

## Somaiya Vidyavihar University

<b>Name: Dr. Nirmala Baloorkar</b>		<b>E-mail: nirmalashinde@somaiya.edu</b>	
<b>Contact No: 9769796863</b>			
Department/Section: Computer Engineering			
Institute / School : K J Somaiya School of Engineering			
DOJ Somaiya: 8/10/2012	Career Experience: 15+ Yrs	Industry Experience: NIL	Teaching Experience: 15 + Yrs
Present Academic Designation: Assistant Professor		Present Administrative Designation: --	

<b>Area of research/specialization and Courses Delivered</b>
<p>Research domain/interests/areas</p> <ol style="list-style-type: none"> <li>1. Artificial Intelligence/Machine Learning/Deep Learning</li> <li>2. Agriculture Engineering</li> <li>3. Application Development</li> <li>4. Data Analysis</li> <li>5. Healthcare Engineering</li> </ol> <p>Courses Delivered</p> <ol style="list-style-type: none"> <li>1. Artificial Intelligence               <ol style="list-style-type: none"> <li>a. Artificial Intelligence</li> <li>b. Soft Computing</li> <li>c. Machine Learning</li> <li>d. Advanced Machine Learning</li> <li>e. Applied Machine Learning with TensorFlow</li> </ol> </li> <li>2. Programming &amp; Data Science               <ol style="list-style-type: none"> <li>a. Python Programming</li> <li>b. Python for Data Science &amp; Data Visualization</li> <li>c. Web Programming</li> <li>d. Full Stack Development (Django / MERN)</li> <li>e. Web Frameworks (Flask, etc.)</li> </ol> </li> <li>3. Systems &amp; Interaction Design               <ol style="list-style-type: none"> <li>a. Operating Systems</li> <li>b. Human–Machine Interaction (HMI / HCI / UxD)</li> </ol> </li> </ol>

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : No
Details of Recognitions <ol style="list-style-type: none"> <li>1. Recognized UG teacher in Mumbai University from 2012.</li> <li>2. Recognized PG teacher in Mumbai University from 2016.</li> </ol>			

<b>Education</b>					
Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
PhD	Computer Engineering	Kalinga University	Kalinga University	2025	-
PG	Master in Computer Engineering	Mumbai University	VJTI, Mumbai	2010	74%
UG	Bachelor in Computer Engineering	SNDT University	Usha Mittal Institute of Technology	2004	65%
Diploma	Computer Engineering	Mumbai University	Shree Ram Polytechnic	1999	70%
NET/SET/ Other	Gate in Computer Science and Engineering	-	Indian Institute of Technology Kanpur	2008	82.25 Percentile

## Somaiya Vidyavihar University

<b>Notable Experience Details</b>					
Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	KJSCE	Assistant Professor	Oct 2012	-	10+
2.	SCOE	Assistant Professor	Aug 2010	Sept 2012	2 Years
3.	VJTI	Teaching Assistant	Jul 2008	July 2010	2 Years
4.	GNDEC	Senior Lecturer	Sept 2004	June 2008	4 Years

<b>Research Accomplishments and Projects</b>		
No of students pursuing Ph.D as on date: NIL	No of students completed Ph.D as on date: NIL	
No of students completed PG thesis / Project work as on date: 03	No of students / groups completed UG projects as on date: 15+ Groups	
Publications Total: 13	Number of Peer review Journal papers: 13	Number of Conference papers: 10

Details of Publications:

### **International Journals**

1. Shinde Nirmala, Ambhaikar Asha, "An efficient plant disease prediction model using danner drain fly optimization-based deep convolutional neural network", Journal of Crop Science and Biotechnology, Springer Nature Singapore Singapore, Feb 2025
2. Shinde Nirmala, Ambhaikar Asha, "An efficient plant disease prediction model based on machine learning and deep learning classifiers", Evolutionary Intelligence, Springer Berlin Heidelberg Berlin/Heidelberg, Nov 2024
3. Shinde Nirmala, Ambhaikar Asha, "Comprehensive Survey on Datasets, Models, and Future Directions in Plant Disease Prediction", International Journal of Image and Graphics, World Scientific Publishing Company, 2024
4. Nirmala Shinde Baloorkar, "A Review of Plant Disease Prediction Methods for Agricultural Applications", International Journal of Engineering and Advanced Technology (IJEAT), Oct 2022.
5. Nirmala Shinde Baloorkar, Janhavi Patil, "Time Series Weather Forecasting Techniques: Literature Survey", International Research Journal of Engineering and Technology (IRJET), Volume 9, Issue 6, June – 2022.
6. Mitali Potnis, Chaitanya Phadtare, Shreyas Parkar, Nirmala Baloorkar, Pradnya Bhangle "Automated System for Effective Control of Electrical Supply of Houses Using Image Processing", International Journal of Innovative Science and Research Technology, Volume 6, Issue 4, April – 2021.
7. Niti Patel, Uday Joshi, Nirmala Shinde," Comparative study of Windows, Linux and Mac Operating System based on User experience, Usability, Learnability and Desirability", International Journal of Scientific Research in Engineering and Management (IJSREM), April 2020.
8. Umang Rupareliya, Henali Shah, Pragnya Kulkarni, Nirmala Baloorkar "Sentence "Completion using NLP Techniques", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 7 Issue IV, Apr 2019
9. Smita Sankhe, Nirmala Shinde "Uncovering user's search patterns to personalize web search", International Journal of Development Resarch, Vol. 08, Issue, 06, June, 2018
10. Nirmala Shinde, Smita Sankhe "Monitoring File System for Windows", International Journal on Future Revolution in Computer Science & Communication Engineering, Volume: 4 Issue: 5, May, 2018.
11. Shraddha Kande, Pooja Goswami, Gurpreet Naul, Mrs. Nirmala Shinde, "Adaptive and Advanced E-learning Using Artificial Intelligence", International Journal of Engineering Trends and Applications (IJETA) – Volume 3 Issue 2, Mar-Apr 2016
12. Vivek Patani, Rhythm Shah, Vruksha Shah, Riya Patni, Nirmala Shinde, "Social Media Aggregator Using a focused Crawler and a Web & Android UI", International Journal on Recent and Innovation Trends in Computing and Communication, Volume: 2 Issue: 10, October 2014

## Somaiya Vidyavihar University

13. Nirmala Shinde, Dipanwita Biswas, Sagar Bairagi , Neelam Panse “Disease Diagnosis System”, International Journal of Computer Science & Informatics, Volume-I, Issue-II, 2011.

### Conferences

1. Nirmala Baloorkar, Janhavi Patil, “Weather Predictions using Machine Learning Techniques”, 2025 3rd International Conference on Sustainable Computing and Data Communication Systems (ICSCDS), Aug 2025
2. Mihir M. Gandhi, Devansh S. Solanki, Rutwij S. Daptardar, Nirmala Shinde Baloorkar “Smart Control of Traffic Light Using Artificial Intelligence”, 5th IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE), 2020.
3. Aditi Deshmukh, Nirmala Shinde,” Sentiment Analysis of People’s Emotions towards News Trends”, Institute of Research and Journal, April 2019
4. Nirmala Shinde,” Chatbot using TensorFlow for Small Business”, Proceedings of the 2nd International Conference on Inventive Communication and Computational Technologies (ICICCT 2018), ISBN:978-1-5386-1974-2
5. Nirmala Shinde, M. M. Chandane “Impact of Multichannel Multi-Interface on AODV Protocol”,International Conference on “On Demand Computing”, ICODC 2010, The Oxford College of Engineering, Bangalore, Nov. 3-4, 2010.
6. Nirmala Shinde, Ashish Mohta “Wireless Sensor Network: An Emerging Technology”, Conference on Recent Trends & Challenges in Internet Technology (RTCIT), 2010.
7. Nirmala Shinde, M. M. Chandane “Imapct of Node Mobility and Scalability on DSR Protocol”, International Conference on Computational Intelligence & Application ICCIA – Mar. 5, 2010.
8. Nirmala Shinde, Manasi Kulkarni, Pramila Chavan “A Better Approach to Requirement Engineering with Agile Process”, 2nd National Conference on RTCE, Dec – 31, 2009.

### Books/Book Chapters

1. Shinde Nirmala, Ambhaikar Asha, “Fine-Tuned Xception Model for Potato Leaf Disease Classification”, Fifth International Conference on Computing, Communications, and Cyber-Security. IC4S 2023, Voulme 991, July 2024
2. Shah Aashay, Shah, Prithvi Savla, Umang Rathod, Baloorkar Nirmala, “Predictive Analysis of Crowdfunding Projects”, Computational Intelligence for Modern Business Systems: Emerging Applications and Strategies, Springer Nature, Nov – 2023 (Chapter)

### Patents/Copy Rights

- 1.
- 2.
- 3.

No of Research / consultancy / projects completed:  
Rs:

No of Research / consultancy / projects on-going:  
Rs:

No of Research / consultancy / projects on applied as on date:  
Rs:

### Details of Research / consultancy / projects:

#### Completed

- 1.
- 2.

#### On-going

- 1.
- 2.

#### Applied

- 1.
- 2.

### IPR/ Copyrights

- 1.
- 2.

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### FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

#### Attended

1. FDP on “Industry 5.0 for Society 5.0”, at Department of Electronics and Telecommunication Engineering, Vishwakarma Institute of Information Technology, Pune, during 18th to 22nd March 2024.
2. FDP on “Writing Research Paper for publication in ABDC, Scopus and Web of Science Journals” Organized by UGC Quality Mandate Paramarsh, Somaiya Vidyavihar University, Mumbai On 18th March, 2023
3. FDP on “Emerging Technologies in Machine Learning” held during 30.01.2023 to 03.02.2023 organized by Dwarkadas J. Sanghvi College of Engineering, Mumbai, Maharashtra.
4. One day workshop on “Documentation” Organised by Somaiya Vidyavihar University, Mumbai Under Paramarsh, UGC Quality Mandate On July 19, 2022
5. FDP on "Research Methodology & Latest Advances in Teaching Methodologies" organized by Kalinga University, Naya Raipur, from 29th June to 12th July 2021.
6. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Data Sciences" from 04/10/2021 to 08/10/2021 at Institute of Engineering and Technology, Devi Ahilya University, Indore M.P.
7. STTP on “Machine Learning & Deep Learning with Deployment” organized by the Dept. of Electronics and Communication Engineering, Adi Shankara Institute of Engineering & Technology, 22nd – 24th July 2021.
8. FDP on “Trends in Machine Learning and Data Science”, Organized by the Dept. of Computer Engineering, Lokmanya Tilak College of Engineering,, 28th – 30th June 2021.
9. Workshop on “ Effective and Efficient Online Teaching in the Age of Corona, A Hands on Workshop”, organized by ICT IIT Bombay, 16th May 2020.
10. AICTE Training and Learning Academy FDP on “Artificial Intelligence” organized by Motilal Nehru National Institute of Technology Allahabad, 18th – 22nd April 2020.
11. FDP ISTE approved Three weeks 8 Credit Course on:” WhatsApp Outcome Based Education Faculty Development Program” organized by D Y Patil College of Engineering, Akurdi, Mar-April 2020
12. NPTEL-AICTE FDP “Introduction to Machine Learning”, July-Sept 2019.
13. Workshop on “Python” organized by ICT IIT Bombay, 22nd June 2019.
14. Workshop on “Phase I - IUCEE International Engineering Educator” organized in 18th – 20th Dec 2018.
15. AICTE ISTE Sponsored Refresher STTP on “Cloud Computing and Security” Organized in June 2018.
16. STTP on “Probability and Statistics for Scientists and Engineers” Organized by TEC, NERUL June 2018
17. FDP on “Pedagogy for Online and Blended Teaching-Learning Process FDP201x”, Conducted by IIT Bombay, September 2017
18. FDP on “Foundation Program in ICT for Education FDP101x”, Conducted by IIT Bombay, Aug 2017
19. STTP on “Introduction to Design of Algorithms”, Conducted by IIT Kharagpur, April 2015
20. Faculty Development Program on “Research Problems in Computer Science & Information Technology”, Organized by FRCRCE on 31 Aug 2013.
21. One Week Graded ISTE STTP On “Structured Programming Approach With Lab Exercise”, Organized by SPIT on 31 Dec 2012 - 5 Jan 2013.
22. Workshop on "Aakash for education", Organized by KJSCE and IIT Bombay on 10-11 Nov 2012.
23. Workshop on “Object Oriented Analysis and Design using UML with Essentials of Rational Software Architect” Organized by SCOE on 10th – 13th Jan 2011.

## Somaiya Vidyavihar University

### Organized

1. **Organized One-Day Workshop** on *Applying Design Thinking Skills to Generate Innovative Solutions for Student-Centric Problems* — facilitated hands-on activities to enhance creativity, problem-solving, and user-centered design approaches among participants (27<sup>th</sup> Oct 2025).
2. **Organized** a workshop on *Design & Implementation of Real-Time Application with IoT* (March 2019), fostering applied learning and innovation in IoT-based systems.
3. **Served as Organizing Committee Member** for the AICTE–ISTE Sponsored Refresher Programme on *Cloud Computing and Security* (June 2018), contributing to the successful execution of a national-level faculty development initiative.
4. **Co-ordinator** for ISTE Workshop on *Computer Programming through ICT* (MHRD), June 2014 — facilitated training sessions and contributed to enhancing expertise in ICT-enabled pedagogy and programming education.

### Delivered

1. **Delivered a session on “Business Intelligence: Unlocking Insights with Tools” during the Hybrid STTP organized by FSDC in collaboration with the Department of Computer Engineering, K J Somaiya School of Engineering, held from 16th–20th June 2025**
2. **Delivered Expert Talk** during the *One-Week Online Short-Term Training Program on “Recent Advancements in Machine Learning (Hands-On)”* approved by the Indian Society for Technical Education (ISTE), New Delhi, and jointly organized by the Department of Computer Science & Engineering, Yadavrao Tasgaonkar Institute of Engineering and Technology — February 3–7, 2025.
3. **Evaluator** in *Toycathon 2021*, Ministry of Education’s Innovation Cell — assessed innovative student projects and contributed to fostering creativity and entrepreneurship.
4. **Core Member** of Faculty Activity Portal Development Team at KJSCE — collaborated in designing and implementing software solutions to streamline faculty activity management.
5. **Delivered Lecture** on *Human–Machine Interaction* for third-year Computer Engineering diploma students at Government Polytechnic — July 26, 2018.
6. **Team Member** for Online Examiner Panel Updating, University of Mumbai — supported digital transformation initiatives by maintaining and updating examiner databases for academic operations.

### Notable Key Scholastic Achievements

1.	<b>Member of Faculty Activity Portal Software Development</b> for KJSSE.
2.	Served as <b>Evaluator</b> in <i>Toycathon 2021</i> , organized by the Ministry of Education’s Innovation Cell.
3.	Achieved <b>NPTEL Online Certification (Elite)</b> in <i>Introduction to Machine Learning</i> , 2019.
4.	Contributed as a <b>Team Member</b> in the <i>Online Updating Examiner Panel</i> initiative for the University of Mumbai.

### Notable Positions and Responsibility

1.	Member of Faculty Documentation Committee
2.	Member of UGC Quality Mandate Paramarsh.
3.	Coordinator of Open Elective.
4.	Member of Faculty Online Course Committee

# Somaiya Vidyavihar University

**Date:**   /   / 2025

**Signature of Faculty Member**