

**Name** **Dr.S.N.Nisha Rani**

Designation Assistant Professor/ECE

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- **Research Area**: Wireless Communication & Machine Learning

- **Educational Qualifications**:

| Qualification | Department | Year (From -To) | Percentage | Class |
|---|---|---|---|---|
| Ph.D | Information and Communication | July 2015-june 2021 | - | - |
| M.E. | Communication Systems | 2007-2009 | 8.59 | First Class With Distinction |
| B.E. | Electronics and Communication Engineering | 1998-2002 | 84.8 | First Class With Distinction |

- **Experience: ( 19 Years 11 Months )**

| Name of Company / Institutions | Designation of Post | From | To | Experience in Year |
|---|---|---|---|---|
| | | DD-MM-YYYY | DD-MM-YYYY | |
| Syed Ammal Engineering College, Ramanathapuram | Lecturer | 02.12.2002 | 13.06.2007 | 4 Years 6 months,12 Days |
| Fatima Michael College of Engineering, Madurai | Assistant Professor | 15.12.2010 | 10.01.2018 | 7 year 27 Days |
| Fatima Michael College of Engineering, Madurai | Associate Professor | 11.01.2018 | 31.01.2019 | 1 Year 21 Days |
| Fatima Michael College of Engineering, Madurai | Professor | 01.02.2019 | 01.12.2025 | 6 Year 10 Months |
| University College of Engineering,Ariyalur | Assistant Professor | 02.12.2025 | Till date | 5 Months |

- **Additional / Academic Responsibilities at University:**
  **Class Advisor for III ECE**
  **Naan Mudhalvan Incharge for III ECE (Batch 2027)**

- **Professional Activities:**
  - Life time member in IETE (AM158548)
  - Life time member in ISTE (LM7792)
  - Life time member in IE(I) (M-1543967)

- **Completed B.E/M.E Projects: B.E. Projects :2**
  - **Smart Noise Intelligence System using real world Speech Communication.**
  - **A Cloud integrated smart energy meter for real time power monitoring.**
- **Sponsored Research Activities: Nil**

- **List of Seminar / Short Term Course /FDP/ Workshop attended: (Within India)**

1. Completed NPTEL Course on the topic of Signal Processing techniques and its application during Jan 2026 –April 2026 Session.
2. Attended Faculty Development program on Teaching methods during 04.12.2205 and 05.12.2025 in IIT Madras, Chennai.

- **International Conferences Participated:**

  - P. T. Sivagurunathan, A. Sathiya, P. V. Kumar, **S. N. N. Rani**, S. C and C. Vanaja, "Behavioral Analysis of Cognitive Radio Network Users for Malicious Activity Detection," *2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS)*, Gobichettipalayam, India, 2024, pp. 1543-1548, doi: 10.1109/ICUIS64676.2024.10866395. **IEEE Xplore (Scopus Indexed).**
  - Rajalakshmi, J., &**Nisha Rani, S. N.** (2024, July 9). *Utilizing artificial neural networks for intelligent battery energy storage control in microgrid energy management*. *E3S Web of Conferences, 547*. International Conference on Sustainable Green Energy Technologies (ICSGET 2024).**(Scopus Indexed)**

- **Nisha Rani, S. N.,** et al. (2023, April 11–12). CatBoosting advanced ensemble machine learning techniques to predict heart disease. In Proceedings of the 4th International Conference on Management, Education and Emerging Technology (MEET 2023),**Philiphines.**
- S. Hameetha Begum and **S. N. Nisha Rani,**"Model Evaluation of Various Supervised Machine Learning Algorithm for Heart Disease Prediction," 2021 International Conference on Software Engineering & Computer Systems and 4th International Conference on Computational Science and Information Management (ICSECS-ICOCSIM), Pekan, **Malaysia,** 2021, pp. 119-123, doi: 10.1109/ICSECS52883.2021.00029**(Scopus Indexed)**
- **Nisha Rani, S. N.**, & Sridevi, B. (2020, March 6–7). *A comparative analysis of pulse shaping filtering in FBMC – waveform technique for 5G Radio Access Network (RAN).* Paper presented at the *International Conference on Recent Advances in Computing and Electronics (ICRACE 2020)*, Velammal Institute of Technology, Chennai
- **Nisha Rani, S. N.**, & Sridevi, B. (2019, January 3–5). *FBMC – An eminent waveform technique for 5G Radio Access Network (RAN).* Abstract published in *Souvenir of the International Conference on Advances in Information, Signal Processing and Communication (AISGSC 2019)* (p. 28). PSG College of Technology, Coimbatore.
- **Nisha Rani, S. N**., & Sridevi, B. (2018, March 8–9). *Analyzing the frequency offset of MC-CDMA system using M-ary PSK constellation and eye diagram under Rayleigh fading channels*. In *Proceedings of the International Conference on Advanced Innovations in Communications (ICAIC 2018)* (pp. 349–353). Karpagam College of Engineering, Coimbatore.
- **Nisha Rani, S. N**., & Sridevi, B. (2018, April 17). *Overview of frequency synchronization in OFDM system.* Paper presented at the *International Conference on Advanced Computing Technologies (ICACT 2018)*, Velammal Institute of Technology, Chennai.

## ➢ Publications :

### a. International Journals:

1. **S.N.NishaRani**,A.Asiya Mariam,M.Roseline Juliana,K.R.Ramela,Multi-Task Learning at the Mobile edge: An effective way to combine traffic classification and prediction,International Journal of latest technology in Engineering Mangement & Applied science:Vol.14 No 7(2025): Volume XIV Issue VII July 2025.

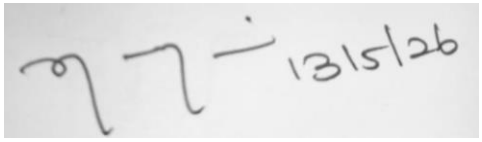
2. **S. N. Nisha Rani,** R. Nagadeepa, P. Jebane, M. Elayaraja. (2025). A Two-Stage Deep Learning Framework for Automated Glaucoma Detection Using U-Net and CNN Ensembles. International Journal of Electronics and Communication Engineering and Technology (IJECET), 16(2), 36–59.
3. **Rani, S. N.** N., Nagadeepa, R., Jebane, P., & Rajadurai, C. (2025). Image processing based automated smart sericulture. Industrial Engineering Journal, 54(2), Article No. 2. ISSN: 0970-2555.UGC Care Journal 2025
4. A. Vijayaprabhu , **Dr. S.N. Nisha Rani** , M. Diana Amutha Priya and M.Thayagarajan' Design and Fabrication of Low-Profile Printed Embroidered Wearable Textile Antenna Using Jean Fabric for IoT Applications', Industrial Engineering Journal ISSN: 0970-2555 Volume 15 Issue 12,PP 1031-1041, **2022**
5. Nisha Rani, S. N., & Sridevi, B. **(2020).** A comparative analysis of pulse shaping filtering in FBMC - waveform technique for 5G radio access network (RAN). International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET), 1(4), 210-215.
6. **Nisha Rani S N**, Dr.B.Sridevi, "Estimation of Carrier frequency offset for FBMC/OQAM by using Modified KalmanFiltering", International Journal of Communication System Int J Commun Syst. **2020;**Volume 33,Issue 16, e4579, pages 1-10,https://doi.org/10.1002/dac.4579 Anna University Annexure Journal(Online Wiley Library)SCI Journal
7. **Nisha Rani S N**, Dr.B.Sridevi,2018,' Overview of frequency synchronization in OFDM System', International Journal of Pure and Applied Mathematics , IJPAM,ISSN 1314 -3395,Volume 119,No12 **2018**,Special issue pp14531-14535 Scopus Indexed Journal in year 2018,pgno 323,https://acadpubl.eu/hub/2018-119-12/issue12f.html

## ➢ Conferences

1. **Nisha Rani, S. N.** 2025. "Building a Machine Learning Powered Diagnostic System for Predicting Alzheimer Disease Using MOBILE NET Algorithm." Paper presented at Grace College of Engineering, Thoothukudi, May 14–15.
2. **Nisha Rani,S.N.,**et al.(2024,April 26-27).IOT based getting Automatic appointment order at GH in 11th International Conference on Emerging Trends in Engineering and Technology (ICETTET'24.

**DECLARATION:**

I CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT TO THE BEST OF KNOWLEDGE AND BELIEF.



DATE: 13.05.2026

Signature With date