th</sup> Nov.2000.

***List of Courses (Subjects) taught:***

**B.E.(CSE) :**

- 1) Data Structure with C/C++
- 2) Object Oriented Programming with C++
- 3) Database Management Systems
- 4) Artificial Neural Network
- 5) Analysis and Design of Algorithms
- 6) Information and Network Security.
- 7)Data Structures and Applications

**M.Tech(CSE):**

- 1) Information Security
- 2) Cloud computing
- 3)Advances in Digital Image Processing
- 4)Internet of Things (IOT)

***List of UG projects Guided:***

Sl. No.	Project Title	Year
1	Medical appointment scheduler	2009-10
2	3D Chess Play	2009-10
3	Noise Removal Techniques in Medical Ultrasound Images	2009-10
4	Desktop email client module	2010-11
5	Internet Usage Control and Monitoring Tool in Network	2010-11
6	Implementation of Hierarchical Clustering Algorithm	2012-13
7	E – Attendance	2015-16
8	Route Saver	2015-16
9	Key Aggregate Searchable Encryption for Group Data Sharing via Cloud Storage	2016-17
10	Human Computer Interaction using Hand Gestures and color bands	2017-18
11	IOT based health monitoring system	2018-19
12	Rainfall Prediction	2019-20
13	Predicting Diabetes Mellitus with Machine Learning Techniques	2020-21

***List of PG projects Guided:***

Sl. No.	Project Title	Year
1	Identification of Cysts in Medical Ultrasound Images of Ovary	2013-14
2	Adaptive Data Hiding using Cluster based PVD and LSB	2013-14
3	Identification of Kidney in Medical Ultrasound Images	2013-14
4	Abnormality Detection in Kidney Ultrasound Imaging	2014-15
5	Data Encryption using DNA Technique	2014-15
6	E-Seva for LPG and Water Bottle delivery	2015-16
7	Digitization of ECG Paper Records	2016-17
8	Voice Signal Synthesis Using Non Negative Matrix Factorization	2016-17
9	IOT based Home Security System	2018-19
10	Detection of Nerve in Ultrasound Images	2019-20
11	Alzheimer Disease Detection	2020-21