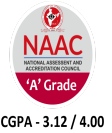Savitribai Phule Shikshan Prasarak Mandal's

N B NAVALE SINHGAD COLLEGE OF ENGINEERING
(Approved by AICTE & Affiliated to P. A. H. Solapur University, Solapur)

CURRICULAM VITAE

NAAC 'A' Grade
CGPA - 3.12 / 4.00

Mr. Siddharudha Shivputra Shirgan

Associate Professor,   Ph.D in Electronics Engineering

✉ **ssshirgan.nbnscoe@sinhgad.edu**   📞 **8087856504**

Educational Details

Institute / University Name	Passedout Year	Degree	Remark
Department of Technology, Shivaji University, Kolhapur	2020	Ph.D	Awarded
Walchand College of Engineering, Sangli	2007	ME	First Class
STB College of Engineering, Tuljapur	2000	BE	First class with Distinction
Government Polytechnic, Solapur	1995	Diploma	First Class
S. S. Shelke Prashala, Wagdari	1992	SSC	First class with Distinction

Total Experience : 21 Years and 9 Months

Teaching Experience

Institute: N. B. Navale Sinhgad College of Engineering, Solapur
From 2023-01-01
Total Experience: years 08 months
Designation: Associate Professor
To:
Approved: Yes

Institute: N. B. Navale Sinhgad College of Engineering, Solapur
From 2011-12-15
Total Experience: 11 years months
Designation: Assistant Professor
To: 2022-12-31
Approved: Yes

Institute: BMIT, Solapur
From 2010-05-03
Total Experience: 1 years 6 months
Designation: Assistant Professor
To: 2011-12-14
Approved: No

Institute: SSPM's College of Engineering, Kankavli
From 2008-02-01
Total Experience: 2 years 3 months
Designation: Assistant Professor
To: 2010-05-02
Approved: Yes

Institute: SSPM's College of Engineering, Kankavli
From 2007-05-01
Designation: Senior Lecturer
To: 2008-01-31
Approved: Yes

	Total Experience: years 8 months

| | **Institute:** SSPM's College of Engineering, Kankavli
From 2001-09-10
Total Experience: 5 years 4 months | **Designation:** Lecturer
To: 2007-04-30
Approved: Yes |

Roles and responsibilities handled in Teaching:
- Head Electronics & Telecommunication department from 15 Jan 2013 to 31 Aug 2021
- Chairman, Board of Studies of Electronics & Telecommunication Engineering
- Key Role in updating Departmental Infrastructure and maintaining well furnished Labs as per AICTE norms.
- Member of Internal Quality Assurance Cell (IQAC).
- Research Coordinator
- Member of Center for Research and Technology Development (CRTD)
- Member of College level Purchase Committee.
- Member of Women's Grievance Cell.
- NSS Coordinator.
- Convener for International and National Conference
- Coordinator for STTP, FDP and Workshops
- Internal and External Senior Supervisor in University examinations

Administrative Experience	**Total Experience :** 8 Years and 8 months **Major Roles and Responsibilities Handled in Administration:** • Head of Electronics and Telecommunication Engineering Department
Area Of Interest	• Cognitive Radio • Microstrip Antenna • Machine Learning

Subjects Handled	
UG	• Electromagnetic Field Theory • Microwave Engineering • Antenna and Wave Propagation • Signals and Systems • Control System • Analog Communication • Digital Communication • Optical Communication • Radar Engineering • Probability and Random Process • Electronics Circuits Analysis and Design • Coding Theory
PG	• Antenna Design and Applications

Research And Guidance	

Number of PG Students Guiding / Guided	12
Invited as Resource Person/ Expert/ Evaluator	- Invitee as a Judge for Grand Finale of Toycathon-2021 oragnized by Ministry of Education, Government of India - Resource person for Research Paper Writing and Patent Registration on 9th to 10th March 2023 organized by SVSMD Polytechnic, Akkalkot - Resource person for Career Guidance on 27th June 2023 organized by SVSMD Polytechnic, Akkalkot - Resource person for the Faculty Development Program on Internet of Things on 30th March 2022 oragnized by BMP, Solapur - Expert Lecture delivered on Audio and Video Engineering at Shri Siddheshwar Women's Polytechnic, Solapur on 29th August 2017. - Expert Lecture delivered on Power Electronics at Shri Siddheshwar Women's Polytechnic, Solapur on 9th Sept 2018. - Expert Lecture delivered on Radar and Microwave Engineering at Shankarrao Mohite Patil college of engineering, Akluj on 14th April 2014. - Expert Lecture delivered on Communication System Design for M.Sc(Applied Electronics) students at Solapur University, Solapur on 16th Feb 2011. - Invitee as a Judge for National level technical symposium at Maulana Azad Polytechnic
Total Journal Paper Publications	19
Total Conference Paper Publications	15
UGC Approved	5
Scopus Indexed	5
Detailed Journal Publication list	1. *S S Shirgan, K Waghmare, "A Review on Predictive Based Brain Tumor Detection Techniques," International Journal of Engineering Applied Sciences and Technology, Vol. 7, No. 5, pp 123-125, 2022. ISSN : 2455-2143.* 2. *S S Shirgan, K Waghmare, "Design and Implementation of Predictive Based Brain Tumor Detection Techniques", International Research Journal of Education and Technology, Vol. 4, No. 09, pp 66-70, 2022. ISSN: 2581-7795* 3. *S S Shirgan, P S Landge, "Saline Level Monitoring and Control System using IoT Cloud Control", International Journal of Research Publication and Reviews, Vol 3, No. 1, pp 1210- 12, 2022. ISSN:2582-7421* 4. *S S Shirgan, U L Bombale, "Analytical and Hybrid Neural Network based Throughput Analysis for Cognitive Radio Network", Journal on Communication Technology and Electronics, Springer Publication (under process). ISSN: 1555-6557*

5. *S S Shirgan, U L Bombale, "Hybrid Neural Network based Spectrum Occupancy Measurement Campaign for Cognitive Radio Application", Journal of Imaging and Sensing, Springer Publication, Vol. 21, N0. 1, 2020. ISSN-1557-2072*

6. *S S Shirgan, U L Bombale, "Analysis of Wideband Microstrip Antenna based Spectrum Occupancy Measurement Campaign for Cognitive Radio Application", Journal on Radio Electronics and Communication Systems, Springer Publication, Vol. 61, No. 2, 2018. ISSN:1934-8061*

7. *S S Shirgan , U L Bombale , "A Wide Axial Ratio Bandwidth Circularly Polarized Antenna for Spectrum Occupancy Measurement Campaign", Journal of Future Generation Communication and Networking, ESCI Indexed, Vol. 10, No. 9, 2017. ISSN: 2233-7857*

8. *S A Dulange, S S Shirgan, "Early Detection of Glucoma using Empirical Wavelet Transform", International Journal of Advanced Engineering and Research Development, Vol. 05, No. 01, Jan2018. ISSN: 2348-4470*

9. *Jayendrakumar, S S Shirgan, "Novel Ultra wideband Circularly Polarized Rectangular Patch Antenna", International Journal of Enhanced Research in Science, Technology and Engineering, Vol. 03, No. 03, March 2014, ISSN: 2319-7463.*

10. *Jayendrakumar, S S Shirgan, "Low Mutual Coupling Wideband 1×2 Rectangular Slot Microstrip Antenna", International Journal of Enhanced Research in Science, Technology and Engineering, Vol. 02, No. 10, Oct 2013, ISSN: 2319-7463.*

11. *S S Shirgan, "Comparison between Radix-2 and Radix-4 based on Booth Algorithm", International Journal of Advanced Research in Computer and Communication Engineering, Vo. 5, NO. 12, Dec2016, ISSN: 2278-1021.*

12. *S S Shirgan, "Acivation, Implementation and Analysis of Efficient Lossless Image Compression Algorithm", International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, Vol.2, No.6, June 2014, ISSN: 2321-2004.*

13. *H D Kadganchi, S S Shirgan, "Performance Analysis of TCP Variants with Pause Time and Node Speed Variation over AODV and DSR Protocol in NS2", International Journal for Research in Applied Science and Engineering Technology, Vol.5, N0.4, April 2017, ISSN: 2321-9653.*

14. *S S Babladi, S S Shirgan, "Design and Implementation of Interactive Home Automation System through Email using Raspberry Pi", International Journal of Innovative Research in Science, Engineering and Technology, Vol.5, No.6, June 2016, ISSN: 2319-8753.*

15. *H D Kadganchi, S S Shirgan, "Analysis of TCP Congestion Control Algorithm over Adhoc Routing Protocols in NS2", Journal of Frontiers in Interdisciplinary Research and Technology Development, Vol. 1, No. 1, June 2018.*

16. *F M Valsangkar, S S Shirgan, "Design and Analysis of AODV Routing Protocol in VANET using NS2", International Journal for Research in Applied Science and Engineering Technology, Vol.2, No.9, Sept 2014, ISSN: 2321-9653.*

17. *S Annaldas, S S Shirgan and V R Marathe, "Automatic Identification of Malaria Parasites using Image Processing", International Journal of Emerging Engineering and Research Technology, Vol. 2, No. 4, Feb 2014, ISSN:2349-4409.*

18. *S Annaldas, S S Shirgan and V R Marathe, "Automatic Diagnosis of Malaria Parasites using Neural Network and Support Vector Machine", International Journal of Advanced Foundation in Computer, Vol.2, Jan 2015*

19. *Annaldas, S S Shirgan and V R Marathe, "Enhanced Identification of Malaria Parasites using different classification algorithms in thick film blood images", International Journal of Research in Advanced Technology, Vol. 2, Oct 2014, ISSN: 2321-9637.*

Detailed Conference	1. *S S Shirgan, U L Bombale, Jayendrakumar, "Compact Partial Ground Plane 1×2 Micro strip Patch Antenna", 6th IEEE International Conference on Computational, Intelligence*

Publication list	2. *S S Shirgan, U L Bombale, Jayendrakumar, " Miniature Wideband 1×2 Micro strip Antenna for 4G Application", 1st IEEE Global Conference on Wireless Computing and Networking (GCWCN-2014), Dec 22-24,2014.*
	3. *Jayendrakumar, S S Shirgan, "Utilization of Capacitive Behavior of Microstrip lines for the Reduction of Mutual Coupling and Return Loss of Wideband Rectangular Slot Microstrip Antenna", International Conference on Modeling and Simulation in Engineering and Technology (ICMSET-2014), Feb 15-16, 2014.*
	4. *Sheetal Dulange, S S Shirgan, "Early Detection of Glaucoma Disease using Empirical Wavelet Transform and Structural Feature Extraction", 2nd IEEE International Conference on Electronics Communication and Aerospace Technology, march 29-30,2018.*
	5. *S B Mashalkar, S S Shirgan, "Design Watermarking Scheme in Medical Authentication using DWT and SVD Technique", IEEE International Conference on Computing Methodologies and Communication, July 2017.*
	6. *Jayendrakumar, S S Shirgan, "Mutual Coupling Analysis of MIMO Micro strip Antennas for 4G Communication Systems", National Conference on Recent Advances in Engineering and Technology, Nov 15-16, 2013.*
	7. *A S Jirage, S S Shirgan, " Design and Implementation of Energy Control System for Zigbee based Home Automation Network", International Conference on Electronics and Computer Engineering (Technovision-2014), April 5-6, 2014.*
	8. *S B Mashalkar, S S shirgan, "DWT and SVD based Watermarking Scheme for Copyright Protection in Medical Images", International Conference on Ubiquitous Computing (ICUC-17), July 25-26, 2017,*
	9. *S A Abhange, S S Shirgan, "A Survey of Hand Hygine using Hand wash Monitoring System for Hospital Application", National Conference on Communication, Computation and Cyber Security (NCCC-2K17), March 9-10, 2017.*
	10. *S S Shirgan, S S Mulla, " WDM extended Passive Optical Network using OFDM-QAM", National Conference on New Trends in Communication Technology, April 4-5, 2009,*
	11. *S S Babladi, S S Shirgan, "Proposed FAM Unit with S-MB Techniques and Kogge Stone Adder using VHDL", International Conference on Technological Innovations in Engineering (ICTIE-2016), Dec 15-16, 2016.*
	12. *S S Shirgan, "Analysis of Optical Fiber Using Finite Element Method", International Conference on Computational Methods in Engineering and Sciences (ICCMES-2009), Jan 8- 10, 2009.*
	13. *S S Shirgan, Prajakata Survase,"Development of Hybrid Vertical Axis Wind Turbine", International Conference on Emerging Trends on Automation, Communication and Security (ICETACS-2023),July 20-21,2023.*
	14. *S S Shirgan, Samreen Bagali,"Design and Implementation of Smart Parking System", International Conference on Automation, Communication and Security (ICETACS-2023),July 20-21,2023.*
	15. *S S Shirgan, Rutuja Vibhute,"IoT Based Manhole Monitoring System using Node MCU", International Conference on Automation, Communication and Security (ICETACS-2023),July 20-21,2023.*
Detailed List of Books Published	1. "Recent Advances in Mathematical Research and Computer Science", B P International, Vol. 3, PP. 90-98, 27 October 2021. (ISBN: 13(15) 978-93-5547-212-0(Print), 978-93-5547-213-7(eBook))
FDP/STTP/Workshop Attended: 21	

Sr.No	Title	Organized by	Dates from to	Duration in Weeks/ Months
1	Roadmap to Reforms in Higher Education	Maharashtra State Faculty Development Academy, Pune	2023-03-25 to 2023-03-29	1 week
2	Implementation of National Education Policy-2020	G H Raisoni College of Engineering and Management, Pune	2023-02-03 to 2023-02-04	2 Days
3	Research Funding and Proposal Writing	N B Navale Sinhgad College of Engineering, Solapur	2023-02-11 to 2023-02-11	1 Day
4	Electrical Vehicle	N B Navale Sinhgad College of Engineering, Solapur	2023-02-27 to 2023-03-03	1 Week
5	AI and Soft Computing Algorithms for Antenna Design	National Institute of Technical Teachers Training and Research (NITTR)	2022-01-17 to 2022-01-21	1 Week
6	Python, Data Science and Machine Learning	Yashoda Technical Campus, Satara	2022-08-22 to 2022-08-27	1 Week
7	Machine Learning to Deep Learning: Trends and Challenges	MBIT, Vidynagar, Gujarat	2021-12-13 to 2021-12-18	1 Week
8	Introduction to Machine Learning	Raisoni Group, Pune	2020-05-23 to 2020-05-23	1 Day
9	Modern Antenna Technologies for Futuristic Wireless Communication System	AICTE Training and Learning Academy (ATAL)	2021-08-20 to 2021-08-24	1 Week
10	Flexible Wearable Antennas for Next Generation Applications	National Institute of Technical Teachers Training and Research (NITTR)	2021-08-02 to 2021-08-06	1 Week
11	Free and Open Source Software Tool for Effective Teaching Learning	National Institute of Technical Teachers Training and Research (NITTR)	2021-02-15 to 2021-02-19	1 Week
12	Effective use of ICT Tools in Online Teaching	MIT, Aurangabad	2020-06-22 to 2020-07-04	1 Week
13	Emerging Trends in Industry 4.0	Rajarshi Shahu college of Engineering, Pune	2020-05-18 to 2020-05-29	2 Week
14	OBE- A Step Towards Excellence	Government College of Engineering, Karad	2020-05-11 to 2020-05-15	1 Week
15	Project Based Learning	Rajarshi Shahu college of Engineering, Pune	2020-06-01 to 2020-06-05	1 Week
16	Advances and Research Opportunities in E&TC Engineering	SVERI, Pandharpur	2020-06-10 to 2020-06-15	1 Week
17	Opportunities and Challenges in Industry 4.0	MIT, Aurangabad	2020-06-15 to 2020-06-17	3 Days
18	Wireless Communication Towards 5G	Sinhgad Institute of Technology, Pune	2020-05-25 to 2020-05-29	1 Week
19	Satellite Photogrammetry and Applications	Indian Institute of Remote Sensing (IIRS	2020-06-29 to 2020-07-03	1 Week
20	Outcome Based Education and Accreditation	NITTR, Kolkata	2018-09-24 to 2018-09-28	1 Week
21	Basic Programming using Python	FOSSEE project, IIT Mumbai	2018-06-17 to 2018-06-19	3 Days

Mooc/ Other Courses Attended: 2

Sr.No	Title	Organized by	Dates from to	Duration in Weeks/ Days
1	Basics of Software Defined Radios and Practical Applications	IIT, Roorkee	2018-02-22 to 2018-03-21	4 Week
2	Analog Communication	IIT, Kharagpur	2017-07-04 to 2017-10-03	12 Week

FDP/STTP/Workshop Conducted: 6

Sr.No	Title	Organized by	Worked As	Dates from to	Duration in Weeks/ Days
1	Research Funding and Proposal Writing	N B Navale Sinhgad College of Engineering, Solapur	Convener	2023-02-11 to 2023-02-11	1 Day
2	International Conference on Emerging Trends on Automation, Communication and Security(ICETACS-2023)	N B Navale Sinhgad College of Engineering, Solapur	Convener	2023-07-20 to 2023-07-21	2 Days
3	National Level Conference on Communication, Computation and Cyber Security	N B Navale Sinhgad College of Engineering, Solapur	Convener	2017-03-12 to 2017-03-12	1 Day
4	Project Based Learning using ARM Processor	N B Navale Sinhgad College of Engineering, Solapur	Convener	2015-12-28 to 2015-12-30	1 Week
5	Image Processing and Machine Learning	N B Navale Sinhgad College of Engineering, Solapur	Convener	2014-12-22 to 2014-12-26	1 Week
6	Booting, Hacking and Linux	N B Navale Sinhgad College of Engineering, Solapur	Convener	2014-09-27 to 2014-09-29	3 Days

Other Activities

Achievements & Awards	1. Awarded as 'Doctor of Philosophy in Electronics Engineering' from Department of Technology, Shivaji University, Kolhapur on 23th October 2020. 2. Awarded as 'Best Teacher' in N B Navale Sinhgad college of engineering, Solapur on 5th Sept 2015. 3. Awarded as 'Best Teacher' in SSPM's college of engineering affiliated to Mumbai University on 5th Sept 2006. 4. Appreciated for getting 100% feedback from students for the subjects Electromagnetic Engineering and Microwave Engineering. 5. Awarded as 'Best Paper' in national conference on Communication, computation and Cyber Security on March 2017. 6. Appointed as Reviewer of International Journal of Engineering and Applied Science

7. Contributed as Judge for grand finale of 'Tycathon-2021' organized by Ministry of Education, Government of India.

8. Awarded by 'Elite Certificate' in NPTEL online certification course on Analog communication conducted by IIT, Kharagpur.

9. Awarded by 'Elite Certificate' in NPTEL online certification course on Software Defined Radio conducted by IIT, Roorkee.

10. E&TC Department awarded as 'Best Department' in N B Navale Sinhgad college of Engineering on 15th Sept 2015 under tenure of Head of Department.

Professional Memberships	1. ISTE Life Membership
Major Projects Handled	

Personal Details

Employee Code	SOL/KG/03/B/778
Adhar Card Number	575804040951
Pan Card Number	AYOPS3239H