


Resume

Name: Mrs. Shilpa N Vatkar	
Address : B1, RH4,sector 9N,CBD Belapur, Navi Mumbai-400614	
Date of Birth : 15/03/1978	
Contact No : 022-27572924 E-mail id : shilpavatkar@somaiya.edu	

Educational qualifications

Degree	Year of Passing	Institute , University	Branch / Area of Specialization	% Marks / GPA obtained
Ph.D pursuing		Mumbai University	Electronics and Telecommunication/Remote Sensing	
MTech	2009	RTM Nagpur	VLSI	68
PG level Part time programme	2016	IIT Mumbai	Nanoelectronics material	BC
HSC	1995	Amravati University	Science	74
BE	1999	Amravati University	(Electronics &Telecommunication)	64

Professional experience: 12+ Years

Name of Organization / Company	Designation	Duration
K J Somaiya College of Engineering, Mumbai	Assistant Professor	Feb 2012 till date
St. Vincent Pallotti College of Engg.nagpur	Assistant Professor	Jan 2007 to Dec 2010
Mahavir Polytechnic College, Nasik	Lecturer	July 2006 to Dec 2006
Shivaji Engg. College, Akola.	Lecturer	July 2001 to April 2004

Teaching experience

Date of joining the college: 6/2/2012

Total Teaching Experience – 18+ Years

Classes Taught

Classes / Branch	Subjects
UG/SY	Object oriented programming language, Electromagnetic field theory. Microprocessor, Data Structures and Algorithm, Object oriented Programming methodology, Applied Cryptography
UG/TY	VLSI Design, Operating system, Integrated circuit, Microprocessor and Microcontroller,
UG/LY	MEMS , Microelectronics, Analog CMOS VLSI

STTP / Workshops/ Training courses Organised

Name of the course	Dates /Duration	Venue
Refresher course on Data structures and object oriented programming Language	22,23rd august 2019	EXTC dept, KJSCE,Mumbai
Coding program course for lab assistant	6 th Sep 2019 to 20 th Nov 2019	EXTC dept, KJSCE,Mumbai
Staff development Program on “Enhancing software skills in Python Programming”	4 to 11 December 2023	K. J. Somaiya college of Engg, Mumbai.
Conducted Metaverse Environment Workshop for students	1 st April 2025	Department of Electronics and Telecommunication Engg, K. J. Somaiya college of Engg, Mumbai

STTP / Workshops/ Training courses attended

Name of the course	Dates /Duration	Venue
ISTE approved STTP on VLSI and Semiconductors	9 to 13 Dec 2025	Fr. Roadrigues Institute of Technology, Vashi
Handson Workshop on “The Cyber Resilience Masterclass”	23 rd September 2024	Somaiya Vidyavihar University,Mumbai
FDP on AICTE training on Next Gen Computing:Advances in HPC and QuantumTechnologies for Data Driven Insights	9/12/2024 to 14/12/2024	A.C.patil college of Engg, Navi Mumbai
FDP on “AI,ML and DI”	8 th to 18 th July 2024	Organized by E&ICT Academy, NIT Warangal
Online Alumni Speaker session on “Future scope for Engg Students in AI/ML	6 th April 2024	K.J.Somaiya college of Engg,Mumbai.
One week Workshop on “Sustainable Research and Development”	2 to 6 Jan 2024	K.J.Somaiya college of Engg,Mumbai.
FDP on “writing research Paper for Publication in ABDC, Scopus and	18 th March 2023	K.J.Somaiya college of Engg, Mumbai.

Web of Science Journals”		
One day workshop on “Documentation”	19 th July 2022	K.J. Somaiya Vidyavihar University, Mumbai.
Workshop on LOCF- Train the trainers Learning Outcomes based Curriculum Framework	April 2021- 2 days	KJSCE, Mumbai
STTP on "Recent Trends and Applications of Machine Learning and Deep Learning Algorithms in Information Technology	5days, 25 th to 29 th may 2020(online)	RAIT,Mumbai
FDP on “VLSI chip Design Hands-on using open source EDA organized by electronics and ICT.	December 16-19, 2019	Terna Engg college, Navi Mumbai
IETE Approved One week STTP On Advanced VLSI Design and Applications with hands-on in CADENCE toolset	1 week/25th June- 30th June 2018	Shah & Anchor Kutchhi Engineering College, Chembur
Workshop on CMOS Mixed signal and Radio Frequency VLSI design	1 week/19-25Sep2016	IIT kharagpur
Short term training program Micro-Electro-Mechanical- Systems (MEMS)	1 week/ 20April 2015 – 25 april 2015	Shri Ramdeobaba College of Engineering and Management.
Workshop on Labview	One week –Nov 2014	KJSCE,Mumbai
Workshop on Modern digital design	2 days	SPIT ,Andheri .
Workshop on “emerging Trends in Embedded Systems”	1 day	PCE, Nagpur

Journal Paper publications:

Authors	Title of the paper	Details of the journal	N/IN	Impact Factor
Shilpa Vatar, Sujata Kulkarni	Automatic Prediction of Soil Moisture Using Efficient Convolutional Neural work from the Synthetic-Aperture Radar Data	Remote sensing in Earth System science, https://doi.org/10.1007/s41976-025-00209-4 . (Obj-2)	Vol 8, No.656-672, March 2025,	
Shilpa Vatar, Sujata Kulkarni	An adaptive deep learning approach for identification of crop-types from remote	Evolving Systems, https://doi.org/10.1007/s12530-025-09702-z . (Obj-3)	Vol.16, No.74, June 2025,	

	sensing images			
Shilpa Vatkar, Sujata Kulkarni	Optimizing Crop Yield Predictions through Satellite Data Fusion and Machine Learning	ECTI Transactions on Computer and Information Technology, https://ph01.tci-thaijo.org/index.php/ecticit .	Vol.19, No.4, October 2025,	

Conference Papers publication:

Title of the paper	Authors	Details of conference	Date	Venue
De-speckling of Synthetic Aperture Radar Image using Hybrid Filtering Techniques	Shilpa Vatkar, Sujata Kulkarni	9th International Conference for Convergence in Technology	April 5-7, 2024 sponsored by IEEE Bombay Section. doi: 10.1109/I2CT61223.2024.10543929 .	Lonavala, Pune
Monitoring Agricultural Stress Using Multi-Sensor Satellite Data and Machine Learning Techniques”,	Shilpa Vatkar, Sujata Kulkarni	4th IEEE International Conference on Circuits, Controls and Communication,	October 25, 2025 sponsored by IEEE Bangalore Section, doi: 10.1109/CCUBE66458.2025.11340426	Banglore
EffMedNet: A Deep Learning Model for Multi-Organ Disease Detection in Medical Images	Vatsala Verma, Shiva Kumaran, Rupali Patil, Shilpa Vatkar	2025 IEEE Pune Section International Conference (PuneCon)	Dec 12-14, 2025	Pune

Work done as University examiner/paper setter/moderator

Sr. No.	Name of Courses	Role : Examiner / Paper Setter / Moderator	Year/ Duration
1	Electronic instrumentation and measurement	Paper setter/Examiner	2012-2015/4 years
2	Operating system	Paper setter/examiner	2014-2018/5+ years
3	VLSI design	Paper setter/Examiner	2013-2017/6+ years
4	Integrated circuit	Paper setter/Examiner	2014-2018/5+ years
5	MEMS	Paper setter/Examiner	2019/1 year
6	Microprocessor	Paper setter/Examiner	2019/1 year
7	Operating system	Paper setter/Examiner	2020-5/5years
8	Nanoelectronics	Paper setter/Examiner	2023
9	Applied Cryptography	Paper setter/Examiner	2025/1 year
10	Structured Programming Methodolgy	Paper setter/Examiner	Nov-Dec 2025
11	Real time Operating System	Paper setter/Examiner	2024,2025

NPTEL Courses Completed

NPTEL online certificate course	2018	IIT Madras	Optimization Techniques for Digital VLSI Design	65
NPTEL online certificate course	2019	Isc Bangalore	Fabrication Techniques for mems based sensor: clinical Perspective	55
NPTEL online certificate course	2022	IIT Kharagpur	Signal Processing Techniques and its Application	75
NPTEL online certificate course	2022	IIT Kharagpur	Introduction to Environmental Engg. And Science-Fundamental and Sustainability Concepts	54

University positions

University position held	Year / Duration
Assistant Professor/Nagpur University	2007
Assistant Professor/Somaiya college of Engineering, Somaiya Vidyavihar University	2012 till date

No of students guided till date: (completed)

Sr. No	Title of Project	UG /PG	Year of completion/Awards received
1	Automated Green Globe	UG	2014/15
2	Smart Home using Bluetooth Low Energy.(4 students)	UG	2015/16
3	Verilog Implementation of 64, 32, 16, 8 Bit Carry.(4 students)	UG	2015/16
4	Enhancing Security using RFID and IOT(4 student)	UG	2016-17
5	PSOC BLE based Attendance System (External-Eduvance)(4 students)	UG	2016-17/ Awarded best project during Prkalp college Technical Event.
6	IOT Based Safety Gadget for Women (4 students)	UG	2017/18
7	Alcalyzer-The Smart Breath Analyzer(2 students)	UG	2017/18,Received Certificate by Ministry of Science and Technology, Ministry of Earth and Sciences In India International Science Festival 2018 in IISF 2018 at Lucknow
8	Smart Bus tracking system	UG	2018/2019
9	Smart patient monitoring system using IOT	UG	2018/2019
10	Path Planning of Autonomous Vehicle Using Bezier Curve	UG	2021-22
11	Shelf life management App for pantry products and medicines	UG	2021-22
12	Biomedical Signal Processing and Classification using Machine Learning	UG	2022-23
13	Hierarchical Distributed Ledger for Ensuring Reliable and Authentic data Collection in IoT with a Peer to Peer Ethereum Blockchain Network	UG	022-23
14	Electronic Health Record System using Blockchain	UG	2023-24
15	Stock Market Risk Analysis	UG	2023-24
16	Medication Alerting and Monitoring System	UG	2024-25
17	SAAS integration of ethical hacking tools	UG	2024-25

Excursions/Industrial visits:

Name of the industry/place visited	No of students	Class	Date
CEN Lab, IIT Mumbai	26 students	Third year	24 th March 2012
CEN Lab, IIT Mumbai	40 students	3 rd and 4 th year	6 th April 2013
Acted as Judge for “AI Powered IOT H/W hackathon,Peripherathon 1.0-2023”			20 th April 2023

Extra-curricular activities:

- 1) Active in Sports and won 2nd Prize in STREAM 2018 for Badminton.
- 2) Involved as Sport Member faculty coordinator in STREAM annual sports events every year.
- 3) Actively participated in TOSS-2020 women’s league from KJSCE and won 4th position
- 4) Actively participated in TOSS-2023 women’s league from KJSCE and won Player of the Match.
- 5) Participated in Avishkar Project Competition in Dec 2023.

College administration / committees :

- 1) Acting as a Incharge of Timetable at department level from 2024 till date.
- 2) Acting as SPOC of Class Roster from 2025 till date.
- 3) Involved in First year admission duty.
- 4) Acted as Miniproject Incharge for VI Semester from 2019 to 2024.
- 5) Acted as member of Project committee for Final year B.E students.
- 6) Acting as a coordinator of Departmental UG electives.
- 7) Presently a SDC coordinator at Department level.
- 8) Honours Coordinator at Department Level.
- 9) Parmarsh UGC Mandate Member.

Name : Shilpa N Vatkar
Department: Electronics and Telecommunication Engg
Signature: S.Vatkar