


## RESUME

### 1. Personal Details

|                           |                           |   |
|---------------------------|---------------------------|---|
| NAME                      | <b>Dr. MONIKA MALIK</b>   |  |
| COLLEGE                   | JSSATE, Noida             |   |
| DESIGNATION               | ASSISTANT PROFESSOR-III   |   |
| PHONE                     | 9971055554                |   |
| EMAIL ID                  | monikamalik@jssaten.ac.in |   |
| Date of Joining (JSSATEN) | 16-08-2007- till date     |   |

### 2. Experience

|                               |               |                 |                                |
|-------------------------------|---------------|-----------------|--------------------------------|
| Total Experience in Years: 17 | Teaching: 17+ | Industry: - Nil | Research: <b>PhD completed</b> |
|-------------------------------|---------------|-----------------|--------------------------------|

### 3. Qualifications

| COURSES  | SPECIALIZATION                             | Year of Award | INSTITUTION                                      | UNIVERSITY                     |
|----------|--|---------------|--|--------------------------------|
| B.E.     | Electronics and Communication Engineering. | 2002          | MCET, Lakshmangarh                               | Rajasthan University           |
| M. Tech. | Digital Communication                      | 2014          | JEC, Jaipur                                      | Rajasthan Technical University |
| Ph.D.    | Wireless sensor Networks                   | <b>2024</b>   | Jaypee institute of information Technology Noida | Jaypee University              |

### 4. Research & Publications

#### Journals

1. **Monika Malik, Alok Joshi and Gayatri Sakya**, “Optimized leach protocol for energy management in wireless sensor network”, in *Multimedia Tools and Applications*, Vol:(0123456789) ,<https://doi.org/10.1007/s11042-023-16248-2> (SCIwith IF=2.577).(online)
2. **Monika Malik, Alok Joshi and Gayatri Sakya**, “DC-LEACH: A unique cluster head selection algorithm with improved QoS in real time applications for WSN”, *Journal of Information & Optimization Sciences*, ISSN 0252-2667 (Print), ISSN 2169-0103 (Online) DOI : 10.47974/JIOS-1458.(ESCI with IF=1.4(Q2)). (online)
3. **Monika Malik, Alok Joshi and Gayatri Sakya**, “Application of nature inspired optimization algorithm on hierarchal LEACH protocol for improved performance”, *Journal of Information & Optimization Sciences* ,ISSN 0252-2667 (Print), ISSN 2169-0103 (Online) DOI : 10.47974/JIOS-1460. (ESCI with IF=1.4(Q2)). (Online).

4. **Monika Malik ,Ruchi Kushwaha, Rohit Shambharkar, Suyash Gupta,** “Integration of Block chain Model for Energy Efficient WSN for IOT Application”, *Journal for Research in Applied Science and Engineering Technology*,2023.
5. **Sakya, Gayatri, Malik, Monika & Sharma, Deependra,** “An exploration of integration of IoT and 5G networks and a fuzzy approach for clustering to enhance the lifetime of such networks”, *Journal of Information and Optimization Sciences*, 2023, 44:6, 1215–1227, DOI: 10.47974/JIOS-1459
6. **Monika Malik, Nischal Maurya,** “Data Aggregation Technique using Genetic Algorithm”, *International Journal of Advance Engineering and Research Development*,2017
7. **Monika Malik, Alok Joshi and Gayatri Sakya ,** “Exploration of Enhancement of LEACH Protocol for Massive and Critical IOT Applications”, *Journal of Computer Networks ( in review)*
8. **Monika Malik, Alok Joshi and Gayatri Sakya,** “New Recursive LEACH Procedure for Real Time Applications”, *Sustainable Computing: Informatics and Systems(in review )*

#### **Book Chapter:**

1. Monika Malik, Nimish Rastogi, Harshita Piyush, Siddhant Singh, Fuzzy logic Application for Early Landslide Detection, Springer book series “Lecture Notes in Networks and Systems,2022.
2. Monika Malik ,Surchi Gupta, Prastuti Gupta and Divya Srivastava, “Air Quality Monitoring Platform”, Springer book series “Lecture Notes in Networks and Systems.2022 .

#### **Conferences**

1. **Monika Malik, Alok Joshi and Gayatri Sakya ,** "Network Lifetime Improvement for WSN Using Machine Learning," *2021 7th International Conference on Signal Processing and Communication (ICSC)*, Noida, India, 2021, pp. 80-84, doi: 10.1109/ICSC53193.2021.9673190. [**Scopus Indexed conf**]
2. **Monika Malik, Gayatri Sakya and Alok Joshi,** “Enhancement of Network Life Time in the LEACH Protocol for Real Time Applications” , *IC3-2021: Proceedings of the 2021 Thirteenth International Conference on Contemporary Computing*, August 2021Pages 426–431, <https://doi.org/10.1145/3474124.3474188> [**Scopus Indexed conf**]
3. **Monika Malik, Alok Joshi and Gayatri Sakya,** "Various Optimization Algorithms for Enhancing Network Lifetime in LEACH Protocol in WSN," *8th International Conference on Signal Processing and Communication (ICSC)*, *Noida, India, 2022*, pp. 215-219, doi: 10.1109/ICSC56524.2022.10009415. [**Scopus Indexed conf** ].
4. **G. Sakya, M. Malik, S. Vats, Y. Rathor, A. Gangwar and P. Srivastava,** "Design of a Microstrip Circular Patch Antenna at 2.4 GHz Using HFSS for IoTApplication," *2023 6th International Conference on Contemporary Computing and*

Informatics (IC3I), Gautam Buddha Nagar, India, 2023, pp. 1232-1237, doi:10.1109/IC3I59117.2023.10398019., [**Scopus Indexed conf** ].

5. **Monika Malik , Gayatri Sakya, Ruchi , Suyash Gupta, Rohit Sambharkar** “Performance Analysis of Energy Efficient WSN using Block-chain model for IOT Application” , International Conference on Intelligent Computation and Analytics on Sustainable Energy and Environment,2023, [**Scopus Indexed conf** ].

6. **Monika Malik, Alok Joshi and Gayatri Sakya**, “Traffic based selection of cluster Head in WSN for IoT Application”, ICICCT-2024 Conference, by Taylor & Francis and Indexing in Scopus. [**Scopus Indexed conf** ].

## 5. Grants

### i. Funds Received (Projects)

| Project Name  | Grant Amount | Date of receiving the Grant                 | Duration    | Grant issuing authority/ Body / Organization |
|---|--------------|---|-------------|--|
| Organic Farming using AI, Robotics and IoT for Women Entrepreneurship in KOT Village, Dadri, Gautam Buddha Nagar, Uttar Pradesh- <b>CO-PI</b> | <b>37L</b>   | <b>Final Approval 16<sup>th</sup> May24</b> | <b>3Yrs</b> | <b>DST</b> (under STW Programme)             |

### ii. Patents

| Sl. No. | Title Details   | Details of award of patent / Filed |
|---------|---|------------------------------------|
| 01      | Cloud-Based Robotic System For Agriculture Management | 2023(application 202311049158)     |

### Others Details

| Name                        |                            |
|-----------------------------|----------------------------|
| Workshop Attended           | <b>20</b>                  |
| Workshop Organized          | 07                         |
| NPTEL Course                | 02                         |
| Best student Feedback Award | 01                         |
| Lab In charge               | e-Yantra Robotics Lab-IITB |
| NBA Criteria In charge      | Criteria -3                |

**Ms. Monika Malik**