

Name of Teaching Staff : **Prof. Mrunalini Pimpale**
 Designation : Assistant Professor
 Department : Electronics & Telecommunication Engineering
 Date of Joining the Institution : 04.7.2013
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Google Scholar Link : <https://scholar.google.com/citations?hl=en&user=CUvPuEEAAAJ>

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Research gate Link: : <https://www.researchgate.net/profile/Mrunalini-Pimpale>

Publons Researcher ID : <https://publons.com/researcher/4917063/mrunalini-pimpale/>



Qualifications with Class / Grade : 1. Pursuing **Ph.D.** in Electronics & Telecommunication Engineering from Dwarkadas J. Sanghvi College of Engineering, under University of Mumbai.
 2. **M.Tech.** – Electronics Engineering from Yashwantrao Chavan College of Engineering, Nagpur Autonomous in June, 2012, 1st class with CGPA 7.59
 3. **B.E.** (Electronics Engineering) from Rashtrasant Tukadoji Maharaj Nagpur University in June 2008, 1st class with 71.6%.

Total Experience in Years : **Teaching: 16 years**
 1. Assistant Professor, D.J. Sanghvi College of Engineering (Electronics and Telecommunication Engineering Department) from 4.7.2013 to till date.
 2. Assistant Professor, D.J. Sanghvi College of Engineering (Engineering Department) from 11.7.2012 to 30.6.2013 on Adhoc basis.
 3. Lecturer, Yashwantrao Chavan College of Engineering Nagpur, from 11.08.2009 to 30.04.2012.

Papers Presented in Conferences : **International: 3**
 [1] Shrey Desai, Shlok Sampat, Darshil Vadodaria, Mrunalini Pimpale “Wind Energy Forecasting using Artificial Intelligence” acceptance for presentation in 4th International Conference Artificial Intelligence and Speech Processing 2022 (AIST), IEEE, 2022
 [2] Rohan Vaidya, Darshan Trivedi, Sagar Satra, Mrunalini Pimpale “A Novel Approach Towards Handwritten Character Recognition Using Deep Learning” Proceeding of 2018 Second International Conference on Inventive Communication and Computational Technologies

(ICICCT), IEEE, 2018, pp 772-775. April 2018

- [3] Mrunalini Pimpale, Tejaswini Panse, “Radix-10 Parallel Decimal Multiplier” Proceedings of International Conference on Electronics and Communication Engineering, January 2012

International Journal: 1

- [1] V, V., Pimpale M., Kapure, V., Mishra, P., Rokade, A., Bhushan, T., & Singh J. (2025). A hybrid IoT and machine learning framework for smart greenhouse automation in sustainable agriculture. International Research Journal of Multidisciplinary Technovation, 58–69.
- [2] Mrunalini Ingle, Tejaswini Panse “Radix-10 Parallel Decimal Multiplier” International journal of Electronics Signals and Systems (IJESS) ISSN: 2231-5969, Vol-2, Iss-1 pg 17-24, July 2012.

Area of Specialization

Analog VLSI, Analog Signal Processing, Embedded Systems, Biomedical Signal Processing

Professional Memberships

: Life Member of Indian Society of Technical Education (ISTE) - **LM125795**

Subjects Taught

UG Level:

- [1] Digital Communication
- [2] Analog Electronics –I
- [3] Analog Electronics –II
- [4] Analog circuit Design
- [5] Integrated Circuits
- [6] Electronics Devices and Circuits-I
- [7] Electronics Devices and circuits-II
- [8] VLSI Design
- [9] Microprocessor and Microcontroller
- [10] Digital System Design
- [11] Electronics and Measurement Instrumentation
- [12] RF-Design

Projects Guided

: **UG Level:**

- [1] IoT based Servo Control Voltage Stabilizer
- [2] Brain Tumor Detection using Machine Learning Techniques
- [3] Object Detecting Autonomous Water Surface Cleaning Bot.
- [4] Sketch recognition using Siamese network.
- [5] Smart Visual Local Navigation AID for the Visually Impaired.
- [6] Metal Detector Robotic Vehicle.
- [7] Closed Loop BLDC motor for Electric cars.
- [8] Wireless Rover with Robotic Arm and Visual Assistance.
- [9] Sleep detector using EEG signal.
- [10] Gesture and Voice control Mouse.
- [11] SEO optimizer and suggester.
- [12] Handwriting detection and recognition using Neural Network.
- [13] Smart trolley using RFID.
- [14] Analysis of 5G network.
- [15] Vehicle Accident Detection System
- [16] Smart Garbage Management and Monitoring system.
- [17] Wind energy forecasting using Artificial Intelligence.

Institute/Department
Responsibility handled:

- [1] Load Distribution and Time Table Coordinator
- [2] NBA Criteria 2- Department coordinator
- [3] Admission Committee Member
- [4] NAAC Criteria 5- Committee member
- [5] NBA Criteria 8- Department coordinator
- [6] Electronics Design/ EHW & simulation Lab In-charge
- [7] SE Class Teacher.
- [8] Academic Bulletin (half yearly news editor)
- [9] Department Website Coordinator.
- [10] Member of organizing committee of International conference (ICWiCOM).
- [11] Organized STTP on “Recent Trends in wireless networks”
- [12] Organized Webinar on ‘Recent Trend in Microwave and Internet of Things’.

Pedagogy Development

Video Lectures on Microprocessor

- [1] <https://youtu.be/cMDSKLHTYLs>
- [2] <https://youtu.be/OKBEjNXEJv0>

Training Programs/FDPs /
Workshops/ Webinars
Attended

Internship:

- [1] **One-month Industrial training and Internship on “Data Science, AI, Machine Learning using Python”** Organized by Academy of Skill Development from 2nd June 2024 to 27th June 2024.
- [2] **One-month Internship on “Machine Learning Masterclass (Python)”** Organized by APSSDC in association with Pantech e Learning Pvt. Ltd on 06 June 2023.

STTP's

- [1] One Week ISTE approved STTP on “Research Funding, Publications, and IPR: A Journey from Fundamentals to Advanced Methodologies” organized by Department of Mechanical Engineering of D. J. Sanghvi College of Engineering on 10th June to 14th June 2024.
- [2] One Week ISTE approved STTP “Recent Trend Research and Challenges in IOT Applications” organized by Department of EXTC of Vidyavardhini College of Engineering and Technology on 28th June 2021 – 3rd July 2021
- [3] National Level One Week STTP on “MATLAB for All” organized by Department of Electrical and Electronics Engineering Shri M. Visvesvaraya Institute of Technology, Bangalore-562157 on 4th June 2020-8th June 2020.
- [4] AICTE-ISTE Approved One-week STTP on “Recent Trends in Wireless Networks” organized by EXTC Dept. of DJSCE on 2nd January – 7th January 2019.

FDP's

- [1] One Week ISTE approved FDP on “Trustworthy AI for Cybersecurity: Emerging Trends and Application” held during 6th July 2026 to 10th July 2026 organized by Department of Computer Science and Engineering (IOT and Cyber Security with Block Chain Technology), D. J Sanghvi College of Engineering, Mumbai.
- [2] One Week FDP on “Modern Machine Learning & Deep Learning Paradigms for Signal and Image Analysis” held during 06th July 2026 to 12th July 2026 organized by Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Manufacturing, Jabalpur.
- [3] One Week ISTE approved STTP on “Advanced Materials for Smart and Sustainable Technologies” held during 27th July 2026 to 31st July 2026 organized by Department of Engineering Science, K.J College of Engineering and Management Research, Pune.
- [4] One Week AICTE (ATAL) approved FDP on “Cross Roads of AI and Signal Processing” held during 27th Jan 2025 to 01st Feb 2025 organized by D. J Sanghvi College of Engineering, Mumbai.
- [5] One Week ISTE approved FDP on “Effective AI Tools Enhancing Teaching, Learning and Research” held during 1st July 2024 to 06 July 2024 organized by Xavier Institute of Engineering, Mahim, Mumbai.
- [6] One Week FDP on, “Exploring Educational Potential of CHATGPT” organized by Career Development Cell of Gokul Global University, Siddhpur, Gujrat from 11th to 17th September 2023
- [7] One Week ISTE approved SF-STTP/ FDP Programme on “Emerging Technologies in Machine Learning” organized by Dwarkadas J. Sanghvi College of Engineering on 30th January – 03rd February 2023
- [8] One Week FDP on “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education (AICTE) from 3rd January, 2022 to 7th January 2022.
- [9] One Week FDP on “Machine Learning and Deep Learning Application in Engineering and Science” organized by Jointly organized by Government College of engineering Karad and Rajkiya Engineering College Azamgarh on 16th May – 20th May 2020
- [10] One Week FDP on “Python software” organized by DJSCE on 03rd May -07th May 2020
One Week FDP on “Data Science” organized by Department of IT, Fr. Conceicao Rodrigues College of Engg., Mumbai from 26th May to 30th May 2020
- [11] One day FDP on “Industry Perspective on Cyber Security” organized by TCS held on 27th January 2022 using Digital platform.
- [12] Two-day FDP on “Intellectual Property Rights” organized by TCS on 24th Aug 2020.
- [13] One Week FDP on “Improving Teaching Learning Experience using Best Practices” organized by department of IT DJSCE from 15th June to 19th

June 2020.

- [14] One Week FDP on “Recent Trends in Power system” organized by Sharad Institute of Technology College of Engineering Yadav [Ichalkaranji] on 22nd June – 26th June 2020.
- [15] Two-day Faculty development Programme on Active Teaching Learning Strategies Using Innovative Technology” organized by Faculty of Applied Science and Humanities, DJSCE on 25th -26th February 2019.
- [16] One Week AICTE-ISTE approved FDP on “Adaptive Signal Processing: The Road Map to Machine Learning” organized by EXTC Dept. of DJSCE on 07th Jan 2020 – 11th Jan 2020.
- [17] Faculty Development Program on “Wavelets” organized by Department of EXTC, DJSCE on 2nd -3rd August 2019.
- [18] AICTE approved Four Week FDP on “Use of ICT in Education for Online and Blended Learning” organized by IIT Bombay from (2nd May 2016 to 10th July 2016).
- [19] Faculty Development Workshop on “ARM mbed Platform” organized by Fr. Conceicao Rodrigues College of Engineering on 1 Day (08 March 2014).
- [20] AICTE approved Two Week FDP on “Basic Electronics” organized by IIT-Bombay from 28th June 2011 to 8th July 2011

Workshop:

- [1] ISTE Workshop on “Writing Effective Conference Papers” organized by Indian Institute of Technology Bombay on 18th and 19th February 2012.
- [2] Orientation on Microprocessor & Peripherals organized by Department of EXTC of Saraswati COE on 3rd January 2014

Webinar's:

- 1) Webinar on “5G-Communication of Next Generation” organized by by ISTE VIT student chapter in association with Electronics and Telecommunication of Vidyalankar Institute of Technology on May 14,2020.
- 2) Webinar on “Challenges in Non-Destructive Testing and Future Prospects” organized by Department of Production DJSCE on 29th May 2020.
- 3) Webinar on “Verilog and System Verilog for Beginner's” organized by ECE Department of RKNEC Nagpur on 28th May 2020
- 4) Webinar on “Recent Trends in Microwave Engineering and Internet of Things” organized by Department of Electronics and Telecommunication DJSCE in association with IETE-SF Chapter on 6th and 7th June 2020.

- 5) Webinar series on “Machine Learning: Application in Communication & Signal Processing” organized by of Electronics and Telecommunication DJSCE from 22nd to 23rd July 2021.

Coursera Courses:

- [1] Advanced Machine Learning Neural Networks and NLP –20th July 2026
- [2] Mathematics for Machine Learning Linear Algebra – 22nd July 2026
- [3] 5G for Everyone – March 2022
- [4] AI for everyone - March 2022
- [5] Assessment in higher education: Professional Development for Techers- November 2021
- [6] Customer journey maps with IOT touchpoints in Miro – April 2022.
- [7] Design of antenna arrays for 5G communication system – February 2022
- [8] Learning to teach online – July 2020
- [9] Machine learning introduction for everyone – April 2022
- [10] Programming for everybody (Getting started with Python) – April 2022
- [11] Psychology of popularity – March 2022
- [12] The teacher’s social and emotional learning – April 2022
- [13] Wireless communication for Everybody – March 2022

Training programs/
workshops organized:

- :
- [1] Co-Coordinator for Webinar on Recent trends on Microwave Engineering and IOT organized by EXTTC Dept. of DJSCE from 6th June -7th June 2020.
 - [2] Course Coordinator for one-day Workshop on “ESIM” organized by IIT-Bombay on 21st September 2019.
 - [3] Co-Coordinator for AICTE-ISTE approved one week STTP on “Recent trends in wireless Networks” organized by EXTTC Department, DJSCE from 2nd January – 7th January 2019.
 - [4] Coordinator for 2-day workshop on “Sixth Sense Technology” organized by Technophile Systems in association with Robotics & Computer Applications Institute of USA held at DJSCE from 9th & 16th March 2014.

Approval received:

- **UG Approval:** Approved since 04.07.2013 via letter no. CONCOL/TAAS (CT)/ICD/2016-2017/21875 dated 13th June, 2017