



## **Dr. ROOPA M**

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**Dr. Roopa M** received her Ph.D. from Sathyabama Institute of Science and Technology, India. She is currently working as Associate Professor in SRM Institute of Science and Technology. She is Fellow member of IETE, New Delhi. Her research area of interest includes Wireless Communication, Mobile Ad Hoc Network, IoT and Wireless Networks. She has published several papers in high impact journals.

### **Areas of Research:**

Wireless Communication, Mobile Ad Hoc Network, and Wireless Networks , IoT

### **SCI PUBLICATIONS :**

1. S.Jagir Hussain & Dr.Roopa M ,“BE-RPL: Balanced-load and Energy-efficient RPL”, in Computer Systems Science & Engineering .no.1,vol.45.
2. Reshma Vengaloor & Dr.Roopa M “Deep Learning Based Semantic Segmentation Technique for Anomaly Detection on Metal Surfaces using High Calibre U- Shaped Network”, Traitment du Signal, Vol. 39, No. 6, December 2022.

### **WOS PUBLICATIONS:**

1. S.Mriudula & & Dr.Roopa M , MUD enabled deep learning framework for anomaly detection in IoT integrated smart building, Advances in Electrical Engineering, Electronics and Energy, Elseiver.
2. Dr.Roopa M et.al ,“Automated Gurney System: A new paradigm for Health monitoring system using Internet of Things”, International Journal of Future Generation Communication and Networking, Vol. 13, No. 3, Aug 01 (2020), pp. 3961–3970 3961 ISSN: 2233-7857, IJFGCN.
3. Reshma Vengaloor & Dr.Roopa M Smart Farming using Iot: The surveillance and regulation of agricultural Area, Bulletin of Environment, Pharmacology and Life Sciences.
4. Roopa M &Dr.Selvakumar Raja“Intelligent Intrusion Detection and Prevention System using Smart Multi-Instance Multi- Learning Protocol for Tactical Mobile Ad hoc Networks”, KSII Transactions on Internet and Information Systems, VOL. 12, NO. 6, 2895-2921, Jun. 2018. ISSN : 1976-7277
5. Roopa M &Dr. Selvakumar Raja “Artificial Neural Network Using Back Propagation Algorithm In Distributed Manets”, IEEE Explore, 25 July 2016.

## **SCOPUS PUBLICATIONS:**

1. Mirdula S, Dr Roopa M, “A constraint-based access control model for optimizing power and performance of cloud storage”, Journal of Data Acquisition and Processing ,Vol. 38 (2) 2023.
2. Vijay M & Roopa M ,“Cavity Backed Multiband SIW Antenna for X Band Applications”, Journal of Communications vol. 17, no. 11, November 2022.
3. Sarada devi & Dr. Roopa M ,“A Critical Analysis on Attacks and Challenges in VANETs” ,Computer Communication Networking and IoT ,Springer , LNNS Volume 459,pp-245-255.
4. Dr. Roopa M ,et.al. “Non-Interference Blood Glucose Screening Based on Laser Beam and Galvanic Skin Response Recorder”, International Journal of Electrical Engineering & Technology (IJEET) Volume 11, Issue 2, 28 April 2020, pp. 147-155, IAEME Publication. ISSN Online: 0976-6553
5. Eenesh Chavan & Dr. Roopa M “Automatic Crash Guard for Motorcycles”, International Journal of Electrical Engineering & Technology (IJEET) Volume 11, Issue 2, 29 May 2020, pp. 17-26, Article ID: IJEET\_11\_02\_003.
6. Dr.Roopa M et.al, “Efficient Waste Management System for Smart City using LoRa”, International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 04, 2020 ISSN: 1475-7192. 26 Feb 2020 DOI: 10.37200/IJPR/V24I4/PR201460 . 3465 -3476.
7. Dr.Roopa M et.al “Lung Pattern Classification for Interstitial Lung Diseases using ANN-Back Propagation Network, International Journal of Recent Technology and Engineering (IJRTE) “, ISSN: 2277-3878, Volume-8 Issue-4, November 2019.
8. Dr.Roopa M & Jagir hussain “Anomaly Detector for Manufacturing Industries using Lab view”, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-1, October 2019.265-269
9. Roopa M & Dr.Selvakumar Raja “An intelligent network algorithm for enhanced security in a mobile ad hoc network”, International Journal of Networking and Virtual Organizations, Vol. 17, Nos. 2/3, 2017,1470-9503.
10. Roopa M & Dr. Selvakumar Raja “Secured Intrusion Detection System using Tristate Algorithm”, International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.20 (2015), 0973-4562. 19850-19853.
11. Dr.Roopa M et.al “Automated Gurney System: A new paradigm for Health monitoring system using Internet of Things”, International Journal of Future Generation Communication and Networking, Science & Engineering Research Support society, 2020.

## **INTERNATIONAL CONFERENCES:**

1. Performance Analysis of Routing Protocols in Vehicular Adhoc networks ,International conference on Frontiers of Intelligent computing ,Cardiff Metropolitan University ,Cardiff,UK(FICTA 2023).
2. Automated Acceleration Limiter for E-Scooters, International conference on Power Electronics and Renewable Energy Systems (ICPERES 2023),Rajalakshmi Engineering College.
3. Semantic segmentation based automatic defect detection system for white- goods logistics industries

using modified u-net architecture, International Conference on Research in Electronic Engineering and Communication Techniques (ICREACT 2023).

4. E -Pool – A Learning Resource for placement aspirants, Innovation in Technological development in Electronics ,Computers and Communication (ITDECC-2023),SRMIST , Ramapuram
5. Types of attacks in IoT application layer used in various applications – An overview” in the 2022 Second Global Conference on Recent Developments in Computer and Communication Technologies (GC-RDCT 2022).
6. A Non Invasive Diagnosis Of Early Stage Disease Through Human Nail Using Neural Networks , International Conference on Artificial Intelligence,5G Communication and Network Technologies.
7. Performance Assessment of the Minimal 6TiSCH Configuration’ during the IEEE International Conference on Computing, Communication , Security and Intelligent Systems (IC3SIS-2022).
8. “An Exhaustive Approach of Application Layer Protocols in IoT”, Fourth IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT 2021).
9. “IoT based Multi-Level Authentication to Enhance Network Security”, in International Conference on Innovations in Smart Technology, Advanced Materials and Communication Engineering.
10. A Critical Analysis on Attacks and Challenges in VANETs ,Computer Communication Networking and IoT ,Springer , LNNS Volume 459,pp-245-255.
11. “Efficient Farming using Machine Learning Technique safety”, International Conference on Engineering and Technology.
12. “Water management system using LabVIEW”. ICIRCC’18, Peri Institute of Technology .
13. “Automatic Quality Assessment of Potatoes using LabVIEW ”. ICIRCC’18, Peri Institute of Technology.
14. “Smart Current Theft Detection and Power Discontinuity Monitoring using LabVIEW ”.ICIRCC’18, Peri Institute of Technology.

#### **BOOK CHAPTER PUBLICATION :**

“Artificial Intelligence and Network Security”, ISBN:978-93-5419-211-1, Chapter 21, Dec.2020,Technical Research Publications .

#### **FUNDING PROJECTS:**

- **Received :**

1. Advance Communication Lab , MODROB , AICTE for 17,41000, 1-9353054828 , Apr-2022.

#### **PATENTS :**

1. A SYSTEM FOR FAULT DETECTION AND PREDICTIVE MAINTENANCE OF ELECTRIC VEHICLE - 202241022369 A
2. SELF STERILIZING GRAB HANDLE- 202141039673 A
3. MULTI PURPOSE SURVEILLANCE BASED ON RADAR SYSTEM WITH CAMERA

USING EMBEDDED , 202041031869 A -Published

4. IMPLEMENTATION OF TELEMATICS BY WPAN FOR LOCOMOTIVES PATH SURVEILLANCE USING SOLAR POWERED VEHICLE ,202041032199 A -Published

5. “ IOT based portable hygiene monitoring system”, - Granted

#### **INTERNATIONAL AWARDS IN COMPETITION :**

Mentored

1. In idea stage under the Innovation category of Intelligent Vehicle Management Systems organized by International Centre for Entrepreneurship and Technology .Titled - Electric Vehicle Innovation Challenge, won Rs.50,000 /.
2. Sparkup fund -International centre for Entrepreneurship and technology(iCreate), project titled “Motor current signature analysis of electric vehicles”.

#### **Professional Bodies:**

Member – FIETE, IAENG, ISTE

Scopus ID – 57210041358

Web of Science - AAL-8591-2021

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