

# Malnad College of Engineering, Hassan

(An Autonomous Institute, Affiliated to V.T.U, Belagavi)

## Faculty Profile

**Name** : Dr. Ravikiran H.K  
Professor,  
Department of Electronics & Communication Engg.,  
Malnad College of Engineering,  
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### Educational profile:

- Ph.D. in Electrical & Electronics Engineering Science, VTU, Belgaum, 2020.
- Master of Technology in Digital Electronics and Communication system, MCE, Hassan, 2010.
- Bachelor of Engineering, Electronics and Communication Engineering, S.J.C.I.T, Chickballapur, 2008.

### Profession Experience:

	Teaching UG/PG	From	To	Institution
1.	Lecturer	26-07-2010	31-08-2012	Rajeev Institute of Technology, Hassan
2.	Assistant Professor	1-09-2012	31-03-2021	
3.	Associate Professor	1-04-2021	22-03-2022	
4.	Associate Professor	23-03-2022	31-03-2025	Navkis College of Engineering, Hassan
5.	Professor	1-04-2025	24-07-2025	
6.	Professor	25-07-2025	Till Date	Malnad College of Engineering

### List of Papers Published in International Journals:

1. Ravikiran, H. K et al., "Hybrid VGG16-Xception Model vs. Single Architecture Transfer Learning for Flower Image Classification." International Journal of Horticultural Science and Technology (2025): 323-342. (**Scopus**)
2. Ravikiran, H. K et al., "A robust framework for Alzheimer's disease detection and staging: incorporating multi-feature integration, MRMR feature selection, and Random Forest classification." Multimedia Tools and Applications (2024): 1-29. (**SCI, Scopus**)
3. Ravikiran, H. K et al., "Classification of Crop Across Heterogeneous Landscape Through Experienced Artificial Bee Colony." SN Computer Science 5, no. 4, 428, 13 April 2024. (**Scopus**)
4. Ravikiran, H. K et al., "Optimizing Sheep Breed Classification with Bat Algorithm-Tuned CNN Hyperparameters", SN Computer Science, 5(2), 219, 20 January 2024. (**Scopus**)

5. Ravikiran, H. K et al., "Optimized Deep Learning Model for Flood Detection Using Satellite Images", Remote Sensing, 15, no. 20, 5037, 20 October 2023. **(SCI, Scopus)**
6. Ravikiran, H. K et al., "Classification of Crops through Self-Supervised Decomposition for Transfer Learning", Journal of Aridland Agriculture, Volume 9, 81-91, 17 October 2023. **(Scopus)**
7. Ravikiran, H. K et al., "Gain Enhanced 2.4 GHz Slotted Rectangular Microstrip Patch Antenna with FR-4 Epoxy Substrate", Journal of Microwave Engineering & Technologies, Volume 10, Issue 1, 2023.
8. Ravikiran, H. K et al., "Comparison of Different Image Fusion Algorithm on Remote Sensed Data", Genesis Global Publication, Volume 4, Issue no 3, Pages 78-783, March 2023.
9. Ravikiran, H. K et al., "VQ-Codebook Enhancement using HGAPSO Algorithm", International Journal of Research Publication and Reviews, Vol 4, no 3, pp 808-812, March 2023.
10. Ravikiran, H. K et al., "2.4 G HZ Miniaturised Rectangular MPA with Defected Ground and Patch". International Journal of Engineering Applied Sciences and Technology, Vol. 7, Issue 9, ISSN No. 2455-2143, 7. 167-170, January 2022.
11. Ravikiran, H. K et al., "Design and Analysis of Sixth-Generation (6G) Microstrip Patch Antenna", SN Computer Science 4, no. 2,153, 11 January 2023. **(Scopus)**
12. Ravikiran, H. K et al., "Antenna Gain Improvement for Wi-Fi Applications Using Parasitic Patch", SN Computer Science 4, no. 2 ,97, 17 December 2022. **(Scopus)**
13. Ravikiran, H. K et al., "Pyramid based Progressive Transmission System with Hybrid Compression Scheme for Medical Images", Springer Nature Computer Science 2:155, pp 155, March 2021. **(Scopus)**
14. Ravikiran, H. K et al., "An Effective Progressive Image Transmission using Superpixel based Saliency Detection and Modified SPIHT Compression Algorithm", International Journal of Engineering and Advanced Technology, Volume-9 Issue-2, December, 2019.
15. Ravikiran, H. K et al., "Neural Network and SPIHT Coding-Based Progressive Image Transmission & Reconstruction for Telemedicine Applications", Journal of Advanced Research in Dynamical and Control Systems, Volume-11, Special issue 4, pp 67-77. **(Scopus)**
16. Ravikiran, H. K et al., "Medical Image Compression using Neural Network with HGAPSO Optimization", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9, Issue-2, December 2019.
17. Ravikiran, H. K et al., "Performance Analysis of Biorthogonal Wavelet and SPHIT for Progressive Image Transmission and Reconstruction", International Journal of Emerging Technologies and Innovative Research, Vol.5, Issue 1, pp723-725, January-2018.

18. Ravikiran, H. K et al., "Design and Implementation of Haar Wavelet Transform and Stripe Logic Based Modified SPIHT Algorithm for Medical Imaging", International Journal of Engineering Development and Research, Volume 5, Issue 1, 2017.
19. Ravikiran, H. K et al., "Design and Implementation of strip based modified SPHIT algorithm for compression and decompression Using Verilog", International Research Journal of Engineering and Technology, Volume 3, Issue 7, pp 316-321, July 2016.
20. Ravikiran, H. K et al., "The Design of Circular Dielectric Resonator Antenna (CDRA) for Wideband Characteristics", International Journal of Electronics & Communication Technology, Volume 5, Issue 2, pp 210-212, April-2014.

#### **List of Papers Published in International Conferences:**

1. Ravikiran, H. K et al., "Enhancing Image Fusion via Optimized Bat Algorithm in Brovey Transform for remote Sensing Images", 2<sup>nd</sup> International Conference on Knowledge Engineering and Communication Systems" in SJCIT, Chickballapur, April 18<sup>th</sup> & 19<sup>th</sup> 2024. **(IEEE Conference, Scopus)**
2. Ravikiran, H. K et al., "Study on VGG16 Transfer Learning Model for Goat/Sheep Image Classification", ICRASET-2023, in BGSIT, Mandya, 23rd - 24th November 2023. **(IEEE Conference, Scopus)**
3. Ravikiran, H. K et al., "Grey level Image Contrast Enhancement using Hybrid BAT and moth flame Optimisation", ICRASET-2023, in BGSIT, Mandya, 23rd - 24th November 2023. **(IEEE Conference, Scopus)**
4. Ravikiran, H. K et al., "Hybrid Codebook Optimization Technique for Vector Quantization to Preserve the Quality of the Decompressed Image", In 2023 IEEE 4th Annual Flagship India Council International Subsections Conference (INDISCON), pp. 1-7. IEEE, 7 August 2023. **(IEEE Conference, Scopus)**
5. Ravikiran, H. K et al., "Design and ASIC Implementation of Automatic Detection of Military Targets Using Neural Networks", International Conference on Communication, Computation, Control and Nanotechnology (ICN- 2010), REC Bhalki, Karnataka, on October 29-30, 2010.

#### **List of Papers Published in National Conferences:**

1. Ravikiran H.K et al., "Performance Improvisation of Microstrip Patch Antenna for 2.4Ghz Wireless Application", 4<sup>TH</sup> National Conference on Communication & Data Science-2024, GSSSIETW, Mysuru, 25<sup>th</sup> April 2024.
2. Ravikiran H.K et al., "Performance Enhancement of Microstrip Patch Antenna", Proceeding of National Conference on Emerging Technologies in Engineering- NCETE-2023, NCE-Hassan, 12 May 2023.
3. Ravikiran, H. K et al., "Development of Security Device with Automation for Home Appliances", IJERT proceedings on National Conference on Communication and Data Science, GSSSIETW, on July 2020.
4. Ravikiran, H. K et al., Physical Design of Associative Memory Neural Network

for Military Target Detection”, National Conference on Communication and Networking, Department of Electronics and Communication Engineering, DBIT, Bangalore on 13<sup>th</sup> Oct 2010.

5. Ravikiran, H. K et al., “Merging The Coefficient in DWT for Image Fusion” (NCRTEC-2010), Department of Electronics and Communication Engineering, SJBIT, Bangalore, Karnataka, 8<sup>th</sup> May 2010.

#### **Patents:**

1. **“Tree Stem Based Antenna for 5G Wireless Application”**, Application No: **408868-001**, Status: **Awarded**.
2. **“Smart door lock system for Wardrobes”**, Application No: **373149-001**, Status: **Awarded**.
3. **“An Effective ROI Based Hybrid Progressive Medical Image Transmission and Reconstruction”**, Indian Patent, Published on 13/08/2021.

#### **Copyright:**

- **“Yield Prediction Algorithm Using Random Forest Algorithm”**, Indian Copyright (Submitted on 17/05/2022).

#### **Books:**

1. **“Unleashing IoT's Potential with NodeMCU: A Programming Perspective”**, Lambert Academic Publishing, June 2023.
2. **“Internet of Things for Beginner’s”**, Lambert Academic Publishing, May 2022.

#### **Book Chapter:**

- Ravikiran H. K et al., "A Hybrid Progressive Image Compression, Transmission, and Reconstruction Architecture", In Emerging Research in Electronics, Computer Science and Technology, Springer, Singapore, pp. 867-875. 2019.

#### **Awards/ Recognitions/ Academic Achievements**

- Best paper award in 4<sup>TH</sup> National Conference on Communication & Data Science-2024, for the paper “Performance Improvisation of Microstrip Patch Antenna for 2.4Ghz Wireless Application”, held at GSSSIETW, Mysuru, 25<sup>th</sup> April 2024.
- Served as a Session Chair at the IEEE conference ICRASET-2023.
- “Design and Fabrication of Microstrip Patch Antenna at 2.4 G Hz for Wireless Communication Application”, Funded by KSCST, IISC, Bengaluru, for the period of 6 Months with a grant of 6000/- in the year 2023.

- Has undergone Innovation Ambassador training “Foundation Level” conducted in online mode by MoE’s innovation cell & AICTE during the IIC calendar year 2021-2022.
- Coordinated “IP Awareness/ Training Program” under NIPAM organized by IIC-Navkis College of Engineering, on April 28<sup>th</sup> 2022-
- Worked as reviewer for Springer Nature Computer Science and IEEE International Conference.

I hereby declare that the above furnished information is true, to the best of my knowledge.



Signature