Nasim B. Shah

Assistant Professor| Information Technology| K. J. Somaiya Institute of Technology, Sion, Mumbai
9821154828 | nshah@somaiya.edu|
[Google Scholar ID: cxxAOYYAAAAJ] | [ORCID: 0000-0003-3939-6076| Scopus ID: 57208102469

SUMMARY

Academic professional in Computer Engineering with over two decades of teaching experience, research publication, curriculum and laboratory development, student mentoring, academic coordination, and institutional responsibilities. Teaching and research interests include Artificial Intelligence, Big Data Analytics, Image Processing, Computer Vision and emerging computing technologies.

EDUCATION

Degree / Qualification	Institution / University	Year	Result
Ph.D. – Computer Engineering (Pursuing)	Sir Padampat Singhania University, Udaipur, Rajasthan	-	-
M.E. – Computer Engineering	K. J. Somaiya College of Engineering, University of Mumbai	2013	69%
B.E. – Computer Engineering	K. J. Somaiya College of Engineering, University of Mumbai	2003	60%
Diploma – Computer Engineering	M. H. Saboo Siddik Polytechnic, Byculla	2000	91.17%
H.S.C.	C.H.M. Junior College, Ulhasnagar	1997	67%
S.S.C.	N.U. High School, Kalyan	1995	87.71%

EXPERIENCE

Assistant Professor 26 May 2006 – Present
K. J. Somaiya Institute of Technology, Sion, Mumbai

- Teach undergraduate courses across computer engineering and emerging technology domains.
- Mentor final-year student projects and guide academic project work.
- Serve as Module Coordinator, Course Coordinator, Laboratory Incharge and departmental academic coordinator.
- Contribute to NAAC/NBA activities, result analysis, examination and assessment responsibilities.
- Coordinate and participate in FDPs, workshops, seminars and technical activities.
- Active reviewer/session chair/jury member for international conferences, national project competitions and hackathons.
- Student research mentoring with participation and awards at Aavishkar

Lecturer 1 January 2005 – 31 April 2006
S.P.I.T., Bhavan's, Andheri, Mumbai
• Worked as a lecturer on an ad-hoc basis.

PROJECTS

Image Processing & Optimization | Research work includes image compression using DWT, evolutionary optimization, wavelet performance analysis and Artificial Bee Colony optimization for JPEG images.

Artificial Intelligence & Computer Vision | Research contributions include artificially ripened fruit identification using machine learning, an AI cooking application, and a computer-vision-based audible experience system.

IoT, Android & Intelligent Systems | Research and development work includes Android-based LAN monitoring and control, biometric attendance using GPRS, hands-free gesture and voice control, and driver drowsiness alert systems.

TECHNICAL SKILLS

Programming & Databases: C, C++, Java, Visual Basic, MySQL, Oracle, Matlab, QtOctave

Tools: MS Office

Research / Teaching Domains: Artificial Intelligence, Big Data Analytics, Image Processing, Data Structures & Algorithms, DBMS, Internet Programming, Computer Vision, IoT

CERTIFICATIONS

- Successfully completed the FDP on "QT-9 Engineering Foundation on Quantum Technologies" conducted from April 10 to May 02, 2026, in online mode, organized by the Electron and ICT Academies at MNIT Jaipur, IIT Kanpur, IIT Roorkee, and IIT Guwahati.
- Participated in "Mastering Generative AI", conducted by Tata NeuSkills, from January 05 to January 10, 2026, in offline mode at the K. J. Somaiya Institute of Technology, Mumbai.
- Attended the one-day Faculty AI Masterclass on "Integrating Google AI" on June 08, 2026, conducted online by Vidyavihar University, Mumbai. The program was conducted by upEducators, the Google for Education partner for the AI Implementation Program.
- Served as an NPTEL Mentor for German-I during January–April 2026, in online mode, under IIT Madras.
- Attended the webinar on "Strengthening Your Understanding of Research Journals" on July 10, 2021, conducted online by K. J. Somaiya College of Science and Commerce in collaboration with Elsevier.
- Participated in the Faculty Orientation Program on "Advance Data Management Technologies" on July 02, 2021, conducted online by the Department of Information Technology, Shivajirao S. Jondhale College of Engineering, Dombivli.
- Attended the webinar on "Entrepreneurship" on December 09, 2021, conducted online by the Department of Information Technology, K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai.
- Successfully completed the Innovation Ambassador Training Program (Basic Level) during June–July 2021, conducted online by the Ministry of Education's Innovation Cell (MIC).
- Participated in the FDP on "Innovation and Entrepreneurship" conducted from December 10, 2021 to January 10, 2022, in online mode, organized by the Institution's Innovation Council, KJSIEIT, Sion.
- Successfully completed the NPTEL Course on "Programming, Data Structure and Algorithm in Python" during July–September 2016.

- Participated in the Short-Term Training Program (STTP) on "Cyber Security in IoT Applications" conducted from 02 July 2018 to 07 July 2018.
- Participated in the Short-Term Training Program (STTP) on "R-Programming, Python and Perl" conducted from 02 January 2018 to 07 January 2018.
- Attended the NPTEL Workshop conducted on 12 January 2018.
- Participated in the Workshop on "Satellite Image Processing – Basic to Advanced" conducted from 24 November 2014 to 05 December 2014.
- Participated in the Faculty Development Program (FDP) on "Research Methodology for PhD Aspirants" conducted from 05 May 2014 to 16 May 2014.

AREAS OF EXPERTISE

• Artificial Intelligence and Machine Learning
• Big Data Analytics
• Computer Vision and Image Processing
• IoT and Intelligent Systems

RESEARCH PROFILE

Research focus: Artificial Intelligence, Big Data Analytics, Computer Vision, Image Processing, IoT, intelligent systems and optimization.

PUBLICATIONS

2025

1. Mrs. Nasim Banu Shah, Dr. Ashutosh Gupta, and Alok Kumar published "A Hybrid AlexNet-ShuffleNet framework for plant leaf disease detection" in *Multimedia Tools and Applications*, Springer, in 2025.

2. Mrs. Nasim Banu Shah, Dr. Ashutosh Gupta, Dr. Manish Tiwari, and Dr. D. S. Chouhan published "A Hybrid Deep Learning Approach for Efficient Classification of Plant Leaf Diseases" in the *International Conference on Computational Intelligence and Autonomous Systems* in 2025.

2024

3. Mrs. Nasim Banu Shah, Dr. Ashutosh Gupta, Prof. Alok Kumar, and Dr. D. S. Chouhan published "A Comprehensive Study on the Advance Methods for Detection of Plant Disease by Using Hybrid Deep Learning Method" in the *Journal of Electrical System*, Volume 20, in 2024, published by the Engineering and Scientific Research Group.

4. Ehlaam Hanwari, Jenil Kanani, Yash Bhavsar, and Shah Nasim published "AI Based Personal Yoga Assistant" in the *2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)*, IEEE, in 2024.

2023

5. Nasim Banu Shah, Ashutosh Gupta, and Alok Kumar published "Performance Analysis of Real-Time Object Detection Algorithm for a Multi-Class Plant Disease Detection and Classification Using Deep Learning" in the *International Conference on Emerging Trends in Engineering and Technology (ICETET 2023),* IEEE Xplore, in 2023.

2022

6. Bhavya Mistry, Het Parekh, Krish Desai, and Nasim Shah published "Online Examination System with Measures for Prevention of Cheating along with Rapid Assessment and Automatic Grading" in the *2022 5th International Conference on Advances in Science and Technology (ICAST)*, IEEE, pp. 28–34, in 2022.

2021

7. Kruti Kunverji, Krupa Shah, and Nasim Shah published "A Flood Prediction System Developed Using Various Machine Learning Algorithms" in the *Proceedings of the 4th International Conference on Advances in Science & Technology (ICAST 2021)* in 2021.

8. Payal Gidwani, Urmi Gori, Aayush Dedhia, and Nasim Shah published "Tuberculosis Detection Using Convolutional Neural Network" in the *Proceedings of the 4th International Conference on Advances in Science & Technology (ICAST 2021)* in 2021.

2020

9. Dhruvil Mody, Priyank Prajapati, Parthil Thaker, and Nasim Shah published "Image Compression Using DWT and Optimization Using Evolutionary Algorithm" in the *Proceedings of the 3rd International Conference on Advances in Science & Technology (ICAST)* in 2020.

10. Harsh Thakkar, Parth Thakker, Preetish Pede, and Nasim Shah published "Detection of Malaria Using Machine Learning", available through SSRN (SSRN 3606136), in 2020.

11. Lavanya Panigrahi, Abhishek Patel, and Shivam Tiwari published "Classification and Segregation of Garbage for Recyclability Process" in the *International Journal of Science and Research (IJSR)*, Volume 9, Issue 4, in 2020.

2019

12. Harshad Vaviya, Ajaykumar Yadav, Vijaykumar Vishwakarma, and Nasim Shah published "Identification of Artificially Ripened Fruits Using Machine Learning" at the *2nd International Conference on Advances in Science & Technology (ICAST)* in 2019.

13. Himani Verma, Shraddha Ugalmugale, Mrunmayee Godse, and Nasim Shah published "Prevention of Duplication of Encrypted Big Data in Cloud" at the *2nd International Conference on Advances in Science & Technology (ICAST)* in 2019.

14. Shubhankar Nalawade, Bhagyashree Parkar, Aishwary Patel, and Nasim Shah published "Oculus: Turning the Visual World into an Audible Experience" at the *2nd International Conference on Advances in Science & Technology (ICAST)* in 2019.

2018

15. Nasim Shah and Dimpy Ghaswala published "Bon Vivant: A Machine Learning Approach Towards Cooking" in the *2018 Second International Conference on Intelligent Computing and Control Systems (ICICCS)*, IEEE, pp. 1569–1574, in 2018.

16. Prof. Nasim Shah, Bhairavi Rawool, Prerna More, and Urvashi Parmar published "Android Based LAN Monitoring and Controlling" in the *Open Access International Journal of Science and Engineering*, Volume 3, Special Issue 1, pp. 154–158, in 2018.

17. Dimpy Ghaswala, Harita Kundalia, and Prof. Nasim Shah published “Bon Vivant: An Artificial Intelligence Cooking App” in the *Open Access International Journal of Science and Engineering*, Volume 3, Special Issue I, pp. 170–174, in 2018.

18. Prof. Nasim Shah, Bhairavi Rawool, Prerna More, and Urvashi Parmar published “LAN Monitoring and Controlling through Android Device Using Wi-Fi” at the *1st International Conference on Advances in Science and Technology (ICAST-2018),* Volume 11, Issue 1, pp. 191–193, in 2018.

19. Shah Nasim, Bhairavi Rawool, Prerna More, and Urvashi Parmar are also listed as authors for “Android Based LAN Monitoring and Controlling” in the publication records provided.

2017

20. Tanvish Thakker, Vaibhav Chopda, Shrenik Ashar, and Nasim Shah published “Implementation of Hands-Free Gesture and Voice Control for System Interfacing” in the *International Journal of Information Research and Review (IJIRR),* Volume 4, Issue 4, pp. 3933–3936, in 2017.

21. Tanvish Thakker, Vaibhav Chopda, Shrenik Ashar, and Nasim Shah published “Hands-Free Gesture and Voice Control for System Interfacing” in the *International Conference on Emanations in Modern Technology and Engineering (ICEMTE-2017),* Volume 5, Issue 3, pp. 144–147, in 2017.

22. Romil Shah, Lokesh Shanbhag, Saurabh Raval, and Nasim Shah published “Game On: An Android Application for E-sports” in the *International Journal of Computer Technology & Applications (IJCTA),* Volume 8, Issue 1, pp. 60–63, in 2017.

23. Viddyut Khanvilkar, Chaitanya Patel, and Nasim Shah published “Driver Drowsiness Alert System” in the *Journal for Research*, Volume 2, Issue 12, pp. 19–21, in 2017.

2015

24. Anjali Tiwari, Harsh Shah, Unnati Thube, and Nasim Shah published “Video Piracy Detection Using Invisible Watermark” in the *International Journal of Engineering Research & Technology (IJERT),* Volume 4, Issue 2, pp. 163–164, in 2015.

25. Nasim Shah and Baiju Garodia published “Training and Placement Automation” in the *National Conference on Advances in Engineering Technology and Applied Sciences* in 2015.

2013

26. Nasim Shah presented “Biometric Attendance with GPRS Technique Using Android Application” at the *National Conference on Signal Image Technology & Applied Communication Systems*, MIT, Pune, in 2013.

27. Anjor Jadhav, Savita Kharje, Pooja More, and Nasim Shah published “Track Your Buddies” in the *Proceedings of the National Conference on New Horizons in IT (NCNHIT 2013),* pp. 129–131, in 2013.

28. Tehsin Khan, Samiksha Patwari, Sadhna Bathe, and Nasim Shah published “Smart Chat With Translator (English ↔ Hindi)” in the *National Conference on New Horizons in IT*, MET, Mumbai, pp. 187–189, in 2013.

29. Nasim Shah and Nandana Prabhu published “Performance of Various Wavelets for JPEG Image Compression” at the *International Conference on Sensing, Signal Processing and Security (ICSSS)* in 2013.

30. Nasim A. Shah and Nandana Prabhu published "Performance Analysis of Control Parameters of Artificial Bee Colony Algorithm for JPEG Images" in the *International Journal of Science and Modern Engineering (IJISME)*, Volume 1, Issue 8, in 2013.

TEACHING PORTFOLIO

Courses / Subjects Taught:

- Big Data Analytics
- Artificial Intelligence
- Internet Programming (Choice Based)
- Digital Signal and Image Processing
- Computer Simulation and Modelling
- Image Processing
- Internet Programming (Old Syllabus)
- Open Source Technology
- Web Programming
- Data Structures and Algorithms
- Database Management System
- Information Storage Management for Disaster Recovery

ACADEMIC & INSTITUTIONAL CONTRIBUTIONS

- Departmental NAAC Coordinator
- NPTEL Departmental Coordinator
- Direct Second Engineering Admission Committee Member
- Entrepreneur Cell Committee Member
- Result Analysis
- AURA Coordinator, IT Department
- Coordinator, FDP on "Research Methodology for PhD Aspirants"
- Member, Internal Complaint Committee Cell
- NAAC/NBA related work
- Alumni Coordinator, IT Department
- Project Guide for Final Year students, IT Department
- Laboratory Incharge
- Departmental Exam (Oral/Practical) Time Table Incharge
- Departmental Proctor Coordinator
- Class Incharge
- Examination: invigilation, assessment and exam duty
- Module Coordinator and Course Coordinator

AWARDS & RECOGNITION

- Completed NPTEL course on “Programming, Data Structure and Algorithm in Python” in July–September 2016.
- Appreciation for outstanding commitment and hard work as “Hindi Head” for AURA 2014, KJSIEIT Annual Magazine.
- Appreciation for valuable contribution as Coordinator for the FDP on “Research Methodology of PhD Aspirants”.
- Appreciation for 100% result for the subjects of Image Processing, Mobile and E-Commerce.
- Received 3rd prize for “Biometric Attendance with GPRS technique using Android Application” in Speak IT’13, a National Level Technical Paper Presentation & Competition, 17 October 2013.

DECLARATION

I hereby declare that the information provided in this Curriculum Vita is true and correct to the best of my knowledge and belief.



Prof. Nasim B. Shah