



Savitribai Phule Shikshan Prasarak Mandal's
N B NAVALE SINHGAD COLLEGE OF ENGINEERING
(Approved by AICTE & Affiliated to P. A. H. Solapur University, Solapur)



CURRICULAM VITAE



Mr. Mudassar Husain Naikwadi

Assistant Professor, ME(Electronics-Digital Systems)PhD(Appeared)

✉ mudassar.naikwadi.nbnscoe@sinhgad.edu ☎ **9763722269**

Profile Summary

- 20+ years of Teaching Experience
- Funding of Research Projects worth Rs 5.95 Lakhs
- Innovation Ambassador (MoE IIC)
- Convener IIC
- Nodal Officer ARIIA

Educational Details

Institute / University Name	Passedout Year	Degree	Remark
Little Flower Convent School, Solapur, Pune Board	1996	SSC	84.4%
Walchand College of Arts & Science, Solapur, Pune Board	1998	HSC	87.67%
Walchand College of Engineering, Sangli, Shivaji University, Kolhapur	2002	BE (Electronics)	60.2%
Sinhgad College of Engineering, Vadgaon, SPPU, Pune	2012	ME (Electronics-Digital Systems)	7.62 CGPA
Sinhgad Academy of Engineering, SPPU, Pune	Appeared	PhD (E&TC Engineering)	Registered 22nd March 2018

Total Experience : 20 Years and 6 Months

Teaching Experience

Institute: N. B. Navale Sinhgad College of Engineering, Kegaon, Solapur
From 2022-01-05
Total Experience: 1 years 9 months

Designation: Assistant Professor
To: 2023-09-20
Approved: No

Institute: Shree Siddheshwar Women's College of Engineering, Solapur
From 2021-09-09
Total Experience: 0 years 4 months

Designation: Assistant Professor
To: 2022-01-04
Approved: No

	<p>Institute: N. B. Navale Sinhgad College of Engineering, Kegaon, Solapur From 2018-07-02 Total Experience: 2 years 11 months</p>	<p>Designation: Assistant Professor To: 2021-05-24 Approved: No</p>
	<p>Institute: Sinhgad Academy of Engineering, Kondhwa, Pune From 2008-07-16 Total Experience: 10 years 0 months</p>	<p>Designation: Assistant Professor To: 2018-06-29 Approved: Yes</p>
	<p>Institute: Rajarshi Shahu College of Engineering, Tathawade, Pune From 2007-01-08 Total Experience: 1 years 6 months</p>	<p>Designation: Lecturer To: 2008-07-15 Approved: Yes</p>
	<p>Institute: SVERI's College of Engineering, Pandharpur From 2004-01-05 Total Experience: 2 years 6 months</p>	<p>Designation: Lecturer To: 2006-04-20 Approved: No</p>
	<p>Institute: Government Polytechnic, Solapur From 2002-07-22 Total Experience: 1 years 0 months</p>	<p>Designation: Lecturer To: 2003-05-30 Approved: No</p>
	<p>Roles and responsibilities handled in Teaching:</p> <ul style="list-style-type: none"> • Institute Level : Nodal Officer (ARIIA, NIRF Innovation), Convener & Vice President (Institution Innovation Council), NISP (National Innovation & Startup Policy), Admission Counseling • Departmental : Teaching, Research, IQAC Coordinator (Accreditation), Class Coordinator, Projects, Lab Innovation, Entrepreneurship Development, Mentoring & Training 	
Industry Experience	<p>Industry: Wipro BPO, Pune From: 2006-06-05 Total Experience: 0 years 6 months</p>	<p>Designation: Associate To: 2006-12-29</p>
	<p>Major Roles and Responsibilities Handled in Industry:</p> <ul style="list-style-type: none"> • Validation Assurance 	
Research Experience	<p>Total Experience : 9 Years and 0 months</p> <p>Major Roles and Responsibilities Handled in Research:</p> <ul style="list-style-type: none"> • BCUD Funded Research Projects Principal Investigator • BCUD Funded Research Projects Co Principal Investigator 	
Area Of Interest	<ul style="list-style-type: none"> • Wireless Communication • Cognitive Radio Network 	

	<ul style="list-style-type: none"> • Deep Learning
Subjects Handled	
UG	<ul style="list-style-type: none"> • Signals & Systems , Network Theory & Analysis, Embedded Systems, Managerial Economics, Electromagnetic Engineering, Analog Communications, Digital Signal Processing, Computer Organization & Architecture, Digital Communication, Telecommunication Switching Systems, Basic Electronics Engineering, Digital Electronics & Microprocessor, Discrete Circuit Design, Information Technology, Programming Techniques, Peripheral Devices & Measuring Instruments, Industrial Electronics
PG	<ul style="list-style-type: none"> • Software Defined Radio, Artificial Intelligence & Machine Learning
Research And Guidance	
Number of PG Students Guiding / Guided	5
Invited as Resource Person/ Expert/ Evaluator	<ul style="list-style-type: none"> • Invited Talk on "Technology Readiness Levels (TRLs)" for Institution Innovation Council on 22nd February 2022 (N. B. Navale Sinhgad College of Engineering, Solapur) • Invited Judge on 28th September 2021 for Innovative Project Ideas Competition Kalpak-2021 (Shree Siddheshwar Women's College of Engineering, Solapur) • Invited Expert Guest Lecture on "Wireless Communication" (Shree Siddheshwar Womens Polytechnic Solapur) • Invited Resource person on 9th to 10th of March 2021 for Two Days Online Workshop entitled "Use of VIRTUAL LABs" in association with College of Engineering, Pune (COEP) under the National Mission on Education through ICT at N. B. Navale Sinhgad College of Engineering, Solapur (NC-53) • Invited Resource person on 21st, 22nd and 23rd January 2019 for Technical Entrepreneurship Development Programme (N. B. Navale Sinhgad College of Engineering, Solapur) • Invited Expert Lecture on 22nd February 2016 on Fast Fourier Transform Department of CSE, SAE Kondhwa. • Invited Expert Lecture on 28th February 2016 on Fast Fourier Transform & Digital Filters, Department of CSE, SAE Kondhwa • Invited Resource Person during 11-13th December 2017 for Train The Trainer Program at NBN Sinhgad School of Engineering, Pune • Invited Resource Person on 2nd January 2015 for Matlab Programming KJ College of Engineering & Management Research, Kondhwa, Pune • Invited Judge for Poster Presentation at "National Level Techfest -JISHIN 15" on 21st January 2015 at Bharati Vidyapeeths College of Engineering for Women, Pune • Judge for project competition "The Platform" at Techtonic 2015 on 19th January 2015, Sinhgad Academy of Engineering, Pune

	<ul style="list-style-type: none"> • Judge for Technical Paper Presentation contest at Innofest 2013 on 23rd and 24th February 2013, Sinhgad Academy of Engineering, Pune • Judge for Project Competition/Exhibition on 7th April 2012, Bharati Vidyapeeths College of Engineering for Women, Pune.
Total Journal Paper Publications	9
Total Conference Paper Publications	16
Scopus Indexed	7
Detailed Journal Publication list	<ol style="list-style-type: none"> 1. Naikwadi, M. H., & Patil, K. P. . (2022). A Multi-dimensional Real World Spectrum Occupancy Data Measurement and Analysis for Spectrum Inference in Cognitive Radio Network. <i>International Journal of Communication Networks and Information Security (IJCNIS)</i>, 14(2), 244–260. https://doi.org/10.17762/ijcnis.v14i2.5516 2. Pandit, G.S., Naikwadi, M.H., & Patil, K.P. (2018). Simulation and Implementation of MIMO-OFDM System with STBC using GNU Radio and USRP. <i>International Journal of Recent Research Aspects</i> ISSN: 2349-7688, Vol. 5, Issue 1, March 2018, pp. 370-376 3. Garkal, S., Suryawanshi S, Naikwadi, M.H., (2018). "Spectrum Occupancy Measurement, Analysis and Observation of Cellular Networks in India". <i>International Journal of Recent Research Aspects</i> ISSN: 2349-7688, Vol. 5, Issue 1, March 2018, pp. 381-387 4. S. Awachat, S. Sharma, S. Dhavale, G. Pisal, M. Naikwadi, "GNU Radio-USRP-MATLAB based Laboratory Set-Up for Digital Modulation Schemes " <i>International Journal of Engineering Research in Electronics and Communication, Engineering (IJERECE)</i>, Vol 5, Issue 4, April 2018, ISSN (Online) 2394-6849 5. Patil, K. P., Lande, A. S., & Naikwadi, M. H. (2016). A Review on the Evolution of Eigenvalue Based Spectrum Sensing Algorithms for Cognitive Radio. <i>Netw. Protoc. Algorithms</i>, 8(2), 58-77. DOI: https://doi.org/10.5296/npa.v8i2.9349 6. M. H. Naikwadi, M. M. Jadhav "An Investigation of SLM and PTS based schemes for PAPR reduction in WPM system" <i>CiiT International Journal of Wireless Communication</i>, Volume 4, No 13 Pg nos. 790-795, August 2012. 7. M. H. Naikwadi, M. M. Jadhav, "Study and Performance Evaluation of Wavelet Packet Multi-Carrier Modulation (WPMCM) for Cognitive Radio" <i>Advances in Computational Sciences & Technology</i>, Volume 4 Number 2, Pg. nos. 213-216, ISSN 0973-6107, May 2011. 8. M. H. Naikwadi, Akshay H. Kaphare, Amol N. Pathade, Deepak K. Patil "Safe soul(sole)" <i>International Engineering Research Journal (IERJ)</i> Volume 2 Issue 3 Page 1470-1474, 2016, ISSN 2395-1621, https://ierjournal.org/volume2issue3.php 9. M. H. Naikwadi, "Biometric Detection Using Image Quality Assessment", <i>Global Journal of Advanced Engineering Technologies</i>, ISSN (O): 2277-6370, ISSN (P): 2394-0921, -2016, May 2016.

**Detailed
Conference
Publication list**

1. M. H. Naikwadi and K. P. Patil, "Spectrum Inference in Cognitive Radio Networks with Machine Learning," *2023 IEEE International Conference on Emerging Smart Computing and Informatics (ESCI), Pune, India, 2023*, pp. 1-7, doi: 10.1109/ESCI56872.2023.10099745
2. Naikwadi, M., Patil, K. (2022). A Real Time Radio Spectrum Measurement Campaign for Machine Learning Based Spectrum Inference in Cognitive Radio Network. In: Kumar, A., Senatore, S., Gunjan, V.K. (eds) *ICDSMLA 2020. Lecture Notes in Electrical Engineering*, vol 783. Springer, Singapore. https://doi.org/10.1007/978-981-16-3690-5_38
3. M. H. Naikwadi and K. P. Patil, "A Survey of Artificial Neural Network based Spectrum Inference for Occupancy Prediction in Cognitive Radio Networks," *2020 4th IEEE International Conference on Trends in Electronics and Informatics (ICOEI)(48184)*, Tirunelveli, India, 2020, pp. 903-908, doi: 10.1109/ICOEI48184.2020.9143053
4. N. Khoja et al., "Opportunistic Spectrum Access Measurements and Analysis in Urban Area for a better cognitive approach," *2017 IEEE International Conference on Computing, Communication, Control and Automation (ICCUBEA), Pune, India, 2017*, pp. 1-6, doi: 10.1109/ICCUBEA.2017.8463736
5. M. H. Naikwadi K. P. Patil, Bhagyashree Raut, "A Framework for Smart Spectrum Sensing Algorithm Based on Covariance Absolute Value Based Detection for Enabling Information Communication Technologies" *9th CMI International Conference 2016 Smart Living, Cyber Security and Privacy at Aalborg University Copenhagen, Denmark, 2016/11/25*.
6. M. H. Naikwadi, K. P. Patil "Spectrum Sensing, Measurement, Access & Co-existence Test-bed Using USRP for Cognitive Radio Research " *National Regional Research Conference INNOVATION 2016 at Rajarshi Shahu College of Engineering, Pune, Oct 2016*.
7. M. H. Naikwadi, K. P. Patil "Spectrum Sensing, Measurement, Access & Co-existence Test-bed Using USRP for Cognitive Radio Research " *Regional Research Conference INNOVATION 2015 at N. M. Wadia College of Engineering, Pune, 1st July 2015*.
8. N. Dixit, N. Singh, S. Mandake, M. H. Naikwadi and K. P. Patil, "A Genetic Algorithm Based PAPR Reduction in WPM System," *2013 Tenth IEEE International Conference on Wireless and Optical Communications Networks (WOCN), Bhopal, India, 2013*, pp. 1-5, doi: 10.1109/WOCN.2013.6616193.
9. A. N. Shaikh, N. Shah, A. Tripathy and M. H. Naikwadi, "Intelligent Monitoring and Control Rendered to Street Lighting," *2013 IEEE International Conference on Advances in Technology and Engineering (ICATE), Mumbai, India, 2013*, pp. 1-5, doi: 10.1109/ICAdTE.2013.6524761.
10. Vikas Khetmalis, Prateek Kapadne, Nitin Gaikwad, M H Naikwadi, K P Patil, "Design and DSP Implementation of OFDM System", *National Conference NCRTE-2K11, Walchand College of Engineering, Sangli 2-4th Dec 2011*
11. Roshan Tulsani, Vijay Khairnar, Kahekashan Sayyed, M. H. Naikwadi,, "Design of Wavelet Packet based Multi-carrier Modulation (WPMCM) Signalling", *Don Bosco Institute of Technology, Bangalore (Got First Prize for paper presentation) 28th to 30th April 2011*.
12. Roshan Tulsani, Vijay Khairnar, Kahekashan Sayyed, M. H. Naikwadi,, "Design of Wavelet Packet based Multi-carrier Modulation (WPMCM) Signalling", *Pravara Rural College of Engineering Loni, Pune, 6th and 7th April 2011*.
13. M. H. Naikwadi, M. M. Jadhav, K. P. Patil "Study and Performance Evaluation of Wavelet Packet based Multi-carrier Modulation Scheme for Cognitive Radio" *National Conference on Information and Communication Technology NCICT-2011 (Peer review conference) held at Rajarshi Shahu College of Engineering, Pune, 26th and 27th May 2011*
14. M H Naikwadi, M M Jadhav, K P Patil "Spectrum Sensing Schemes Survey for Cognitive Radio" *NCPC 2010, Sinhgad College of Engineering, Pune, 9th and 10th April 2010*.

15. Mohamad AzharInamdar, Gaurav Agrawal, Karan Idnani, M. H. Naikwadi, K.P. Patil, "Design of Orthogonal Frequency Division Multiplexing (OFDM) Signalling" National Conference NCPC 2010, Sinhgad College of Engineering, Pune, 9th and 10th April 2010.
16. M. H. Naikwadi, K.P. Patil, "Design of Orthogonal Frequency Division Multiplexing (OFDM) Signalling" National Conference INNOVATION 2009-10, Sinhgad College of Engineering, Pune, 16th and 17th Dec 2009.

FDP/STTP/Workshop Attended: 40

Sr.No	Title	Organized by	Dates from to	Duration in Weeks/ Months
1	Electric Vehicle	Dept. of Mechanical & Electrical Engg, NBNSCOE Solapur.	2023-02-27 to 2023-03-03	1 Week
2	STP "Startups and their Ecosystems Role and Promotion Strategy"	IISC Bengaluru, QIP, AICTE	2019-12-09 to 2019-12-13	1 Week
3	Workshop on "Research Funding & Proposal Writing"	Dept. of Electronics & Telecommunication Engg, NBNSCOE Solapur.	2023-02-11 to 2023-02-11	1 Day
4	National Webinar "Effective and Efficient Writing of Research Papers"	AISSM College of Engg, Pune	2020-07-01 to 2020-07-01	One Day
5	Webinar on "Startup Lifecycle and Patent Registration"	Atharva College of Engg, Mumbai	2020-05-18 to 2020-05-19	Two Days
6	Workshop "MOODLE - Learning Management System"	IQAC, NBNSCOE Solapur	2020-07-10 to 2020-07-11	Two Days
7	Webinar on MATLAB for Deep Learning	AISSM COE Pune	2020-05-30 to 2020-05-30	One Day
8	Workshop on Education 4.0	Atharva COEngg, Mumbai	2020-04-28 to 2020-04-30	Three Days
9	Workshop "Smart Use of Virtual Laboratories"	Anantrao Pawar CoEngg, Pune	2020-04-28 to 2020-04-29	Two Days
10	Workshop "BE E&TC, BE Electronics Curriculum Setting and BTech Structure Design"	NBNSCOE Solapur	2019-01-17 to 2019-01-17	One Day
11	FDP Rubrics Data Science	Rubics Limited, Pune	2019-06-28 to 2019-06-28	One Day
12	Workshop "Finalization of TY BTech Electrical Engg Syllabus (Part I and II) CBCS Pattern"	BMIT Solapur	2020-02-24 to 2020-02-24	One Day
13	National Workshop "Scilab and Latex Software for Research, Computation and Publication"	NBNSCOE Solapur	2020-01-20 to 2020-01-21	Two Days
14	Workshop "TY Btech (Electrical Engg) Syllabus Setting for CBCS Pattern"	SKN Sinhgad College of Engg, Pandharpur	2020-01-27 to 2020-01-27	One Day
15	Workshop "Boot Camp Startup India Maharashtra Yatra"	WIT Solapur	2018-10-17 to 2018-10-17	One Day

16	Workshop "Regional Orientation Session on IIC 2.0 and ARIIA 2020"	Army Institute of Technology, Pune	2019-07-26 to 2019-07-26	One Day
17	Machine Learning and It's Applications in Engineering	AISSMS, CoE, Pune	2018-03-16 to 2018-03-17	2 days
18	Train The Trainers Program-SE(E&TC) Curriculum as a Subject Expert for subject "Analog Communication"	Department of E&TC, NBN Sinhgad School of Engineering, Ambegaon(Bk), Pune	2017-12-11 to 2017-12-13	3 days
19	Software Defined Radio with LabView and NI USRP	PICT, Pune	2017-02-20 to 2017-02-24	1 Week
20	Train The Trainer TE E&TC for subject Digital Communication	SCoE, Pune	2017-06-05 to 2017-06-10	1 Week
21	Student Training Programme	NBN, School of Engg, Ambegaon, Pune	2017-06-12 to 2017-06-14	3 Days
22	Faculty Orientation Workshop SE (E&TC/Elex) Revised Syllabus 2015 Course for subject 'Signals and Systems"	BoS (Electronics Engg), SavitribaiPhule Pune University at SAE Pune	2016-06-09 to 2016-06-11	3 Days
23	Thrust Topic-Faculty Training Program SE E&TC for subject Signals and Systems	SCoE, Pune	2016-06-06 to 2016-06-08	3 Days
24	Train The Trainers Program-SE(E&TC) Curriculum as a Subject Expert for subject "Signals and Systems"	Department of E&TC, SAE Kondhwa	2014-06-02 to 2014-06-07	1 Week
25	Faculty Training Program-TE (E&TC) Curriculum attended and worked as a Subject Expert for subject "Computer Organization and Architecture"	Department of E&TC, SAE Kondhwa	2013-12-09 to 2013-12-14	1 Week
26	Faculty Orientation Workshop SE (E&TC) Revised Syllabus 2012 Course for subject "Analog Communication"	BoS (Electronics Engg), UoP at G. H. Raisoni Institute of Engg and Technology	2013-12-02 to 2013-12-07	1 Week
27	"Teacher Advancement Programme-Level 1 & 2"	STES, Pune under Wren and Pecker Private Limited.	2013-11-14 to 2013-11-16	3 Days
28	A workshop on "Discussion of Online Examination of SE(E&TC/Electronics)" University of Pune	PVG's College of Engineering and Technology, Pune	2012-09-10 to 2012-09-10	1 Day
29	Faculty Orientation Workshop SE (E&TC) Revised Syllabus 2012 Course for subject 'Signals and Systems"	BoS (Electronics Engg), UoP at PICT Pune	2013-06-17 to 2013-06-22	1 Week
30	A workshop on "A Syllabus discussion for Third year E&TC/ Electronics (2008 Course)" on organized by	MMIT, Lohgaon, Pune	2010-07-13 to 2010-07-13	1 Day
31	A Workshop on "Next Generation Wireless Communication with matlab and OPNet"	Trinity College of Engineering, Pune.	2011-02-03 to 2011-02-05	3 Days
32	A workshop on "Guidelines for SE (E&TC/Electronics) syllabus reform "	Board of Studies in Electronics, SAE, Pune.	2008-10-24 to 2008-10-24	1 Day

33	A workshop on Digital Image and Video Processing using Matlab and Simulink	YCCE, Nagpur	2008-11-25 to 2008-11-29	1 Week
34	Mission10X Certificate in Teaching and Learning	D Y Patil, Pimpri, Pune.	2008-12-29 to 2008-12-30	2 Days
35	Refresher Course on Machine Learning and Soft Computing from	NIT, Warangal, Andhra Pradesh.	2009-05-18 to 2009-05-30	2 Weeks
36	A workshop on High Impact Presentation Skills	RSCOE, Pune.	2008-02-05 to 2008-02-06	2 Days
37	A workshop on CMOS VLSI: Digital IC Design	YCCE, Nagpur.	2008-06-23 to 2008-06-27	1 Week
38	Training on Wipro's Code of Business Conduct and Ethics & Risk Management & Compliance	Wipro, Pune	2006-12-28 to 2006-12-29	2 Days
39	A Workshop on CAMSS Private Services Validation	Wipro, Pune.	2006-11-29 to 2006-12-15	3 Weeks
40	A workshop on ASIC Design and CAD Tools for VLSI	IIIT, Pune.	2006-02-15 to 2006-02-17	3 Days

Mooc/ Other Courses Attended: 6

Sr.No	Title	Organized by	Dates from to	Duration in Weeks/ Days
1	NPTEL Introduction to Research	Indian Institute of Technology, Madras	2019-02-01 to 2019-03-31	8 Weeks
2	Artificial Neural Network & Machine Learning Using Matlab	Udemy Inc.	2022-12-22 to 2023-01-22	4.5 hours
3	Introduction to Artificial Neural Networks & Deep Learning	Udemy Inc	2022-12-13 to 2023-01-13	7 hours
4	Scalecast : Machine Learning & Deep Learning	Udemy Inc	2023-06-04 to 2023-07-04	8 hours
5	Deep Learning : Recurrent Neural Networks in Python	Udemy Inc	2023-06-04 to 2023-07-04	13 hours
6	Artificial Intelligence : LSTM Neural Networks with Keras	Udemy Inc	2023-04-28 to 2023-05-23	2 hours

FDP/STTP/Workshop Conducted: 3

Sr.No	Title	Organized by	Worked As	Dates from to	Duration in Weeks/ Days
1	Entrepreneurship Awareness Camp	NBNSCOE, Solapur	Coordinator	2018-09-28 to 2018-09-30	Three Days
2	Technology Entrepreneurship Development Programme	NBNSCOE Solapur	Coordinator	2019-01-16 to 2019-03-01	Six Weeks
3	Innovation, Startups and	NBNSCOE Solapur	Coordinator	2020-02-10 to	One Day

Other Activities	
Achievements & Awards	1. Reviewed a script on Digital Signal Processing for McGraw Hill Education (India) Pvt. Ltd, April 13, 2009.
Professional Memberships	1. LMISTE 40235
Major Projects Handled	<p>1. Project 1 : "Software Define Radio Implementation of Multiple Input Multiple Output OFDM System using USRP" (BCUD, Savitribai Phule Pune University Research Funding : 2.75 Lakhs, 2015-2017)</p> <p>2. Project 2 : "Spectrum Sensing, Measurement, Access and Co- existence Testbed using USRP for Cognitive Radio Research" (BCUD, Savitribai Phule Pune University Research Funding : 1.7 Lakhs, 2014-2016)</p> <p>3. Project 3 : "Design and Implementation of Orthogonal Frequency Division Multiplexing Signaling" (BCUD, Savitribai Phule Pune University Research Funding : 1.5 Lakhs, 2009-11)</p> <p>4. "An Investigation of SLM and PTS based schemes for PAPR reduction in WPM system" Dissertation for Master Degree in Electronics Engineering</p> <p>5. "Distributed Digital Energy Metering and Data Logging system" Project for Bachelors Degree in Electronics Engineering</p>
Personal Details	
Employee Code	35/L/8084
Adhar Card Number	815489359166
Pan Card Number	ADYPN7000L