

FACULTY PROFILE

Name of Teaching Staff : Mrs. Bahar C. Soparkar

Designation : Assistant Professor

Department : Electronics & Telecommunication Engineering

Date of Joining the Institution : 10th July 2006



Google Scholar Link : <https://scholar.google.com/citations?user=QaM9ETIAAAAJ&hl=en&oi=ao>

Qualifications with Class / Grade :

1. B.E.(Industrial Electronics) 1st Class, 61.80%, Pune University, August 2003.
2. M. Tech. (EXTC), 1st Class with distinction, NMIMS University, April 2008.

Total Experience in Years : **Teaching : 20 years**

1. Assistant Professor in D. J. Sanghvi College of Engineering, department of Electronics & Telecommunication Engineering on transfer from 12-12-2023 till date.
2. Lecturer in D. J. Sanghvi College of Engineering, department of Electronics Engineering on probation from 07-07-2009 till date.
3. Lecturer in D. J. Sanghvi College of Engineering, department of Electronics Engineering on adhoc basis from 10-07-2006 to 30-06-2009.
4. Lecturer in Vidyavardhini's College of Engineering & Technology, Vasai. from July 2005 to June 2006.
5. Lecturer in Vidyalkar Polytechnic, Wadala from Nov. 2003 to June 2005.

Industry :

1. Internship of 6 months at Air India (Jan 1998 to May 1998)
2. Internship of 6 months at Systems Creator (Jan 1999 to May 1999)

Papers Published : **National : 3**

1. "Rope Climbing Robot" Technofocus, Volume 2, Issue 1, ISSN 2229-662X, Oct 2011
2. "MODBUS Communication Protocol", NCCT – 2011 Proceedings ISBN 93- 81361-37-1, Oct 2011
3. "Powerline Communication using MODBUS", Protocol DJ – Spark 2012 Proceedings ISBN 93-82062-20-3, April 2012

International : 3

1. "Defuzzification in a Fuzzy Logic Controller: Automatic Washing Machine", International Journal of Computer Applications (0975 – 8887)
2. "Stock Market Prediction using Digital Signal Processing Models", International Journal of Computer Applications (0975 – 8887)
3. "Stochastic Signal Modeling Techniques for Stock Market Prediction", International Journal of Computer Applications (0975 – 8887)

Papers Presented in Conferences : **National : 1**

1. "MODBUS Communication Protocol", NCCT – 2011 Organized by DJSCOE, Dept. of EXTC, Electronics and Biomed on 14/10/2011 & 15/10/2011

International : 3

- Area of Specialization** : 1. Neural Networks and Fuzzy Logic
2. Artificial Intelligence
3. Machine Learning
- Professional Memberships** : 1. **IETE** – Life member at The Institution of Electronics and Telecommunication Engineers
2. **ISTE** – Life member at Indian Society for Technical Education
- Interaction with Professional Institutions** : 1. Delivered a lecture on **“KEIL Development tools for 8051 microcontroller”** for TE (Electronics) students of K. J. Somaiya Institute of Engineering and Technology, on 20th and 21st February 2009.
2. Delivered a lecture on **“Smith Chart and its applications”** at ISTE approved STTP on Microwaves & Antennas organized by D. J. Sanghvi College of Engineering Department of EXTC, ELEX & BIOMED in January 2011.
3. Delivered a lecture on **“Hands on practice on PCB designing using ORCAD and PCB fabrication”** for students and staff members of FR. Conceicao Rodrigues College of Engineering, on 18th and 19th March 2011.
4. Worked as a point contact person for the workshop on **“AVR and RTOS”** organized by Department of Electronics Engineering with Thinklabs Technosolutions Pvt. Ltd. for two sessions of 100 hours each.
i. Session I : Jan 2011 - 15 days
ii. Session II : Aug – Dec 2011 (only Saturdays)
5. Course coordinator for one day workshop on “Aurdino”, organised by the Teaching Learning Centre (ICT) at IIT Bombay, funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), MoE, Govt. of India on 8th February 2020.
- Achievements** : 1. Member of organising committee of two week ISTE approved STTP on **“Signal processing and Communication Engineering”**, from 10th December 2007 to 20th December 2007, by Department of Electronics Engineering, D. J. Sanghvi College of Engineering, Mumbai.
2. Member of organising committee of one week ISTE approved STTP on **“Microwaves & Antennas”**, from 10th January 2011 to 14th January 2011, by Department of Electronics and Telecommunication Engineering, D. J. Sanghvi College of Engineering, Mumbai.
3. Accompanied 6 TE students of Electronics Engineering for the University level (at Mumbai University campus, Kalina) and state level (at Shivaji University, Kolhapur) for **Inter-Collegiate Research Convention “Avishkar 2011-12.”** (January 2012).
4. Member of organizing chair committee for **“International Conference on Communication Technology ICCT – 2015”**, on 25th and 26th September 2015, by Department of Electronics and Telecommunication Engineering, Department of Electronics Engineering and Department of Biomedical Engineering, D. J. Sanghvi College of Engineering, Mumbai.

5. UG project guided for the students of B.E. (Electronics) titled, ***“Intelligent and Interactive Robotic Gaming System”***, received TCS Best Student Project Award in February 2016.
6. Member of ***syllabus framing committee*** in the subject of Neural Networks and Fuzzy Systems for University of Mumbai, April 2017.
7. Industrial training on ***“Advance Excel”***, June 5, 2024 to July 22, 2024 (6 Weeks), by Academy of Skill Development.
8. Awarded the **NPTEL star** certificate for July – Dec 2025

Subjects : UG Level :

Taught

1. Basic Electrical and Electronics Engineering
2. Principles of Control Systems
3. Electromagnetic Engineering
4. Microwave Devices and Circuits
5. Neural Networks and Fuzzy Logic
6. Artificial Intelligence and Machine Learning
7. Python programming
8. Java programming

Projects guided : UG Level :

1. Solar powered wireless charger
2. Hybrid driver safety, vigilance and security system for vehicle
3. Application in Astronomy
4. Handwritting recognition system
5. A ML model for detecting mental health illness, its causes and suggesting corrective measures/practices for the same.
6. Invoice Digitization and Predictive Analysis of Personal Expenditure.
7. Tours & Travels Recommendation Website
8. Image Emotion Recognition
9. Sign Language to Speech Conversion
10. Personalized Exam Preparation system using recommender systems

Responsibilities : Institute Level :
handled

1. Admission committee (2010 onwards - till date)
2. Examination core committee (2010 onwards - till date)
3. Alumni committee (2009 onwards - till date)
4. Trinity Technical committee (August 2022 onwards)
5. Degree Distribution Ceremony committee (March 2024 onwards)
6. NBA committee member (2023 -24 onwards)
7. Open Electives course co-ordinator (2023 -24 onwards)

Department Level :

1. Assisted Time Table coordinator (2009-10)
2. Time Table coordinator (2010 to 2013)
3. Department NBA committee member (2012 onwards)
4. Department NAAC co-ordinator (Electronics Engineering)
5. Alumni co-ordinator (2012 onwards)
6. Department OE course co-ordinator (2023 -24 onwards)