Faculty Profile

Personal Information

- **Name:** Dr. Veenadevi S V
- **Designation:** Associate Professor
- **Department:** Electronics and Communication Engineering]
- **Email:** veenadevi@rvce.edu.in
- **Phone:** -

ORCID: 0000-0001-9003-4033
Google Scholar: https://scholar.google.com/citations?user=us08TgQAAAAJ&hl=en

Domain of Expertise: Image and Signal Processing

Research Focus

- **Primary Area:** Signal and Image Processing, Bio medical Signal Processing.

Academic Qualifications

- **Ph.D.**: Electronics , Kuvempu University, 2015
- **M.Sc./M.Tech**: Biomedical Instrumentation, VTU, 2002
- **B.E./B.Tech**: Instrumentation Technology, Mysore, 1998

Professional Experience

Experience			
S.No	**Institute/College/Industry**	**Job Title**	**Duration (From- To)**
1.	RVCE	Associate Professor Assistant Professor Lecturer	06-08-2016 – till date 11-10 - 2010 – 05-08-2016 28-02-2005 – 10-10-2010
2.	VKIT,Bangalore	Lecturer	2004 to 2005
3.	MVJCE,Bangalore	Lecturer	2003 to 2004
4	SJCE, Mysore	Visiting Faculty	2002 to 2003

Publications & Patents

Journal Publications

International Journals: 26

1. Sowmya Nag, Veenadevi, "Precised Cashew Classification Using Machine Learning", Published in Engineering Technology and Applied Science Research, Vol. 14, No. 5, 2024, 17414-17421, October-2024 (Q2 Journal and Scopus Indexed) DOI: https://doi.org/10.48084/etasr.8052.

2. Sowmya Nag, Veenadevi , "Implementation and Assessment of New Hybrid Model for Cashew Kernel Classification", Published in International journal of intelligent systems and applications in Engineering, Vol. 12 -No. 3, ISSN: 2147-67992, 2024(Q3 Journal and Scopus Indexed). DOI: https://ijisae.org/index.php/IJISAE/article/view/5984.

3. Padmavathi, Veenadevi "An Automated Embedded Distribution of Deep Learning Heart Disease Identification System Using ECG Signal", International Journal of INTELLIGENT SYSTEMS AND APPLICATIONS IN ENGINEERING (Q3), pp.15 – 26, Jan 2024, ISSN: 2147-67992.

4. Sowmya Nag, Veenadevi , "Deep Learning Based System for of Grading Cashew Kernels", Published in International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 8 – Issue No. 6, ISSN: 2582-3930, June-2024 DOI: https://doi.org/10.55041/IJSREM35658.

5. Padmavathi, Veenadevi, "Whole And Split Classification Of Cashew Kernels Using Hybrid Machine Learning Algorithm", JXAT,Issue-11, pp-248-257,2024(Q2 Journal),
DOI:https://doi.org/10.37896/JXAT16.11/35115

6. Padmavathi, Veenadevi , "Hybrid Learning Approach for Automated Identification and Categorization of Cardiovascular Disorders", International Journal of Electrical and Electronics Research, volume 12, issue 4, 2024, pp. 1301-1323, DOI: https://doi.org/10.37391/IJEER.120423

7. Sowmya Nag, Veenadevi , "Classification in Cashew Grading System: A Systematic Review", Published in International Journal of Computer Applications, vol-185-No.25, July 2023(Scopus Indexed), DOI: https://doi.org/10.5120/ijca2023923004

8. Sowmya Nag, Veenadevi , "Classification of Cashew Kernels into Wholes and Splits using Machine Vision Approach", Presented in International Conference on Recent Trends in Science and Technology-2023, Published in Journal of Propulsion Technology, Vol. 44 -No. 5, ISSN: 1001-4055, 2023(Q3 Journal and Scopus Indexed) DOI: https://doi.org/10.52783/tjjpt.v44.i5.3013

9. Sowmya Nag, Veenadevi, "Classification of Cashew kernels into Wholes and Splits using Machine Vision Approach", Journal of Propulsion Technology, ISSN: 1001-4055, Vol. 44, No. 5, pp. 2668 – 2680, Oct 2023.

10. Veenadevi et al, "Test Development for Power Management Integrated Circuit", RV Journal of Science of Technology (RVJSTEAM), Vol 4, Issue 1, pp. 66 - 76, Jan 2023, ISSN 2582 – 8819.

11. Veenadevi et al, "Speech Signal Enhancement Using Signal-Vector Analogy", Journal of Emerging

Technologies and Innovative Research (JETIR), JETIR June 2022, Volume 9, Issue 6, ISSN-2349-5162.
12. Veenadevi et al, "Improvement in Speed of Hardware Adaptive Filter", RV Journal of Science of Technology (RVJSTEAM), Vol 2, Issue 2, pp.31-38, July 2021, ISSN 2582 – 8819.
13. Veenadevi et al, "Rice Crop Yield Prediction using Recurrent Neural Networks", International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, Volume: 07 Issue: 07, July 2020.
14. Padmavathi, Veenadevi, "Heart Disease Recognition from ECG Signal Using Deep Learning", International Journal of Advanced Science and Technology, Vol. 29, No. 5, pp. 2303 - 2316, Scopus Indexed, May 2020, ISSN: 2005-4238.
15. Padmavathi, Veenadevi ,"An Optimized FPGA Based System Design for the Atrioventricular Block Detection Using ECG Signals" in the Scopus indexed Indian Journal listed in UGC care list, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-1, pp 2808-2818, November 2019, DOI: 10.35940/ijitee.J9420.119119.
16. Padmavathi, Veenadevi, "An Automated Detection of CAD Using the Method of Signal Decomposition and Non Linear Entropy Using Heart Signals" International Journal of Image, Graphics and Signal Processing, volume 11, issue 2, pp. 30-39, 2019.
DOI:10.5815/ijigsp.2019.02.04. https://doi.org/10.5815/ijigsp.2019.02.04
17. Veenadevi, et al., "An Automated Approach for the Detection of Laryngeal Cancer Based on Analysis of Voice Signal International Journal of All Research Education and Scientific Methods (IJARESM)", ISSN: 2455-6211 Volume 8, Issue 12, pp. 126-136, December-2020.
18. Veenadevi et al, "Saliency Map Generation", International Journal of Advanced Research in Computer and Communication Engineering, ISSN (Online) 2278-1021 ISSN (Print) 2319 5940, ISO 3297:2007 Certified Vol. 6, Issue 5, pp. 282 – 285, May 2017.
19. Veenadevi et al, "A Hybrid Approach Based on Texture Feature Analysis in CT Images", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (An ISO 3297: 2007 Certified Organization), Vol. 5, Issue 7, ISSN (Print) : 2320 – 3765 ISSN (Online): 2278 – 8875, pp.6152 – 6158, July 2016.
20. Veenadevi et al, "Efficient Design of a Low power DCT Processor using CORDIC Algorithm for Image Compression/Decompression", International Journal of Engineering Technology, Management and Applied Sciences, vol.3, Issue 5, May 2015, pp.345-350.
21. Veenadevi et al, "Low Power Array Multiplier using Modified GDI Cell for Full output swing", International Journal of Advanced Research in Computer and Communication Engineering, l Processing, Vol. 4, Issue 4, April 2015, pp. 656-658.
22. Veenadevi, A G Ananth "Fractal Image Compression of Satellite Color Imageries Using Variable Size of Range Block", International Journal of Image Processing (IJIP), Vol. 8, Issue 1, PP. 1 - 8, 2014.

23. Veenadevi et al, "Design of Multicopter Test Bench", International Journal of Modelling and Optimization, Vol.3, No.3, PP.251-255, June 2013.

24. Veenadevi, A G Ananth, "Fractal Image compression of Satellite Imageries using Domain Pool Classification Technique", International Journal of Graphics & Image Processing (IJGIP), Vol. 2, Issue 3, PP. 229 – 232, Aug. 2012.

25. Veenadevi, A G Ananth , "Fractal Image Compression using Quadtree Decomposition and Huffman Coding", International Journal of Signal & Image Processing (SIPIJ), Vol. 3, No. 2, PP.207 – 212, April 2012.

26. Veenadevi, A G Ananth, "Fractal Image Compression of Satellite Imageries", International Journal of Computer Applications (IJCA), ISSN 0975 – 8887, Vol. 30, No. 3, PP. 33 – 36, Sep. 2011.

International Conferences: 13

1. Madhumathi K, Veenadevi S V, ' Design of UDS Protocol in an Automotive Electronic Control Unit", IEEE Conference on Recent Developments in Electronics and Communication Systems, pp. 255 – 262, 2023, doi:10.3233/ATDE221266.

2. Apeksha Deshpande, Veenadevi S V," Test Automation and Continuous Integration using Jenkins for Smart Card OS", IEEE 12th ICCCNT, IIT Kharagpur, July 6 – 8, 2021.
3. Abhishek, Veenadevi.S.V, "Tracking Targets Using Digital Beamforming", IEEE 11th ICCCNT, IIT Kharagpur, July 1 – 3, 2020.

4. Veenadevi S. V., Padmavathi C, Shanthamma B., Balaji Govindraj Abbigeri, Pavithra K. M,"Extraction of Fetal Electrocardiogram from Maternal Electrocardiogram and Classification of Normal and Abnormal Signals", IEEE 2nd International Conference on Signal and Image Processing , PP.396 – 401, Singapore, August 4 – 6, 2017.

5. Pooja. K. Jadhav,Sampath Dakshinamurthy,Veena Devi, "Variable Length Ring Oscillator – HDL Implementation, a Case Study", IEEE international Conference On Recent Trends In Electronics Information Communication Technology, PP. 1- 4, May 19-20, 2017, India.

6. Veenadevi.S.V and A.G.Ananth, "Fixed Range Block Segmentation and Classification for Fractal Image Compression of Satellite Imageries", IEEE International Symposium on Electronic System Design (ISED), NITK Suratkal, Mangalore, PP. 11 – 12, 15th to 17th December 2014.

7. Veenadevi.S.V and A.G.Ananth, "Fractal Image Compression of Satellite Imageries Using Moments and Variable Size Range Blocks", International Conference on Communication and Computing (ICCC), Elsevier, Bangalore, PP. 26 – 32, 21st to 23rd August 2014.

8. Veenadevi.S.V and Harish S.Velingkar, "Texture Reconstruction for Gray Scale Images using Error Reduction Algorithm and FFT Estimation", International Conference on Electrical and Electronics Engineering (ICEEE), ISBN 978-3-643-24819-03, Goa, PP. 7-12, May 2014.

9. Veenadevi.S.V and A.G.Ananth, "Fractal Image Compression of Satellite Imageries using Variable Size of Range Block", IEEE International conference on Signal and Image Processing Applications (IEEE ICSIPA), Malaysia, PP. 172 – 175, 8-10th October 2013.

10. Veenadevi.S.V and Praveen G, "Porting real time linux kernel to ARM core for interfacing data

acquisition in CDDU", International Conference on Recent Trends of Computer Science Engineering, PP.373-380, 2012.

11. Veenadevi.S.V and Praveen G, "Porting real time linux kernel to ARM core for interfacing data acquisition in clinical data display unit", International Conference on Recent Trends of Computer Technology in Academia, (0975-0979), 2012.

12. Veenadevi.S.V, Suma M.S, "Implementing Edge Detection by different algorithms in VHDL", Published in International conference on Frontier Technologies and Need for the Industry, Business and Education at Adhiyamaan College of Engg,Tamilnadu, India, PP.130-134, 6th -8th September. 2006.

13. Veenadevi.S.V, Suma M.S, "Coding and Optimization Technques for FPGA/ASIC designs", Published in International conference on Frontier Technologies and Need for the Industry, Business and Education at Adhiyamaan College of Engg, Tamilnadu, India, PP. 140-144, 6th -8th September. 2006.

National Conferences: 07

1. Veenadevi.S.V and Suma M.S, "Implementing Edge Detection in VHDL", RTEIT, National Conference at SRES's College of Engg, Kopargaon, PP. 121-125, July 28-29 2006.

2. Veenadevi.S.V and Suma M.S, "Implementation of Floating Point Arithmetic Unit in VHDL", RTEIT, National Conference at SRES's College of Engg, Kopargaon, PP. 106-110, 28th -29th July 2006.

3. Veenadevi.S.V and Suma M.S, "To make the Best Designs' in Front End ", IICA, CIT, Coimbatore, PP. 55-59, Feb 10-11 2006.

4. Veenadevi.S.V and Suma M.S, "Handling Multiple Clocks in a Design –II", Second National conference -Control Instrumentation System Conference , MIT, Manipal, PP. 360-364, 11-12 November 2005.

5. Veenadevi.S.V and Suma M.S, "Segmentation of MRI Brain Diseases", Second National conference Control Instrumentation System Conference, MIT, Manipal, PP. 221-224, 11-12 November 2005.

6. Veenadevi.S.V and Suma M.S , "Computer Based segmentation of MRI Brain Images", National Conference on Recent Trends in Information Technology at Sir M.VIT, Bangalore, PP. 31-35, 2-3 Aug 2005.

7. Veenadevi.S.V and Suma M.S, "Handling Multiple Clocks in a Design", National Conference on Recent Trends in Information Technology at Sir M.VIT, Bangalore, PP. 26-30, 2-3 Aug 2005.

Books/Book Chapters

1. Veenadevi S V, Sujatha Hiremath, Sowmya Nag K, Authored text Book "Control Systems" I.K. International Pvt Ltd, New Delhi, ISBN: 978-93-90620-70-8, Febraury 2022.

2. Veenadevi, Padmavathi, "Automated Detection of Defects and grading of Cashew Kernals Using Machine Learning", Computer Vision and Recognition Systems using Machine and Deep learning Approaches, IET, Scopus indexed, London, United Kingdom, March 2022.

Patents [Published]

Real Time Seriplane Test System for Inspecting Raw Silk Threads using AI", No.202441074738, Filling date: 03-10-2024, Published in Jan 2025.

R & D Grants & Consultancy Projects

Ongoing Completed Research Projects

1. Approved 14 Lakhs proposal on "Development of Automated Detection and Grading of Cashew Kernels using AI Approach, MSME, Feb 2024 – Feb 2026, Research Mentor.

2. Approved 12 Lakh proposal on "Studies on use of AI for Replacing Subjective Analysis of Seriplane test with Objective Analysis, Central Silk Board – CSTRI, Sep 2024 – Sep 2026, PI.

Professional Memberships

- IEEE, IETE, ISTE

Awards & Recognitions

1. Received Award of Appreciation faculty for the Extraordinary Achievements of the year 2024 on Annual Get together Jan 26th 2025 from RSST.
2. Received certificate of Appreciation Participated in Symposium cum Project Exhibition on Recent Advances in Engineering Science organized by S J C Institute of Technology in association with Karnataka Science and Technology Academy, Project titled "Weak Electric Field to Neutralize Virus in a Facemask", 19th July 2021.
3. Certificate of Honor for "Academic excellence through Research Publications" from RSST, Sep 9, 2008, ISTE-RVCE Chapter.
4. Best Teacher Award given by M.V.J.C.E, Bangalore in the year 2003 for the best Academic performance.

Student Supervision

Ph.D Students - 02

1.	Padmavathi.C	Application of transform domain based signal decomposition methods for the study and analysis of cardiovascular diseases.

		Status: Uploaded Final Thesis.
2	Sowmya Nag K	Development of Automated Detection and Grading of Cashew Kernels. **Status: PhD Degree Awarded.**

M.Tech Student:15
Undergraduate
Research : 30

Professional Roles

- **Track Chair:** IEEE International Conference for Women in Innovation, Technology and Entrepreneurship (ICWITE) 2025.

Teaching

Core Courses: [Current semester]

- EC244AI , Signals and Systems
- EC364TA, DSPML

Advanced/Lab Courses:

- Signals and Systems

Professional Roles

Responsibilities

- **Academic:** UG – Major, Minor and interdisciplinary coordinators, NBA Coordinator.
- **Administrative:** AMC, AAC, Signals and Systems Lab Incharge.