

Aparna M. Telgote



Profile Summary: Ms. Aparna M. Telgote is an experienced academican with over 19 years of teaching and research in the field of Computer Communication, Wireless Networks, and IoT. She is currently serving as an Assistant Professor at Don Bosco Institute of Technology, Mumbai, and has contributed to several funded research projects, publications, and academic development initiatives.

Designation: Assistant Professor

IDs

- Google Scholar Link: <https://scholar.google.com/citations?user=C-6GtS0AAAAJ&hl=en>
- LinkedIn URL: <https://in.linkedin.com/in/aparna-telgote-32b2b61a5>
- VIDWAN ID: <https://dbit.irins.org/profile/457243>
- Orcid ID: <https://orcid.org/0000-0002-4204-2298>

Educational Details:

| Sr. No. | Degree | Board / Institution / University | Year |
|---------|------------------|----------------------------------|------|
| 1 | Ph.D. (Pursuing) | UoM | - |
| 2 | ME (EXTC) | UoM | 2010 |
| 3 | BE(EXTC) | NMU | 2003 |

Date of Joining DBIT: 2nd July 2011

Area of Specialization: Wired and Wireless Communication Teaching

Experience in DBIT: 14 Years

| Sr. No. | Position Held | Dates (From-To) |
|---------|---------------------|-----------------|
| 1 | Assistant Professor | 2011- till now |
| | | |

Total Teaching Experience:

| Sr. No. | Institution | Dates (From-To) | Designation |
|---------|---|-----------------------|-------------|
| 1 | Don Bosco Institute of Technology, Mumbai. | 2011-to till | 14 Yrs |
| 2 | K.J.Somaiya college of Information Technology, Mumbai | 31/1/2011 to 2/7/2011 | 6 Months |
| 3 | K.C. College of Engg, Thane | 6/02/07 to 10/01/10 | 3 Yrs |
| 4 | COET Bambori, Jalgaon | 11/2/04 to 25/2/07. | 3 Yrs |
| 5 | Godavari College of Engg, Jalgaon | 23/9/03 to 10/2/2004. | 6 Months |

Industrial Experience:

| Sr. No. | Institution | Designation | Date (From-To) |
|---------|------------------|-------------|----------------------|
| 1 | Transworld, Pune | Trainee | 01/05/03 to 22/09/03 |
| 2 | | | |
| 3 | | | |

Peer Reviewed Journal Papers:

- Telgote, Aparna & Mande, Sudhakar. (2024). A Power-Awareness Routing Protocol for Sustainable Low-Power Wireless Networks: FPGA vs. Microcontroller Implementation. International Journal of Ad Hoc and Ubiquitous Computing. 1. 10.1504/IJAHUC.2024.10067198.
https://www.inderscienceonline.com/doi/abs/10.1504/IJAHUC.2025.143974?_journalCode=ijahuc
- Aparna Telgote, Sudhakar Mande. (2023) Analyzing the Effect of Different Objective Functions on Energy Efficiency for RPL-based Routing in Low Power Lossy

Networks for IoT application, [<https://doi.org/10.21203/rs.3.rs-3173150/v1>]

- Telgote, Aparna & Chakraborty, Poonam. (2018). Performance analysis of VoIP under the effect of interference and during conference call in WLAN network using OPNET modeller. *International Journal of Intelligent Systems Design and Computing*. 2. 156. 10.1504/IJISDC.2018.10017636.

<https://www.inderscienceonline.com/doi/abs/10.1504/IJISDC.2018.096331>

- Telgote, Aparna, Fernandes, Ryan, Dialle, Brayan & Dsouza, Kevin. (2021). Televoting System for Rural Development Using VSAT. *Journal of Emerging Technologies and Innovative Research*, 8(5), c574–c581. IJ Publication. <https://www.jetir.org/view?paper=JETIR2105329>
- Telgote, Aparna M. (2018). Hardware Implementation of Routing Algorithm for WSN Monitoring Intrusion Detection Using Zigbee Technology. *International Journal of Applied Science and Computations*, 5(10), 726–729. IETE.
- Aparna Telgote, Shilpa Shende . MIMO OFDM System using Iterative Turbo Receiver. *International Journal of Computer Applications* (March 2012), 8-11. <https://www.ijcaonline.org/proceedings/icwet2012/number1/5312-1003/>

Peer Reviewed Conference Papers:

- A. M. Telgote and S. S. Mande, "Implementation and Analysis of MAC Layer and Network Layer Protocols in 6LoWPAN Networks for Home Automation: A Comparative Study of Software and Hardware Approaches," *2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, Kamand, India, 2024, pp. 1-6, doi: 10.1109/ICCCNT61001.2024.10725658.
- A. M. Telgote, V. Narayanan and N. A. N. Dave, "Design and implementation of water environment monitoring system using GSM technology," *2015 International Conference on Technologies for Sustainable Development (ICTSD)*, Mumbai, India, 2015, pp. 1-4, doi: 10.1109/ICTSD.2015.7095853.
- M. D'souza, N. Wilfred, R. Pereira, T. Rayen and A. Telgote, "Home automation using Internet of Things," *2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS)*, Chennai, India, 2017, pp. 559-561, doi: 10.1109/ICECDS.2017.8389498.
- A. M. Telgote, "MIMO OFDM System Using Iterative Turbo Receiver," in *Proc. Int. Conf. on Advances in Communication and Computing Technologies*, Thakur College of Engineering and Technology, Mumbai, India, Feb. 24–25, 2012.
- A. M. Telgote, "Multi-user MIMO OFDM with Turbo Receiver," in *Proc. Int. Conf. on Emerging Trends in Engineering and Technology*, Chitkara Institute of Technology, Punjab, India, Oct. 23–24, 2009.
- A. M. Telgote, "Traffic Smoothing Digital Video and Its Applications," in *Proc. Int. Conf. on Emerging Trends in Engineering and Technology*, Chitkara Institute of Technology, Punjab, India, Oct. 23–24, 2009.

- A. M. Telgote, "Uplink Multi-user MIMO OFDM with Genetically Added Turbo Receiver," in *Proc. Int. Conf. on Emerging Trends in Computing Technologies*, Lakshmi Devi Institute of Information and Technology, Alwar, Rajasthan, India, Nov. 9, 2009.
- A. M. Telgote, "MIMO OFDM," in *Proc. Nat. Conf. on Advanced Wireless Communication Systems*, Bapurao Deshmukh College of Engineering, Wardha, India, Feb. 20, 2009.
- A. M. Telgote, "Traffic Smoothing of Digital Video," in *Proc. Nat. Conf. on Signal and Image Processing*, NMIMS, Vile Parle, Mumbai, India, Mar. 6–7, 2009.
- A. M. Telgote, "MIMO OFDM with GA-ICE," in *Proc. Nat. Conf. on Signal and Image Processing*, NMIMS, Vile Parle, Mumbai, India, Mar. 6–7, 2009.
- A. M. Telgote, "Emerging Trends in Wireless Communication," in *Proc. Nat. Conf. on Communication Technologies*, K. J. Somaiya College of Engineering, Mumbai, India, Mar. 20, 2009.
- A. M. Telgote, "Performance Analysis of Cellular Network," in *Proc. Nat. Conf. on Communication Technologies*, K. J. Somaiya College of Engineering, Mumbai, India, Mar. 21, 2009.
- A. M. Telgote, "Significance of Nanotechnology for Future Wireless Devices and Communication," in *Proc. Nat. Conf. on Nanotechnology and Communication*, Pravara Rural College of Engineering, Loni, India, Oct. 6–7, 2008.
- A. M. Telgote, "Nanotechnology," in *Proc. Nat. Conf. on Emerging Technologies*, S.V. Institute of Computer Studies, Kadi, Gujarat, India, Jan. 8–9, 2005.

Books/Chapters Published:

- Telgote, A., Mande, S. (2023). Effect of IEEE 802.15.4 MAC Layer on Energy Consumption for Routing Protocol for Low Power Lossy Networks (RPL). In: Bhattacharyya, S., Koeppen, M., De, D., Piuri, V. (eds) *Intelligent Systems and Human Machine Collaboration. Lecture Notes in Electrical Engineering*, vol 985. Springer, Singapore. https://doi.org/10.1007/978-981-19-8477-8_16
- Chakraborty, P., Telgote, A.M. (2019). Performance Analysis of LAN, MAN, WAN, and WLAN Topologies for VoIP Services Using OPNET Modeler. In: Iyer, B., Nalbalwar, S., Pathak, N. (eds) *Computing, Communication and Signal Processing . Advances in Intelligent Systems and Computing*, vol 810. Springer, Singapore. https://doi.org/10.1007/978-981-13-1513-8_20

STTPs/FDPs/Workshops Organized:

2024–25

- Organized a **Faculty Development Program (FDP)** on “*Benchmarks and SOPs for NAAC Criteria*” (2024)

2023–24

- Organized an **FDP** featuring a session on “*Professional Ethics*” under NAAC
- Organized a **Faculty Orientation Program (FOP)** on “*7 Tools of Quality*” under NAAC,

2019–20

- Organized a **Workshop** on *Red Hat Linux Administrator Training* in collaboration with an industry expert for Department of EXTC DBIT (2019)

2017–18

- Organized and conducted a **CCNA Training Program** in collaboration with industry professionals for the students of Department of EXTC, DBIT

2016–17

- Organized and conducted a **CCNA Training Program** in collaboration with industry professionals for the students of Department of EXTC, DBIT

2015–16

- Organized and conducted a **CCNA Training Program** in collaboration with industry professionals for the students of Department of EXTC, DBIT

2014–15

- Organized and conducted a **CCNA Training Program** in collaboration with industry professionals for the students of Department of EXTC, DBIT

STTPs/FDPs/Workshops Attended:

2024-25:

- Successfully completed one week of online AICTE Training And Learning (ATAL) Academy Faculty Development Program on Cross Roads of AI and Signal Processing at D.J. Sanghavi College of Engineering from 27 January 2025 to 01 February 2025.
- Successfully completed one week AICTE Training And Learning (ATAL) Academy FDP on “Integration of Blockchain and Artificial Intelligence for Enhanced Supply Chain Management” at Don Bosco Institute of Technology from 06 -11 January 2025.
- Successfully completed a one week STTP on “NeXus2K25: The Evolution of Networking” organized by IETE Student Chapter of St. Francis Institute of Technology, Mumbai from 08-13 March 2025.

2023-24

- Attended STTP on IoT End-to-End System Design organized by Veermata Jijabai Institute of Technological Institute Mumbai, from 13th Feb - 17th Feb 2023.

2022-2023

- Attended the Introductory Course on Internet of Things (IoT) which is scheduled from July 4, 2022 to July 8, 2022. TIH Foundation for IoT and IoE (TIH-IoT) organized by IIT Bombay
- Attended FDP on Advances in 5G and Next Generation Networks, virtually organised by the Dept. of E&TC Engg, Sinhgad Institute of Technology, Lonavala & Dept. of EE, Yeshwantrao Chavan College of Engineering Nagpur. TSponsored by IEEE Bombay Section and Supported by IEEE SITSB & YCCESB During June 26-30, 2023.

2021-2022

Webinars, Workshops, and Faculty Development Programs Attended (Lock Down Activities)

- 1 **National Level FDP on "Decoding Examination During and Post COVID-19"**
 - o **Organized by:** Sinhgad Institute of Technology, Pune
 - o **Date:** 8th May 2020
 - o **Additional Module:** IIT Spoken Tutorial on Moodle Learning Management System
- 2 **COVID-19 Awareness Program**
 - o **Organized by:** Pune Shopholic
 - o **Date:** 15th May 2020
- 3 **One-Week Faculty Development Program on MATLAB**
 - o **Organized by:** RAIT, Nerul
- 4 **Faculty Program on NBA Accreditation Process**
 - o **Organized by:** Bharati Vidyapeeth College of Engineering, Navi Mumbai
 - o **Date:** 15th May 2020
- 5 **One-Week Webinar Series on "Technological Advancements in the Field of Electronics and Telecommunication"**
 - o **Organized by:** Vidyavardhini's College of Engineering, Vasai
 - o **Date:** 9th May 2020
- 6 **Two-Day Workshop on Internet of Things**
 - o **Organized by:** Universal College of Engineering, Vasai
- 7 **International Webinar on "Writing Articles in Impact Factor Journals"**
 - o **Organized by:** MGM University – Dr. G. Y. Pathrikar College of Computer Science and IT, Aurangabad
 - o **Date:** 19th May 2020
- 8 **Webinar on "A Tour to Communication Engineering"**
 - o **Organized by:** Shree L. R. Tiwari College of Engineering, Thane
 - o **Date:** 16th May 2020
- 9 **One-Week Webinar Series on "Digi-Tech Teaching Learning – 2020" (Students Training Programs)**

- o **Organized by:** Sinhgad Institute of Technology, Lonavala
- o **Date:** 19th May 2020

10 **One-Week Webinar Series on "Digi-Tech Teaching Learning – 2020" (Project-Based Learning)**

- o **Organized by:** Sinhgad Institute of Technology, Lonavala
- o **Date:** 20th May 2020

2020-2021

Attended AICTE sponsored one week online STTP on “**Telecommunication Networks - Phase II**” organized by **Vidyalankar Institute of Technology**, Mumbai.

Participation in SWAYAM MOOCs/NPTEL/Certification CoursesAttended:

2021-22

- 1 Successfully completed the Coursera course "**FPGA Computing Systems: Background Knowledge and Introductory Materials**", a 5-week program that provided foundational knowledge on FPGA-based computing systems.
- 2 Successfully completed the Coursera course "**Hardware Description Languages for FPGA Design**", a 5-week program focused on the application of Hardware Description Languages in FPGA development.

Trainings Undergone in Industry/ Joint Research Publications:

2021-22

Successfully completed **10 days training program Programs organised by E&ICT Academy IIT Guwahati.**

2018-19

Successfully completed the training program "**Workshop on SoC Design using Open Source EDA Tools**" held from **19th to 23rd February 2020**, organized by **EICT, IIT Guwahati at DBIT, Mumbai**

Patents Granted:

- Title of the invention : **A Novel IoT based 5G Ambient Air Quality Monitor System using Light Scattering Technique.** Application No was: 202321013848 under Intellectual Property Right, Govt of India and Indexed at WIPO, Switzerland (Patent Published)

Prototypes / Products Developed:

Wi-Fi Enable Robot for Versatile Applications

Implementation and analysis of **energy efficient routing protocol for WSN**

Professional Body Memberships:

- Life time Member of INDIAN SOCIETY OF TECHNICAL EDUCATION (ISTE)
- Life time Member of Institution of Electronics and Telecommunication Engineering (IETE)

Invited Talks/Resource Person in STTPs / FDPs:

2025-2024

- Delivered an expert talk on “**Benchmarks and Standard Operating Procedures (SOPs) for NAAC Criterion 3**” during the Faculty Development Program (FDP) organized by the Institute NAAC team.

2023–24

- Conducted a session on **Computer Networks** for **third-year students**, organized by the **Department of Computer Engineering, Don Bosco Institute of Technology (DBIT)**, as part of the department’s **academic enrichment initiative**.

2018-19

- Acted as a **Resource Person**, along with an industry expert, for the **Red Hat Linux Administrator Training Program** organized by the **EXTC Department of Don Bosco Institute of Technology (DBIT)**, facilitating hands-on training in Linux system administration.

2014–15

- Invited as a **Resource Person** for an STTP organized by the Department of Electronics and Telecommunication (EXTC) , DBIT on the topic of *NS2 for wired and wireless networks*

2014–2019

Served as a **Resource Person** for the **CCNA Training Program**, conducted in collaboration with industry experts, contributing to practical training in computer networking concepts and certification for the **EXTC Department of Don Bosco Institute of Technology (DBIT)**.

Achievements/Awards/Recognitions:

Reviewer for the *Journal of Electrical Engineering & Technology*, a peer-reviewed journal published by the Korean Institute of Electrical Engineers under Springer and indexed in Scopus.

Interactions with Professional Institutions: IETE , IETE, and IEEE

Other Achievements & Responsibilities:

Fulfilled all the responsibilities of department as well as Institute level from 2011 **Consultancy**

Projects Received from External Agencies:

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Funded Research:

2019–20

Received a research grant of ₹25,000 from the **University of Mumbai** for the project titled ***“Implementation and Analysis of Energy-Efficient Routing Protocol for WSN.”***

2014–15

Received a research grant of ₹20,000 from the **University of Mumbai** for the project titled ***“Wi-Fi Enabled Robot for Versatile Applications.”***

Sponsored Research Projects Received from External Agencies:

2019–20 (*funds received in 2019–20*)

Received a research grant of ₹25,000 from the **University of Mumbai** for the project titled ***“Implementation and Analysis of Energy-Efficient Routing Protocol for WSN.”***

2014–15

Received a research grant of ₹20,000 from the **University of Mumbai** for the project titled ***“Wi-Fi Enabled Robot for Versatile Applications.”***

Institute Development/Department Responsibilities Handled:

2024–25

- Serving as the **NAAC Co-ordinator at the Institute level** since 2014, continuing to oversee quality assurance and accreditation-related activities.
- Holding the position of **Criterion 3 Co-ordinator at the Department level** since 2014, responsible for managing activities related to research, innovations, and extension.
- Functioning as the **Timetable Co-ordinator** since 2020, ensuring smooth scheduling and execution of academic timetables.
- Consistently appointed as the **Class Teacher for both EVEN and ODD semesters** every academic year, contributing to student mentoring and academic support.

2019–20 to 2021–22

- Actively served as a **member of the Women's Development Cell (WDC)**, contributing to initiatives focused on women's empowerment and welfare.
- Served as a **member of the Staff Welfare Committee**, supporting activities aimed at the well-being and professional growth of faculty and staff.

2014–15 to Present

- **Appointed as the NAAC Co-ordinator at the Institute level** since the academic year **2014–15**, actively leading initiatives related to institutional accreditation and quality enhancement.
- **Serving as the Criterion 3 Co-ordinator at the Department level** since **2014–15**, with responsibilities focused on promoting research, innovation, and extension activities.

2014–15 to 2017–18

- **Worked as the Project Co-ordinator for final-year students**, guiding and mentoring them through their academic projects and ensuring successful completion in alignment with departmental objectives.

2012–13 to 2014–15

- Served as the IETE Student Forum Co-ordinator, facilitating technical events, student engagement, and professional development activities under the banner of the Institution of Electronics and Telecommunication Engineers (IETE).

- **PG / Ph.D. Guidance:**

NA

Contact Details:

- Email ID: aparna@dbit.in

Personal Webpage Link: