

## Faculty Profile

Name	:Dr. Bhat Geetalaxmi Jairam
Designation	:Professor
Department	:ISE
Contact Details:	The National Institute of Engineering Mysuru
E-mail	: bgj@nie.ac.in
Phone	: 9448297150



PHOTOGRAPH

**About me:** I am presently working as Professor, in the Department of Information Science and Engineering, National Institute of Engineering, Mysuru. I have received my Bachelor's degree in Electronics from Dr. Baba Saheb Ambedkar University, Aurangabad and M. Tech from VTU by securing II-Rank in M-Tech (CNE-FT). I have been awarded PhD from VTU. I am having more than 20 years of experience in Teaching. My field of interest is Wireless Sensor Networks, Artificial Intelligence, Theory of computation . My Research has received Grant along with citation award from VGST (K-FIST-Level-I), Bangalore. I have published more than 30 research papers in different international conferences and in reputed international journals out of which 18 papers are Scopus indexed. I won best paper award for my research paper "Analysis of Data Gathering Protocol and Security Issues during Data Aggregation in WSN" presented at the International Conference on Computer and Electronics Engineering and Most Innovative paper Award for the paper title, "Mobile Element Based Energy Efficient Data Aggregation Technique in Wireless Sensor Networks - Bridging Gap between Virtuality and Reality" ,presented at International Conference on Computational Intelligence. I am the member of technical professional bodies like ISTE, Institute of Engineers. I am a research supervisor of VTU, Belgaum. I am serving as a reviewer for prestigious conferences and journals.

### **Qualification:**

B.E. (Ambedkar University, Aurangabad.), MTech (VTU, Belagavi), Ph.D. (VTU, Belagavi)

### **Courses Taught:** List of 5-6 UG courses taught in recent years:

Computer Networks, Graph Theory, Software Engineering, Logic Design, Computer Organization, Microprocessor, Advanced Microprocessor, Software Architecture and Design Patterns, Artificial Intelligence, Wireless Networks, Data Structures, Finite Automata and Formal Languages, Data Communication.

### **Journal Publication:**

M.S., Dhruva; R., Sunitha; K. S., Rekha; Shashank Dhananjay; **Bhat, Geetalaxmi Jairam** "Optimized Cross-Modal Data Fusion Framework for Robust Emotion Recognition Multimodal using Hybrid Deep Learning Techniques",330,2026.

S, Rekha K; **Jairam, Bhat Geetalaxmi**, "A Blockchain-Enabled GNN Framework for Secure Routing in IoT Networks", *International Journal of safety and security Engineering*,(2025), 2041-9031

Shwetha G N, **Bhat Geetalaxmi Jairam**," Sensor based Framework for Soil Nutrients Prediction using Deep Learning Techniques:, *Agricultural Engineering International: CIGR Journal*, (2025), 291-305,

**Bhat Geetalaxmi Jayram**, D. V. Ashoka , "Qualified Breakdown of Wi-Fi with and without standard in Wireless Networks-Onus on Throughput," *International Journal of Advanced Research in Computer and Communication Engineering* ,4 (2015), 19-21.

**Bhat Geetalaxmi Jayram**, D. V. Ashoka , " MAC Layer Protocols for WSN --Comparison and Performance Improvement Strategy ", *International Journal of Engineering Research*,3.4 (2014), 217—220.

**Bhat Geetalaxmi Jayram**, D. V. Ashoka , "Intelligent data gathering in distributed wireless sensor environment-A Real Scenario." *International Journal of Scientific & Engineering Research (2229-5518)* 5.2 (2013): 789-794.

**Bhat Geetalaxmi Jayram**, D. V. Ashoka , "Merits and Demerits of Existing Energy Efficient Data Gathering Techniques for Wireless Sensor Networks." *International Journal of Computer Applications* 66.9 (2013).

### **Conference Proceedings:**

**Jayram, Bhat Geetalaxmi**, and D. V. Ashoka. "Validation of Multiple Mobile Elements Based Data Gathering Protocols for Dynamic and Static Scenarios in Wireless Sensor Networks." *Procedia Computer Science* 92 (2016): 260-266.

**Bhat Geetalaxmi Jayram**, D. V. Ashoka," Analysis of Data Gathering Protocol and Security Issues during Data Aggregation in WSN." *Proceedings of 1st International Conference on Computer and Electronics Engineering*, (2016), 101—104.

**Bhat Geetalaxmi Jayram**, D. V. Ashoka , "Comparative Analysis of Data Gathering Protocols with Multiple Mobile Elements for Wireless Sensor Network." *Proceedings of First International Conference on Information and Communication Technology for Intelligent Systems: Volume 1*. Springer International Publishing, 2016, 281—290.

**Bhat Geetalaxmi Jayram, D. V. Ashoka,**” Necessity of Improvement in existing Data gathering Techniques in wireless sensor Network”, *Proceedings of International conference on Global Research,*” *Technology Innovation creates success to organization development,* (2013), 49—57.

**Bhat Geetalaxmi Jayram, D. V. Ashoka,**” Performance Improvement of DMAC For data Gathering in Wireless Sensor Networks”, *Proceedings of International conference on Global Research,*” Sharing innovative thoughts, gaining memorable knowledge, (2012), 61--68.

**Bhat Geetalaxmi Jayram, D. V. Ashoka,**” Comparison of MAC Layer protocols for wireless Sensor Networks”, Proceeding of International conference on Evolutionary Trends in Information Technology, (2012).

**Bhat Geetalaxmi Jayram,**” Data Gathering”-An Emerging Technology in Wireless Sensor Networks”, Proceedings of International conference on Emerging Trends In Engineering, (2012),108.

**Other achievements:**

**Funded Research Projects completed**

Sl. No.	Title of the Research Project	Funding Agency	Amount	Duration	Year (From – To)
1.	Research work on “Energy efficient data gathering using multiple mobile elements in wireless sensor networks” (K-FIST (L1))	VGST Government of Karnataka	20 Lakhs	2 years	2012-14  Completed on 4 July 2018

**Candidates Presently pursuing PhD Degree under My Guidance**

Research Supervisor Letter Received on-29/3/2021					
Sl. No.	Name of the Candidate	Degree	Title of the Thesis	Commencement Year	Status
1.	Nandini P	PhD	Optimization of Named entity recognition techniques for accuracy improvement in Kannada Language	2020	Preparing for Course work
2.	Shwetha G N	PhD	Enhanced design framework for evaluating soil nutrients using wireless sensor network	2020	Open seminar -1 Completed

3.	Jyothishree RK	PhD	Root Analysis drives AI- Based process	2025	Preparing for Course work
4.	Sandya N	PhD	Semi Agentic AI framework for Translating Sanskrit Chants	2025	Provisional Registration

**Membership in Professional Bodies/University Bodies/Organizations**

Sl. No.	Type of Membership	Professional Bodies/Organizations/ University Bodies/Others	Period of Membership
1.	.Life Member	“The Indian Institute of Engineering” (M-1721083 )	Year 20-21
2.	Life Member	“The Indian Society for Technical Education” (LM 13096)	Year 20-21

\*\*\*