

**NAME : Dr. MALLIKARJUN B. CHANNAPPAGAUDAR**

Affiliation: Associate Professor, Dept. of ETE, SIT

Contact: 9980680753

Email: mallikarjun\_bc@sit.ac.in, mallikarjun.cp@gmail.com

Vidwan ID: 90937

Scopus ID: 57218881216

OrcID: 0000-0002-5406-5366

Faculty ID: SIT0126

**Education**

	Degree	Year	Institute	Specialization
1	Ph.D.	2018	Indian Institute of Science (IISc), ECE Dept., Bangalore	Communication Networks
2	M.E.	2006	University Visveswaraya College of Engg. (UVCE), Bangalore	Power Electronics
3	B.E	1999	GNDEC, Gulbarga University	Electronics and Communication

**Professional Experience**

	Date (from-to)	Designation	Organization
1.	05-08-2019 to Till date	Associate Professor	Siddaganga Institute of Technology, Tumkur
2.	01-01-2011 to 04-08-2019	Assistant Professor	Siddaganga Institute of Technology, Tumkur
3.	10-10-2006 to 31-12-2010	Senior Lecturer	Siddaganga Institute of Technology, Tumkur
4.	10-10-2001 to 09-10-2006	Lecturer	Siddaganga Institute of Technology, Tumkur

**Positions held**

- Internal ISO Coordinator for internal audit
- Squad Member for External exams at SIT(2021-2024)
- Academic Council Member (2021-23)
- BoS and BoE member of Dept.
- Time Table Coordinator for the Dept. (2019)
- Test Coordinator for the Dept.

## Affiliations of Professional organizations

- IEEE member (2023)
- IAENG member

## Awards and Honors

- BITES BEST PhD Thesis Award 2018 in Electronics and Communication Engg. Discipline. ( Board of IT Education Standard, Bangalore, Karnataka)
- Certificate for completion of Internal Auditors Course. 2018-19.
- Certificate awarded as a role of mentor for the NPTEL online certification course, 2016.
- Received BEST PROJECT Award for the Worklet “Popular Recharge Plans Discovery”, along with Certificate of Excellence from SAMSUNG PRISM, 2023-2024.
- Received BEST PROJECT Award for the Worklet “Micro aneurysms detection using ML approach”, along with Certificate of Excellence from SAMSUNG PRISM , 2021-2022
- Certificate awarded as NPTEL STAR in Computer Science Discipline, 2025.

## Courses Taught

### Undergraduate Courses

- Wireless Communication
- Data Communication and Networking (Computer Communication Networks)
- Ad Hoc Wireless Networks
- Digital Communication
- Information Theory and Coding
- Probability and Random Processes
- ARM Microcontroller
- Python Programming
- C programming
- C++ programming
- Fundamentals of Electronic Circuits (Basic Electronics)

- Digital Electronic Circuits (Logic Design)
- Control Systems
- Java Programming
- Fundamentals of CMOS VLSI Design
- Analog Electronic Circuits

#### Postgraduate Courses

- Advanced Computer Networks
- Advanced Wireless Communication
- Error Control Coding Theory

#### Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1.	Ranjitha R	Routing in Wireless Sensor Networks	Ongoing

#### Research Areas

- Communication Networks and Network Security
- Wireless Networks/Ad Hoc Networks, Artificial Intelligence Applications in Network Management, Computational Intelligence Applications in Communication Networks, Communication Protocols.
- Wireless Communication Systems
- Software Agents, Machine Learning
- Software Defined Networks (SDN)
- Wireless Sensor Networks/IOT applications

#### Sponsored Projects

##### **Ongoing Project:**

1. Title: 5G use case Lab  
 Funding Agency: Department of Telecommunications (DoT), Govt. of India.  
 Amount: 75 Lakhs  
 Duration: 5 years  
 Role: PIG Member

### Journals

1. Mallikarjun B. Channappagoudar and Pallapa Venkataram. "TTCN-3 Based Conformance Testing of a Node Monitoring Protocol for MANETs ", International Journal of Computer, Electrical, Automation, Control and Information Engineering, World Academy of Science, Engineering and Technology, Vol: 8, No: 1, 2014.
2. Mallikarjun B. Channappagoudar and Pallapa Venkataram. "Performance analysis of a node monitoring protocol for mobile ad-hoc networks: an agent-based approach." International Journal of Communication Networks and Distributed Systems 14.3: 303-338, Inderscience Publishers, 2015.
3. Mallikarjun B. Channappagoudar and Pallapa Venkataram. "Performance evaluation of mobile agent based resource management protocol for MANETs." Ad Hoc Networks 36: 308-320, ELSEVIER, 2016.
4. Mallikarjun .B.C., K, Viswanath., B.M., Karthik. *et al.* Retinal image analysis for detection of diabetic retinopathy- a simplified approach. *Multimedia Tools Applications, Springer*, 84, 4435-4456, 2025.<https://doi.org/10.1007/s11042-024-18821-9>

### Conference Proceedings

1. Mallikarjun B. Channappagoudar, and Pallapa Venkataram. "Mobile agent based node monitoring protocol for MANETs." 2013 National Conference on Communications (NCC), pp. 1-5. IEEE, 2013.
2. M. Vinod, H. S. Vinay, Mallikarjun B.C. M. Prathap, "Smart school," IEEE, *International Conference On Smart Technologies For Smart Nation (SmartTechCon)*, Bangalore, pp. 1424-1427, 2017.
3. B. C. Mallikarjun, K. J. Kiranmayi, N. Lavanya, K. H. Prateeksha and J. Sushmitha, "Intruder Detection System - A LoRa Based Approach," 2020, *IEEE, 5th International Conference on Communication and Electronics Systems (ICCES)*, Coimbatore, India, 2020, pp. 255-258, doi: 10.1109/ICCES48766.2020.9137923.
4. Mallikarjun B.C., Annapoorneshwari. K., Madankumar Y. M., Rakesh L.R. and Suhas S.R., "Intelligent Automated Text Processing System - An NLP Based

Approach," 2020, IEEE, 5th International Conference on Communication and Electronics Systems (ICCES), Coimbatore, India, 2020, pp. 1026-1030, doi: 10.1109/ICCES48766.2020.9138070.

5. B. C. Mallikarjun, S. Harshitha, B. K. Harshita, S. Bhavani and S. Tarwey, "Smart Refrigerator: An IOT and Machine learning based Approach," IEEE, 2020 International Conference for Emerging Technology (INCET), Belgaum, India, 2020, pp. 1-4, doi: 10.1109/INCET49848.2020.9154025.
6. Mallikarjun B.C. and V. Kapinaiah, "Mobile Agent Based Protocol for Location Management in Mobile Ad Hoc Networks," 2021 Sixth International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, India, pp. 406-410, 2021, IEEE doi: 10.1109/WiSPNET51692.2021.9419424.
7. Mallikarjun B. C, Rakshith. R, Rakshit T, et al, "LoRa Technology Based Farm Irrigation Control System," 2021 10th International Conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON), Jaipur, India, 2021, pp. 1-5, doi: 10.1109/IEMECON53809.2021.9689074.
8. K. Chaitanya and B. C. Mallikarjun, "A Service Migration Strategy for Communication Networks," 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2022, pp. 1-4, doi: 10.1109/GCAT55367.2022.9971843.
9. B. C. Mallikarjun, V. Y. Gowd, S. Gagan, K. P. Vishwas and L. Gagan Kumar, "Precision Agriculture-Machine Learning Based Approach," 2023 11th International Conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON), Jaipur, India, 2023, pp. 1-6, doi: 10.1109/IEMECON56962.2023.10092314.
10. B. C. Mallikarjun, G. Anantha Krishna, B. V. Mahantesha, K. T. Monish and E. Kishore, "Parking Space Monitoring – A LoRa Based Approach," 2023 11th International Conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON), Jaipur, India, 2023, pp. 1-5, doi: 10.1109/IEMECON56962.2023.10092339.
11. Ranjitha R, Mallikarjun B C and P. Shivakumar, "Wireless Sensor Network Technologies in Precision Agriculture-A Survey," 2023 Global Conference on Information Technologies and Communications (GCITC), Bangalore, India, 2023, pp. 1-7, doi: 10.1109/GCITC60406.2023.10425910.
12. Mallikarjun B. C, B. A. Pramod Reddy, P. Shivakumar, V. K. Jain TV, R. M. D and M. K. R, "Optimal Sensor Network Solution Based Smart Drip Irrigation System," 2023 International Conference on Smart Systems for applications in Electrical Sciences (ICSSSES), Tumakuru, India, 2023, pp. 1-6, doi: 10.1109/ICSSSES58299.2023.10199822.

13. B. C. Mallikarjun, G. V. Priyanka, R. V. Sripriya and B. M. Kalpashree, "Optimal Wireless Data Transfer Solution in Precision Agriculture," *2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2024, pp. 1-5, doi: 10.1109/ICSSES62373.2024.10561329.
14. Mallikarjun B C, Akhilkumar M B, Anirudh T G, et.al. "Smart Agriculture with Fertilizer/Pesticide Recommendation System," *2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES)*, Tumakuru, India, 2025, pp. 1-6, doi: 10.1109/ICSSES64899.2025.11009330.

### Book Chapters

1. Mallikarjun B. C., Phalanetra, H.S. (2022). QOS Management Protocol for Mobile Ad Hoc Networks Using Mobile Agents. In: Pandian, A.P., Fernando, X., Haoxiang, W. (eds) *Computer Networks, Big Data and IoT. Lecture Notes on Data Engineering and Communications Technologies*, vol 117. Springer, Singapore. [https://doi.org/10.1007/978-981-19-0898-9\\_34](https://doi.org/10.1007/978-981-19-0898-9_34)
2. Mallikarjun, B.C., Prathima, H.S. (2025). UDS for Data Communication in Temperature Monitoring. In: Tripathi, A., Soni, A., Tiwari, M., Swarnkar, A., Sahariya, J. (eds) *Intelligent Computing Techniques for Smart Energy Systems. ICTSES 2023. Lecture Notes in Electrical Engineering*, vol 1277. Springer, Singapore. [https://doi.org/10.1007/978-981-97-8429-5\\_4](https://doi.org/10.1007/978-981-97-8429-5_4)

### Editorial

#### Reviewer of Journals

- Multimedia Tools and Applications, Springer.
- Array Journal, Elsevier

#### Invited Lectures, talks and workshops

- Invited Talk on "Network Management", National Conference at BIT, Bangalore.