



**Pimpri Chinchwad Education Trust's
Pimpri Chinchwad College of Engineering &
Research Ravet, Pune**



Academic Year: 2025 - 26

Faculty Profile

Name of Faculty:	Dr. Dipali Nilesh Dhake		
Qualification :	Ph.D. in E&TC		
Designation :	Assistant Professor		
Department :	Electronics and Telecommunication Engineering		
Date of Joining :	15/12/2017		
Experience :	Teaching: 14 Yrs. Industry: 1 Yr.		
Research Areas / Area of Specialization	Biomedical Signal Processing		
Courses / Subjects Taken:	JAVAScript, Skill Development, Artificial intelligence, Electrical Circuits, Principle of Communication System, Broadband Communication system, Electrical and Electronics Engineering, Basic Electronics		
IPR :	Title of Patent/Copyright	Docker No./ Diary No.	Registered /Filed
	Tiny pain relief multipurpose bottle	380738-001	Filed
	Alert System For Side Stand Retraction In Moving Bicycle	202221010732	Filed
	Multipurpose hair belt for hairstyle	201921052353	Filed
	ATM security system using iris recognition by image processing	201921052340	Filed
	Presentation on "Diode Circuits"	733/2018-CO/L	Registered
	ATM security system using iris recognition by image processing	17533/2019-CO/L	Registered
	Teleoperated Animatronics Robot	9072/2021-CO/L	Registered
	Solar Grass Cutting Robot	9250/2021-CO/L	Registered
	AgriAI: Cultivating Insights into Commodity Markets	L-137768/2023	Registered
	Automatic CNC Based Spot Welding Machine	L-139943/2023	Registered
	Development of IoT based Solar drying and monitoring System	L-122618/2023	Registered
	EEG based Mental Stress Level Detection	L-125727/2023	Registered
	EEG Based Persons Emotion Recognition	28364/2021-Co/L	Registered

	Artificial Intelligence Based Multilevel Stress Detection And Analysis Using Eeg Signal	1435/2022-Co/L	Registered
Research Publications :			
Journal Publications:	Year	Title of Paper	Published in
	2025	Novel 2-D Wavelet-Based Spectral-Temporal Representation for Deep Learning Based Stress Detection Using EEG Signal	Circuits, Systems, and Signal Processing
	2024	Implemented OBL-DE assisted Tasmanian devil optimisation for selecting the optimal features using EEG signal for stress detection	International Journal of Ad Hoc and Ubiquitous Computing
	2024	Dielectric modulated organic thin film transistor trench biosensor for label-free detection: Modeling and simulation analysis	International Journal of Numerical Modelling: Electronic Networks, Devices and Fields
	2023	A Comparative Analysis of EEG-based Stress Detection Utilizing Machine Learning and Deep Learning Classifiers with a Critical Literature Review	International Journal on Recent and Innovation Trends in Computing and Communication
	2021	Solar Grass Cutting Robot	International Journal Of Innovative Research In Technology
	2021	Teleoperated Animatronics Robot	Journal Of Huazhong University Of Science And Technology
	2021	Eye Blink Actuation Using Human Computer Interface	International Journal For Research In Applied Science & Engineering Technology (IJRASET)
	2020	Sign Language Communication With	International Journal of

		Dumb And Deaf People	Engineering Applied Sciences and Technology
	2020	ATM Security System using Iris Recognition by Image Processing	International Journal of Engineering Research & Technology (IJERT)
	2020	Animatronic Robot with Telepresence Vision	International Journal of Innovative Research In Technology(IJIRT)
	2019	Mobility aware and energy efficient medium access control protocol in WSN	IOSR Journal of Engineering (IOSR JEN)
	2019	Image Processing based Silkworm Engg counting Methods	IOSR Journal of Engineering (IOSR JEN)
	2019	Distance Regularization Level set evolution for Blood cell image segmentation	IOSR Journal of Engineering (IOSR JEN)
Conference Publications:	Year	Title of Paper	Published in
	2025	Eco-Watt Estimator: A Solar Energy Assessment	International Conference on Advancement in Communication & Computing in Technology (INOACC)
	2024	Comprehensive Analysis of Solar-Powered Electric Carts	IEEE 3rd International Conference on Electrical Power and Energy Systems (ICEPES)
	2024	Simulation and Analysis of Solar-Powered Electric Golf Cart	4th Asian Conference on Innovation in Technology (ASIANCON)
	2024	EEG Features Selection by Using Tasmanian Devil Optimization Algorithm for Stress Detection	Algorithms for Intelligent Systems ((AIS))
	2024	Neural Stress Mapping	International

		with Machine Learning from EEG Data	Conference on Intelligent Computing and Big Data Analytics
	2023	LSTM algorithm for the detection of mental stress in EEG	International Conference on Intelligent Technologies (CONIT)
	2023	FPGA-Based Automatic Speech Emotion Recognition Using Deep Learning Algorithm	Artificial intelligence applications and reconfigurable architectures
	2023	Deep learning-based analysis of affective computing for Marathi corpus	International Conference on Intelligent Technologies (CONIT)
	2022	EEG Signal Enhancement using Wavelet based Soft-thresholding Approach	IEEE 2022 3rd International Conference for Emerging Technology (INCET)
	2019	Mobility aware and energy efficient medium access control protocol in WSN	National Conference on “Recent Innovations in Engineering and Technology”
	2019	Image Processing based Silkworm Egg counting Methods	National Conference on “Recent Innovations in Engineering and Technology”
	2019	Distance Regularization Level set evolution for Blood cell image segmentation	National Conference on “Recent Innovations in Engineering and Technology”
Books Publication:	06		
Profile Link :	https://scholar.google.com/citations?user=Xd-qG3gAAAAJ&hl=en Cited by		
		All	Since 2018
	<u>Citations</u>	35	34
	<u>h-index</u>	3	3
	<u>i10-index</u>	0	0

H –Index:	3
Product Developed:	1
Certifications :	6
Awards/Appreciation/Achievements :	6 NPTEL courses completed with Elite
Membership:	IETE,ISTE
Industrial Training :	03
Resource Person /Expert Session/Jury Invited:	03
Workshop/FDP/STTP attended(more than a Week):	18
Event Organized Inter department/Inter college/ Other recognized Industry/IIT's/NPTEL/SPOKE N TUTORIAL/ etc. :	<ul style="list-style-type: none"> • URC Competition organized at national level • SAE Areathon Competition Coordinator at college level • CODE-JANGO Competition organized at state level • 1 week national FDP organized “recent trends in AI ,IoT,Data analytics
Event Organized in Department:	<ul style="list-style-type: none"> • Industry expert lecture organized on “Motors used in the electric vehicle” at department level. • Industry expert lecture organized on “Leading technology of Artificial Intelligence in industry” at department level. • Guest lecture organized on “Positive Attitude and Time Management” at department level. • Webinar on “Website development” at department level. • Guest lecture arranged on “Bessel function and spectrum of Phase Modulation” at department level. • lecture arranged on “Ethics”at department level. • lecture arranged on “Human resources Development”at department level. • Webinar on “Report writing using Latex” at department level. • Webinar on “Selection criteria of an Electronic Component and Microcontroller” at department level.
University level appointments:	External Examiner ,Paper Setter
Administrative Duties:	Assistant Professor
Academics Duties:	Drone club Coordinator, BE Project Coordinator, Time table in charge, Guest,Expert,Alumini Lecture,Workshop/Seminar/Conferences Conducted Coordinator, Department Meeting Notice and MoM, Curricular /Extracurricular Participated by students in charge NBA Criteia 5 Coordinator NAAC Criteria 3 member CDC Member Art Circle
Any Other	-