

Faculty Profile

Brief Profile (Few Paragraphs)

Faculty Photo

Personal Information

- **Name:** Dr. Shambulinga M
- **Designation:** /Assistant Professor
- **Department:** Department of Electronics and Telecommunication Engineering
- **Email:** shambulingam@rvce.edu.in
- **Phone:** 080-68188433

Google Scholar / ResearchGate / LinkedIn: [Link if applicable]/ **ORCID:** [Link]

Google Scholar: https://scholar.google.com/citations?user=sQ8J_74AAAAJ&hl=en

ORCID: <https://orcid.org/0000-0003-3895-278X>

Domain of Expertise

Research Focus

- **Primary Area:** RF and Microwave Circuits Designs, Communication, Image Processing
- **Allied Areas:**
 - 5G Communication, Wireless Communication, Antennas, Machine learning and Neural Networks

Academic Qualifications

- **Ph.D.:** [Electrical Engineering], [VTU], [2023] (*Thesis Title: Satellite Image Classification and Implementation using Neural Network*)
- **M.Tech:** [Digital Communication], [VTU], [2013]
- **B.E./B.Tech:** [Electronics and Communication Engineering], [VTU], [2011]

Publications

Journal Publications

1. Praveen H L, Yerriswamy Thatti, Puneeth Kumar T R, Shambulinga M, "High-gain circularly polarized metasurface antenna for NR257 band millimeter-wave 5G communication"

- Indonesian Journal of Electrical Engineering and Computer Science, Vol. 37, No. 2, February 2025, pp. 867-877. DOI: <http://doi.org/10.11591/ijeecs.v37.i2.pp867-877>
2. V. K. S. Rajanna, T. Venkatesh, P. K. Tharehalli Rajanna, and Shambulinga M, "Independently tunable metamaterial inspired compact triband dual-sense circularly polarized antenna," International Journal of Microwave and Wireless Technologies, vol. 17, no. 1, pp. 104–112, 2025. doi:10.1017/S1759078724001247
 3. Rajanna, Vinaya & Venkatesh, Thimmegowda & T R, Puneeth & Shambulinga, Mudukavvanavar. (Feb-2024). A Triband Slot Antenna Loaded with Asymmetric Split Ring Resonator for Wireless Applications. Progress In Electromagnetics Research Letters. 117. 61-67. 10.2528/PIERL23110101.
 4. Shambulinga M and G. Sadashivappa, "Hyperspectral Image Classification using Convolutional Neural Networks" International Journal of Advanced Computer Science and Applications(IJACSA), 12(6), 2021. <http://dx.doi.org/10.14569/IJACSA.2021.0120682>
 5. Shambulinga M and G. Sadashivappa, "Supervised Hyperspectral Image Classification using SVM and Linear Discriminant Analysis" International Journal of Advanced Computer Science and Applications(IJACSA), Vol. 11(10), 2020. <http://dx.doi.org/10.14569/IJACSA.2020.0111050>
 6. Priyanka P. N., Shambulinga M., "Design and Simulation of 8W GaN HEMT Power Amplifier for Telemetry Applications", International Journal of Advanced Science and Technology, ISSN: 2005-4238, Vol. 29, no. 3, pp. 14474 - 14489, Sep. 2020. <http://sersc.org/journals/index.php/IJAST/article/view/31933>
 7. Pratiksha R Matalawar, Shambulinga M, Poornima R, "Design And Development Of S-Band Power Amplifier Module For Satcom Manpack Terminal", International Journal of Scientific and Technology Research, ISSN: 2277-8616, Vol. 09, Issue. 08, Aug 2020. <https://www.ijstr.org/paper-references.php?ref=IJSTR-0820-40572>
 8. Shambulinga M and G. Sadashivappa, "Hyperspectral Image Classification using Support Vector Machine with Guided Image Filter" International Journal of Advanced Computer Science and Applications(IJACSA), ISSN: 2156-5570, Vol. 10(10), Oct-2019. <http://dx.doi.org/10.14569/IJACSA.2019.0101038>
 9. Krishna Prasad S, Shambulinga M, " Design of Class F Power Amplifier for 2.4 GHz using Third Harmonics", International Journal of Recent Technology and Engineering, ISSN: 2277-3878, Volume 8, Issue 3, Sept 2019.
 10. AkshataRakkasagi, Shambulinga M, Manjunath R K, "Building Low Cost Coupler: Made Easy", International Journal of Advance Engineering and Research Development, Volume 1, Issue 8, Sept-2014.
 11. Shambulinga M, T. C Thanuja, N Ramanathan, "Tone Mapping of HDR Image for LDR Display Using Guided Image Filter", International Journal of Scientific & Engineering Research (IJSER), ISSN 2229-5518, Volume 4, Issue 6, June-2013.
 12. Conference Papers
 13. P. C. Metri, M. Shambulinga and U. Kumar Gowda, "Design and Simulation of RF Front End Receiver Mixer for 5G NR Application," 2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON), Bangalore, India, 2022, pp. 1267-1272, doi: 10.1109/MAPCON56011.2022.10047420. <https://ieeexplore.ieee.org/abstract/document/10047420>

14. Vishnu. R, Shambulinga. M and S. Hari, "Design of Active Frequency Multiplier for X-Band Radar Application," 2022 6th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India, 2022, pp. 1-6, doi: 10.1109/CSITSS57437.2022.10026360. <https://ieeexplore.ieee.org/document/10026360>
15. Shreelakshmi. V and Shambulinga. M, "Design and Simulation of a Low-Noise Amplifier for Radar Application at 5 GHz Frequency Band," 2022 6th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India, 2022, pp. 1-6, doi: 10.1109/CSITSS57437.2022.10026374. <https://ieeexplore.ieee.org/document/10026374>
16. K. Pruthwi, M. Shambulinga, P. Ullas and R. K. Dora, "Design and Simulation of X-Band Transmitter Chain for Radar Application," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 135-140, doi: 10.1109/RTEICT52294.2021.9573669 <https://ieeexplore.ieee.org/document/9573669>
17. N. Paramesh, B. H. Yashodha, R. K. Samminga and M. Shambulinga, "Printed Reflect Array Design for SAR Applications," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2021, pp. 395-400, doi: 10.1109/RTEICT52294.2021.9573653. <https://ieeexplore.ieee.org/document/9573653>
18. S. C. Havanur, M. Shambulinga and H. V. Manjunatha Reddy, "Performance Analysis of Substrate Integrated Waveguide H-Plane Horn Antenna," 2020 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), Bangalore, India, Nov-2020, pp. 69-73, doi: 10.1109/RTEICT49044.2020.9315639 <https://ieeexplore.ieee.org/document/9315639>
19. V. Dan, K. V. Vinay and M. Shambulinga, "Evaluation of RFID Anti-Collision Protocols Using Java Based Tool," 2020 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), Bangalore, India, Nov-2020, pp. 173-176, doi: 10.1109/RTEICT49044.2020.9315563 <https://ieeexplore.ieee.org/document/9315563>
20. Jyotsna Kumbar, Shambulinga M, "Mifare reader system for Smart Fuelling", in Proceedings of IEEE International conference on Intelligent computing and control, I2C2'17, Karapagam College of Engineering, Coimbatore, 23rd and 24th June 2017.
21. Shambulinga M. and G. Sadashivappa, "Satellite image classification technique- survey", in the proceedings of International conference on Emerging Trends in Computer, control and communication Technologies, Pune, 27th-28th August 2016.
22. ManikalaNagababu, R.K.Manjunath, and Shambulinga M, "4x4 Dual beam microstrip antenna array for Terrestrial Applications " in Proceedings of IEEE International Conference on Innovations in Information, Embedded and Communication Systems, ICIIECS-16, Karapagam College of Engineering, Coimbatore, 17th and 18th March 2016.

Professional Memberships

- IEEE

Student Supervision

- **M.Tech Students:** [24]

- **Undergraduate Research Mentees:** [10]

Teaching

Core Courses: [Current semester]

- [ET345AT] [Principles of Electromagnetics]

Advanced/Lab Courses:

- [Antenna and Propagation Lab]

Professional Roles

Responsibilities

- **Academic:** SAP Coordinator

External Connect

- Member of BoE