Name of Faculty: Varsha Hemantkumar Bodade (PhD)
Designation: Professor

Email: varshabodade@ternaengg.ac.in

Address for Correspondence: 2102, Marigold A Wing, Siddheshwar Gardens, Dhokali, Kolshet Road, Thane (West)-400607

Professional Qualification:

- **Ph.D in Electronics and Telecommunication Engineering, 2018**
  Sant Gadge Baba Amravati University, Amravati.
- **Master of Electronics and Telecommunication Engineering, 2007**
  Mumbai University, Maharashtra
- **Bachelor of Industrial Electronics Engineering, 1998**
  Priyadarshini College of Engineering and Architecture, Hingna Road, Nagpur. Nagpur University name, Nagpur, Maharashtra

Short Biodata:

I am working as Professor in Information Technology Department, completed Ph.D in Electronics and Telecommunication Engineering from Sant Gadge Baba Amravati University, Amravati, India. I completed M.E in Electronics and Telecommunication from Mumbai University, Mumbai in 2007. The main research areas are wireless communication, wireless sensor networks, Internet of Things, Digital Communication, Simulation and Modelling.

Patents/ Products/ Consultancy:

Patents:

1. **Application No:**202121005122

Date of Patent:6/02/2021
Status: Filed
Title: FUZZY LOGIC BASED AUTOMATIC INTRAVENOUS ANESTHESIA DELIVERY AND MONITORING SYSTEM

2. **Patent No:** 2021100883

Date of Patent: 13th Feb 2021
Status : Granted
Validity: 13th Feb 2029
Title: FUZZY LOGIC BASED AUTOMATIC INTRAVENOUS ANESTHESIA DELIVERY AND MONITORING SYSTEM

3. Patent No: 202141045152
Date of Patent: 05th Oct 2021
Status : Filed
Validity: 13th Feb 2029
Title: METHOD AND SYSTEM FOR UTILIZING MACHINE LEARNING (ML) MODELS FOR DETERMINING OPTIMAL TRAVEL ROUTES FOR ELECTRIC VEHICLES (EV)

Reviewer:

1. International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2014, Sep 2014
2. International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2017, Sep 2017
3. IEEE transaction on Industrial Informatics-Manuscript No TII-19-0109," Automated Follow-up and Alert System for Patients with Chronic Hypertension"
4. Transaction on Emerging Telecommunications Technologies for reviewing Manuscript ID ETT-19-0438.R1 entitled "Epowt: A Denoising Technique of the ECG Signal Transmission via 5g Wireless Communications".
5. Springer CCIS Series Conference Proceedings of the " 2nd International Conference on Computing Science, Communication and Security (COMS2 2021), for reviewing paper ,"A Novel ACO -FA Based Hybrid Algorithm for Routing in FANETs", Feb 2021.
6. Springer CCIS Series Conference Proceedings of the " 2nd International Conference on Computing Science, Communication and Security (COMS2 2021), for reviewing paper ,"A Survey of Short Term Stock Market Movements Based on Sentiment Analysis", Feb 2021.
7. Springer CCIS Series Conference Proceedings of the " 2nd International Conference on Computing Science, Communication and Security (COMS2 2021), for reviewing paper ," Route Optimization and Threshold-T for Malicious Node Detection In ADhoc Network", Feb 2021.
8. International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2021, June 2021.

Major Subjects:

- Wireless Communication
- IoT
- Simulation and Modelling
- Computer Networks

Citation Analysis:

36 citations (h-index 4 and i10-index 1) in google scholar

https://scholar.google.com/citations?user=BDvcDlgAAAAJ&hl=en

List of Publication:

Journal Publications:

International Conferences and Journals

1. Varsha Wahane, Jyothi Digge, *"An overview of Next Generation Network".* International Conference on "Digital factory ICDF 2008" at Coimbatore college of Technology, Coimbatore.
2. Varsha Wahane *"An adaptive call admission control for wireless network".* International Conference on " Computer Networks and Security (ICCNS08)" at Vishwakarma Institute of Technology, Pune
3. Varsha Wahane, P.V.Ingole, *"Wireless Health Monitoring using BAN: Body Area Network".* International Conference on " Recent trends in Information Technology and Computer Science – ICRTITCS-2012"
4. Varsha Wahane, P.V.Ingole, *"Role of BAN: Body Area Network In Wireless Health Monitoring"* International Conference on **"** Advanced Computing & Communication Technologies (ICACCT 2012)" at Asia Pacific Institute of Information Technology SD India, Panipat
5. Varsha Wahane, P.V.Ingole, *"Machine –to-Machine Communication for Wireless Mobile Health Monitoring"* International Journal of Current Engineering and Technology," IJCET ,in Vol.5, No.10 May/June 2015
6. Varsha Wahane, P.V.Ingole, *"An Android Based ECG Monitoring System for Cardiac Arrhythmia" 2016 IEEE Healthcare Innovation Point-Of-Care Technologies Conference (HI-POCT),* Cancun, 2016, pp. 183-187. doi: 10.1109/HIC.2016.7797727
7. Varsha Wahane, P.V.Ingole, *"Interactive Mobile Health Monitoring System"* http://dx.doi.org/10.14569/IJACSA.2017.080442 International Journal of Advanced Computer Science and Applications, Vol. 8, No. 4, 2017, U.S. ISSN: 2156-5570 (Online), U.S. ISSN: 2158-107X (Print). IJACSA is indexed by Thomson Reuters
8. Varsha Wahane, P.V.Ingole, *"A Survey: Wireless Body Area Network for Health Monitoring"* American Scientific Research Journal for Engineering ,Technology and Sciences, ISSN (Print) 2313-4410, ISSN (Online) 2313-4402 © Global Society of Scientific Research and Researchers http://asrjetsjournal.org/,April 2017.ASRJETS having impact factor 0.167 and indexed, abstracted and listed by Ulrich's, Massachusetties
9. Aparna Kamble, Varsha Bodade *"Model Driven Architecture For Code Generation* International Journal of Global Technology Initiatives" , IJGTI Vol 1, Issue 2
10. Aparna Kamble, Varsha Bodade, *"Empirical Development Of Model Driven Architecture Paper ID: ICEECS-CH-25NOV12-041"* International Conference On Electrical Engineering and Computer Science(ICEECS-2012)
11. Rajiv Bhatia, Varsha Bodade, *"Smart Grid : Wireless Communication and Cyber Security"* International Journal of Latest Technology in Engineering, Management and Applied Science-IJLTEMAS-2013
12. Teja Dhanawade, Varsha Bodade *"Disclosed Diffusion & S-R Algorithm in Image Inpainting"* International Conference on Recent Trends in Computer & Electronics Engineering (ICRTCEE) impact factor 2.5 (JAN. 2015), page number 17

13. Rajiv Bhatia, Varsha Bodade, *"A Smart Sustainable System for Wireless Smart Metering in Smart Grid"* International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2014, 30th Sep 2014
14. Vaishali Bondre, Varsha Bodade *"Scalable problem in mobile presence service"* International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2014, 30th Sep 2014
15. Rajiv Bhatia, Varsha Bodade, "*Defining the framework for Wireless-AMI Security in Smart Grid"* International conference on Green Computing, Communication and Electrical Engineering-ICGCCEE'14
16. Varsha Bodade, Teja Dhanawade "*Image Inpainting Based on SR Algorithm"* International Conference on Emerging Trends in Technology and Its Applications-ICETTA- 2014
17. Varsha Bodade, Abhilasha Singh *"BSBL Compressed sensing for ECG Telemonitoring"* International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2014, 30th sep 2014
18. Varsha Bodade, Abhilasha Singh *"RSS-Detection & Localization of Wireless Spoofing Attack"* International Conference on Advances in Science & Technology organized by Saraswati College of Engineering on 11 & 12 November 2014.
19. Abhilasha Singh, Varsha Bodade *"Detection & Localization of Attackers in Spoofing Attack"* International Conference on Computing Paradigms by Don Bosco College, Yelagiri Hills, Tamil Nadu on 24 & 25 June 2015
20. Abhilasha Singh, Varsha Bodade *"Detection & Localization of Spoofing Attack in Wi-Fi Network"* Equinox-2014 organized by Terna College of Engineering on 30 Sep & 1 Oct 2014 published in IJTRA "http://www.ijtra.com/special-issue-view/detection-amp-localization-of-spoofing-attack-in-wi-fi-network.pdf".
21. Abhilasha Singh, Varsha Bodade *"Detection And Localization Of Spoofers In Wireless Sensor Network Using RSSI"* ICAST-2015 International Conference on Advances in Science & Technology organized by Saraswati College of Engineering.
22. Teja Dhanawade, Varsha Bodade, *"Cascading the Images Based on S-R Algorithm"* IJSR Volume 11, Issue 4 Ver.VI (NOV. 2014), page number 3
23. Vaishali Bondre, Varsha Bodade, *"Scalable Server Architecture for Presence Cloud"* International Journal Of Modern Trends In Engineering And Research (IJMTER), organized by ICRTET 2015.(International Conference on Recent Trends in Engineering and Technology-2015)
24. Rajiv Bhatia, Varsha Bodade, "*Smart Grid Security and Privacy: Challenges, Literature Survey and Issues"* IJARCSSE, Vol -4, Issue-1, Jan-2014, pg- 702-706.
25. Vaishali Bondre, Varsha Bodade, *"Security of Scalable presence Cloud using PGP Web Trust Model"* International Conference on Advances in Science and Technology. ICAST 2015
26. Snehal Chankhede, Varsha Bodade, "*Analysis of Non-Coherent Receiver for suppression of NBI in UWB Communication System"* International Journal of Engineering and Computer Science,"Vol4, Issue 9, September 2015
27. Mitesh Santhalkumar, Varsha Bodade," Wireless E-Notice Board", IOSR Journal of Computer Engineering, Vol.18, Issue 2, March-April 2016.
28. Nidhi Bhatt, Shubham Mishra, Varsha Bodade, Ayush Pandita, Jyotisingh "*A Smart Car Parking System Based on Genetic Algorithm"* International Conference on Computing for Sustainable Global Development, 12th INDIACom : 2018, 14th-15th March 2018
29. Varsha Bodade, Gopika, Aishwarya Radhakrishnan "ECG telemonitoring by CS and BSBL approach" International Conference in Nascent trends in Information Technology and Communication Engineering, Equinox -2017, Sep 2017

30. Varsha Bodade, Gopika Tharammal, Aiswarya Radhakrishnan, Shrutika Kalangutkar, Nilima Phalak *"Automatic System for ECG Arrhythmia classification using fuzzy neural network"* IJCRT ISSN UGC Approved Vol. 6 Issue 2 April 2018.
31. Poonam Thakur, Varsha Bodade, Neeraj Malviya," Universal Framework Upgrade Over-The-Air for IoT Devices with Security", IEEE International Conference on Computing for Sustainable Global Development, Proceedings of the 13th INDIACOM-2019,IEEE Conference ID: 46181
32. Varsha Bodade, Dikshita Ubhare, Namrata Mandekar, Ashish Harane," Braille Pad for Blinders", Test Engineering and Management (TEST) ISSN 0193-4120, Volume83, Issue May- June 2020 indexed Scopus.
33. Varsha Bodade, Shruti Nagotkar, Farida Gazi, Raj Gohil," Online Examination System", Test Engineering and Management (TEST) ISSN 0193-4120, Volume83, Issue May- June 2020 indexed Scopus.
34. Varsha Bodade, Neha Karkhanis, Vineet Agarwal," Website: Higher Education Entrance Mock Test and Result Analysis", Test Engineering and Management (TEST) ISSN 0193-4120, Volume83, Issue May- June 2020 indexed Scopus.
35. Varsha Bodade, Uzma Khatib," A review on Machine Learning Techniques for Detection of Covid-19 Using X-Ray Images," IJRAR- International Journal of Research and Reviews, E-ISBN 2348-1269-ISSN 2349-5138, Volume 8, Issue 1, February 2021.
36. Varsha Bodade, Sonal Sawant, Pooja Jamdhade, Vishakha Desale," App for Organizing Alumni Event", International Research Journal of Engineering and Technology, Volume 8, Issue 5, May 2021.
37. Varsha Bodade, Mahendra Hiwale, Ashish Thorat," Extensible Desktop Controller for Mobile Robots", International Research Journal of Engineering and Technology, Volume 8, Issue 5, May 2021.
38. Varsha Bodade, Poonam Malik," Survey Paper on different Cloud Auditing Systems", Turkish Journal of Mathematics and Education, Volume 12, No 10, 6967-6971,indexed Scopus, April 2021
39. Varsha Bodade, Poonam Malik," Security Auditing Framework with Signature Verification Systems fpr Cloud Computing", Turkish Journal of Qualitative Inquiry,Mathematics and Education, Volume 12, No 10, 6967-6971,indexed Scopus, April 2021
40. Varsha Bodade, Uzma Khalid," Automated diagnosis of COVID-19 cases through CNN in Conjunction with VGG-16 model using data augmentation,"2nd Interntaional Confererence on Soft Computing for Security Applications,ICSCS 2022, 21-22 April 2022, publish in Springer_ Advances in Intelligents Systems and Computing.

Conferences and Workshops Publications:

National Conferences:

1. Varsha Wahane, N.S.Killarikar, *"Call Admission Control scheme For Wireless Mobile Network"* National conference on "Innovations in Engineering and Technology, INVENT 2007" at MIET, Gondia.
2. Varsha Wahane, Nusrat Parveen, *"Comparison Of CAC for Wireless Mobile Network"* National Conference on "Trends in Advance Computing" at DMCOE, Airoli , Navi Mumbai.
3. Varsha Wahane, Nusrat Parveen, *"AJAX (Asynchronous java script and And XML*)" National Conference on "Trends in Advance Computing" at DMCOE, Airoli , Navi Mumbai

4. Varsha Wahane, Jyothi Digge, *"Design and Simulation Of Optical Modulator On X-Cut Lithium Neobate" National* conference on "Recent trends in Wired and Wireless Communications", at SIES Graduate School of Technology, Nerul, Navi Mumbai.
5. Varsha Wahane, Vijaylaxmi Kadroli, *"A fuzzy approach to English Numeral Recognition* National conference on" Recent trends in Wired and Wireless Communications", at SIES Graduate School of Technology, Nerul, Navi Mumbai.
6. Varsha Wahane, Alam Shaikh, *"Handoff Algorithm for wireless Network".* National Conference on "Communication, Information technology and Automation" at PCT, Thane
7. Varsha Wahane, Vijaylaxmi Kadroli, *"Handwritten address interpretation using PIN code validation"* National Conference on "Nascent trends in engineering fields of Computer, Mechanical, Electronics and Telecommunication, Electrical and Information Technology" Father Agnel College of engineering, Vashi, Navi Mumbai

Workshop Attended:

Sr. No.	**Course/Seminar/Workshop**	**Duration/Date**	**Attended**
1	STTP on "Software defined Radios"	12-19th June 2006	Attended
2	DBMS and GUI	One Week-Aug2008	Attended
3	Recent Trends in DSP & Applications.	One Week-July-2008	Attended
4	STTP on "Convergence of Technologies", TEC, Navi, Mumbai	6-10th July 2011	Attended
5	International Workshop on "Global ICT Standardization Forum for India "SIT, Pune.	19-21st Mar 2009	Attended
6	STTP on "Information Networking and security" VJTI, Mumbai	20-25th Dec 2010	Attended
7	National Workshop on " Advances in Networking and Mobile Applications" RAIT Nerul, Navi Mumbai	Two-week 21 Nov-2 Dec-2011	Attended
8	STTP on "Wireless Network and Security", KC college of Engg. Thane	One week Jan-2011	Attended
9	Ten days Workshop on "Research Methodology", IIT Bombay	Two Weeks 25 June-4th July-2012	Attended
10	Signals and System	Two Week 2 Jan -12 Jan 2014	Attended

11	Workshop on “Network Simulator”	7th to 9th Feb 2014	Attended
12	Computer Networking	One Week 30 June -5 July 2014	Attended
13	Two days workshop on “Accreditation and OBE”	15th -16th Dec 2016	Attended
14	Workshop on “Knowledge ++”	20th and 21st Feb 2015	Attended
15	Advances in Communication	One Day-22nd March-2017 22nd March-2017	Attended
16	Cloud Computing	One Week - 2 Jan -6 Jan 2018	Attended
17	Workshop on the Role of Local Chapters	One day –by IIT Kanpur 15th Jan 2018	Attended
18	Machine Learning for Data Science and Analytics	One week Jan-2018	Attended
19	FDP 101x BY IIT Bombay	Two Week, Mar-2018	Attended
20	FDP 201x BY IIT Bombay	Two Week June-2018	Attended
21	Optical Communication and Network Component Design	Two Days 9-10th July 2018	Attended
22	Workshop on MATLAB	One Day 3rd Jan 2019	Attended
23	Workshop on” Advancement in Data Analytics”	One week 2nd Jan to 7th Jan2019	Attended
24	One Day Workshop on “NAAC Revised Accreditation Process , Initiatives and Reforms”	15th Feb 2019	Attended
25	Workshop on “ Digital Image Processing, Wavelets and Machine Learning”	Two weeks 10th June 2019 to 22nd June 2019	Attended
26	AICTE and ISTE approved Workshop on ” Advance Networking and Cyber Security”	One week 10th June 2019 to 22nd June 2019	Attended

27	One Day Workshop on " Data organization and Revised Accreditation Framework of NAAC"	27th June 2019	Attended
28	One day Faculty development program on " Enterprise Architecture"	One day 26th Aug 2019	Attended
20	One week faculty development program on" Deep Learning and Application ". Organized by Electronics and ICT Academies, Government of India	One week 9th Dec 2019 to 13th Dec 2019	Attended
30	One day National Workshop on NAAC PEER TEAM VISIT PREPARATION : CRITERIA EXHIBITION	One Day 13th Dec 2019	Attended
32	FDP on " IT and IPR", organized by Shree L.R. Tiwari College of Engg.	5th May 2020- 8th May 2020	
32	One week FDP on " Emerging Trends in Computer Science and Applications" , organized by BVICAM, New Delhi	11th May 2020 - 15th May 2020	Attended
33	A workshop on " Understanding NAAC Accreditation Process- An Expert Opinion", organized by VES, Mumbai	20th May -22nd May 2020	Attended
34	One Week FDP on " Opportunities and Challenges in Electronics ans Allied Industries in India post COVID-19", organized by VESIT, Chembur	25th May 2020- 30th May 2020	Attended
35	Online Course on " IT Project Management" by Coursera	March 2020	Attended
36	Online Course on " Introduction to Relational Database and SQL" by Coursera	March 2020	Attended
37	Online FDP on " Emerging Trends in Computer Engineering", organized by DMCE, Airoli	22th June 2020- 25th June 2020	Attended
38	Online FDP on " Delivering High Impact Presentation", organized by ICT Academy	26th April 2021-26th April 2021	Attended
39	Online FDP on " Smart Computing", organized by D. J. Sanghvi College of Engg. Mumbai	12th July 2021- 16th July 2021	Attended

40	Online FDP on " UHV" organized by AICTE	22nd Nov to 26th Nov 2021	Attended
41	ATAL FDP on "EMI EMC", organized by Terna Engineering College, Nerul, Navi Mumbai	13th Dec 2021 to 17th Dec 2021	Attended
42	Online FDP on "Flutter and PWA-Build Better Web Applications ", organized by Terna Engineering College, Nerul, Navi Mumbai	3rd Jan 2022 to 8th Jan 2022	Organized

Research and Scholarly Contributions:

- **Ph.D. Research**: Design and Implementation of Interactive Mobile Health Monitoring System
- **M. E. Research**: Adaptive Call Admission Control Scheme for Wireless Mobile Network

Funding Received:

812500/ funds received as a Coordinator for AICTE Prerana Scheme for 2020-2022.
Under this scheme successfully conducting the classes for GATE 2020-21, 2021-22, CAT 2020-21, 2021-22.

Software Tools:

1. MATLAB
2. ECLIPSE

Professional Association:

- Indian Society of Technical Education (ISTE) - Life Member -LM 65691

Experience:

Name and Address of Institute	From(Date)	To(Date)	Years-Months	Designation
Terna Engineering College, Nerul Navi Mumbai	Nov-2018	Till date	Working currently	Professor in IT Dept. (UGC)
Terna Engineering College, Nerul Navi Mumbai	Mar-2011	Nov-2018	7 years- 3 months	Asso. Prof in IT Dept.(UGC)
Terna Engineering College, Nerul Navi Mumbai	Dec-2010	Feb-2011	3 months	Asst. Prof in IT Dept.(UGC)
Terna Engineering College, Nerul Navi Mumbai	July-2006	Nov-2010	5 Years- 5 Months	Asst. Prof in IT Dept./Lecturer (UGC)

Terna Engineering College, Nerul Navi Mumbai	July-2005	June-2006	1 year	Lecturer in EXTC Dept
VPM's Polytechnic, Thane.	July -2002	May -2004	2 year	Lecturer
Govt. Polytechnic, Thane.	Sept -2001	June - 2002	1 years	Lecturer
Kamptee Polytechni ,Kamptee.	Aug – 1998	June - 2000	2 years	Lecturer

Work Experience Details (Industry)

Name of Organization	From (Date)	To (Date)	Years-Months	Designation
Ms. GTL Ltd. Mahape, Navi Mumbai	Aug-2000	July-2001	1 Year	Engineer

Responsibilities Handled:

Roles and Responsibilities:

Institute:

1. Dean IQAC
2. SC/ST Grievance Redressal Incharge
3. Health and Hygiene(Canteen Committee) Incharge
4. Academic Program Coordinator
5. Senior Supervisor for University Examination
6. Online and Offline CAP Incharge for College and University
7. Convocation Committee Incharge
8. Equinox Reception Committee Incharge
9. NBA Criteria Incharge
10. NAAC Criteria Incharge

Mumbai University

1. Member of syllabus setting committee and designed the syllabus for MEIT Next Generation Networks.
2. Convener and Member of syllabus setting committee and designed the syllabus for SEIT Principles of Communication
3. Convener and Member of Paper Setting for various subjects of UG and PG.

Talks/Guest Lectures Delivered:

1. Sr. No.	Course/Seminar/Workshop	Duration	Organized /Conducted
1	Emerging Trend in Wireless Networks and Security.	One Week July 2011	Co-ordinator Conducted

2	Workshop on Data Mining and Matlab graph generation	One Week July-2012	Conducted
3	Wireless Communication	One Day 20th Nov 2013	Conducted in ARMIET
4	Cloud Computing Workshop	One Week Oct-2016	Organized
5	Five Days Workshop on MATLAB	One Week-Jan 2016	Conducted & Organized
6	Emerging Trends in Wireless Communication	One Day 29th Jan 2016	Conducted
7	Orientation on Principles of Communication Engineering.	20th July 2017	Conducted
8	Orientation on Logic Design	20th July 2017	Conducted
9	Cloud Computing	One Week Jan-2018	Organized
10	Usage of Technology in COVID 19	One week 28th May-2nd June 2020	Organized
11	NBA Awareness Quiz	May 2020	Organized and Conducted
11	Orientation on Principles of Communication Engineering.	7th July 2020	Conducted

SESSION CHAIR/JUDGE:

Invited as Judge at College level Avishkar Research Convention-2022 on 7/12/2022 at CKT College, New Panvel.

Declaration

I hereby declare that the foregoing information are correct and complete to the best of my knowledge.

Faculty Name: Dr. Varsha Bodade

Place: Navi Mumbai