

Dr. Reena Lokare

Assistant Professor, Department of
Information Technology,
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Scopus ID: 57225206604

Google Scholar Profile:

<https://scholar.google.com/citations?user=Ksx6XtsAAAAJ&hl=en>

Strengths:

- Life-long learner
- Fast learner
- Adaptive to changes easily
- Use of state-of-the-art technologies in teaching
- Passionate teacher and researcher

Academic Profile:

- **Degree: Doctor of Philosophy (Technology) (Ph.D.)**
Branch: Computer Engineering
Domain: Bioinformatics
Research Topic: Prediction and Recommendation of Precision Medicine for Cancer Treatment using Machine Learning Techniques
Institution: Pillai HOC College of Engineering and Technology, Rasayani, Navi Mumbai
University: University of Mumbai
Year of Award: 2023-24
- **Degree: Master of Technology (M. Tech.)**
Branch: Computer Engineering
Domain: Information Communication Technology
Research Topic: Developing Internet Search Utility for Low-Bandwidth, Low-Connectivity Communities.
Institution: Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad
University: Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad
Percentage: 67% (First class with Distinction)
Year of Award: 2008
- **Degree: Bachelor of Technology (B.Tech.)**
Branch: Computer Engineering
Domain: Healthcare
Research Topic: Hospital Management System
Institution: Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad
University: Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad
Percentage: 66.12% (First class with Distinction)
Year of Award: 2002
- **Examination: Higher Secondary School Certificate Examination (H.S.C.)**
Institution: J.S.M. Junior College, Alibag, Raigad
University: Maharashtra State Board, Pune
Year of Award: 1998

- **Degree: Secondary School Certificate Examination (S.S.C.)**

Institution: J.R.H. Kanya Shala, Alibag, Raigad

University: Maharashtra State Board, Pune

Year of Award: 1996

- **Work Experience:**

1. Working as an Assistant Professor in K. J. Somaiya Institute of Technology, Sion, Mumbai from 2nd July, 2012 till date.
2. Worked as a Lecturer in Rajiv Gandhi Institute of Technology, Andheri, Mumbai from June 2005 to June 2012.
3. Worked as a Lecturer in Naval Institute of Technology, Colaba, Mumbai from February 2004 to October 2004.
4. Worked as a Lecturer in Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad from August 2003 to January 2004.
5. Worked as a Lecturer in Walchand college of Engineering, Sangli, Maharashtra from January 2003 to April 2003.

Courses Taught at B.E./B. Tech. Level:

1. Microprocessor & Microcontroller
2. Computer organization & architecture
3. Operating System
4. Computer Networks
5. Database Management System
6. Automata Theory
7. Computer graphics & virtual reality
8. Programming Languages- C, C++, Java, Python
9. Soft Computing
10. Data Structure & Algorithm Analysis
11. Advanced data structure & algorithmic performance analysis
12. Machine Learning & Deep Learning
13. Artificial Intelligence & Data Science-I
14. Artificial Intelligence & Data Science-II
15. Explainable Artificial Intelligence
16. Robotic Process Automation
17. DevOps

Research Publications:

Journal Publication:

1. Lokare R., Kulkarni B., Rathod M., Correlation of Genomic Indicators with Hormone Receptor Status in Breast Cancer in The Indian Population Dataset. Suranaree Journal of Science and Technology. (Accepted:16th May, 2025; Publication in process) Indexing: Scopus, ESCI, TCI, ACI.
2. Lokare R., More J., Sarbhukan V., Rathod M., Rathod S., Patil S., Improving Breast Cancer Prediction through Explainable Artificial Intelligence-A transdisciplinary approach. **Indonesian Journal of Electrical Engineering and Computer Science**. (Publication in process-Accepted:March 2025). **Indexing: Scopus**
3. Wadmare, J., Lokare, R., Wadmare, G., Kolte, D., Bhatia. K., Singh, J. and Agrawal, S., Enhancing Accessibility with LSTM-Based Sign Language Detection Systems. **IAES International Journal of Artificial Intelligence** **13**, Vol. 14, No. 2, April 2025, pp.1355-1362. **Indexing: Scopus**

4. Lokare, Reena R., J. Wadmare, S. Patil, G. Wadmare, and D. Patil. Transparent precision: Explainable AI empowered breast cancer recommendations for personalized treatment. **IAES International Journal of Artificial Intelligence** 13, no. 3 (2024): 2694-2694.

Indexing: Scopus

5. Lokare, R., & Patil, S. Prediction and Recommendation of Precision Medicine for Cancer using Machine Learning Techniques. In **International Journal of Engineering and Advanced Technology(IJEAT)**, Vol.9, Issue-2, December,2019.

Indexing: Scopus

6. Lokare, R., Patil, S. Breast Cancer Prediction-An Explainable AI Approach. Shodh Prabha, Vol.53, Issue-03, 2023, **Shodh Parbha, ISSN: 0974-8946, UGC Care approved, Peer reviewed and Referred journal**
7. Lokare, R., Patil, S. Endocrine Therapy Recommendation for Estrogen Receptor Positive (ER+) Metastases Advanced Breast Cancer using Machine Learning Algorithms. **South India Journal of Social Sciences, Vol. 21, Issue-02,2023, ISSN: 0972-8945, UGC Care approved, Peer reviewed and Referred journal.**
8. Lokare, R., Patil, S. Artificial Intelligence Based Breast Cancer Prognosis and Recommendation of Precision Medicine. **Anvesak, Vol. 53, Issue-03,2023, ISSN: 0378-4568, UGC Care approved, Peer reviewed and Referred journal.**

Conference Publications:

1. Lokare, R., & Patil, S. (2022, April). A Study of Genetic Mutations, Amplification, Deletion and Fusion in Endocrine Resistant Advanced Breast Cancer. In *Proceeding of International Conference on Computational Science and Applications: ICCSA 2021* (pp. 25-51). Singapore: Springer Nature Singapore. **Indexing: Scopus**
2. Patil, D., Lokare, R., & Patil, S. (2022, May). An Overview of Text Representation Techniques in Text Classification using Deep Learning Models. In *2022 3rd International Conference for Emerging Technology (INCET)* (pp. 1-4). IEEE. **Indexing: Scopus**
3. Patil, D., Lokare, R., & Patil, S. (2022, December). Privacy Preserving Document Classification using Convolution Neural Network-A Deep Learning Approach. In *2022 5th International Conference on Advances in Science and Technology (ICAST)* (pp. 215-219). IEEE. **Indexing: Scopus**
4. Bajariya, K., Gandhi, P., Deshpande, Y., & Lokare, R. (2021, May). Machine Learning approach for Chemotherapy Suitability Prediction using Genomic Data. In *Proceedings of the 4th International Conference on Advances in Science & Technology (ICAST 2021)*. **Indexing: Scopus**
5. Shetty, S., Bhosale, R., Naik, R., Mane, R., Lokare, R., & Patil, S. (2021, May). Agribot-System for Plant Disease Detection and Pesticide Sprinkling. In *Proceedings of the 4th International Conference on Advances in Science & Technology (ICAST 2021)*. **Indexing: Scopus**
6. Tiwari, M., Bharuka, R., Shah, P., & Lokare, R. (2020). Breast cancer prediction using deep learning and machine learning techniques. *Available at SSRN 3558786*.
7. Sharma, S., Shah, N., Singh, R., & Lokare, R. (2020, April). Machine Learning Approach for Predicting Breast Cancer Using Genomic Data. In *Proceedings of the 3rd International Conference on Advances in Science & Technology (ICAST 2020)*. **Indexing: Scopus**
8. Patil, D., Lokare, R., & Patil, S. (2020, April). Private data classification using deep learning. In *Proceedings of the 3rd International Conference on Advances in Science & Technology (ICAST 2020)*. **Indexing: Scopus**

9. Thakkar, J., Vyas, S., Panchal, V., & Lokare, R. (2019, April). Future Location Estimation of a Mobile User. In *2nd International Conference on Advances in Science & Technology (ICAST 2019)*.
10. Parmar, C., Chaubey, R., Bhatt, K., & Lokare, R. (2019, April). Abstractive text summarization using artificial intelligence. In *2nd International Conference on Advances in Science & Technology (ICAST 2019)*.
11. Kanvinde, A. R., Panchal, S. A., Palrecha, S. V., & Lokare, R. (2017). Android Application for Passwordless Login for Web Applications. *Journal for Research/Volume*, 3(02).
12. Patil, A., Patil, T., Salaskar, V., Lokare, R.. (2018, April). Android Application for Soil Analysis Using OCR Technique. In *1st International Conference on Advances in Science & Technology (ICAST 2018)*.
13. Lokare, R., Sable, S. (2008, February). Easysearch Utility for Low-Bandwidth, Low-Connectivity Communities. In *Proceedings of SPIT-IEEE Colloquium and International Conference*, Mumbai, India.

Patent:

1. Permanent Complete Indian National Patent.

Title: “Suitable therapy recommendation on Luminal A, Luminal B and Triple Negative breast cancer based on 6 genomic biomarkers”,

Application No: 202221040860.

Filled and Published at Indian Patent Office and Indian Patent Journal, Dated: 18/07/2022.

Live Projects Handled:

1. SARI Survey Mobile Application for ASHA Workers for Solapur Municipal Corporation.
2. Artificial Intelligence and Deep Learning for Prediction of COVID-19 for K. J. Somaiya Hospital.

Major Funding Research Proposals Submitted:

Sr. No.	Academic Year	Title of Project	Faculty Investigator(s)	Funding Agency	Amount Applied	Status, with Remarks for Resubmission
1	2023-24	Artificial Intelligence based Precision Medicine Recommendation for Breast Cancer using Multi Omics data	Dr. Sunita Patil, & Dr. Reena Lokare	SERB Power Grant	INR 20,01,800	Submitted
3	2020-21	SARI-ASHA	Dr. Suresh Ukarande, Dr. Sunita Patil, Prof. Reena Lokare	BIRAC-PACE-AIR	INR 20,09,000	Rejected
4	2019-20	Personalized Risk Prediction using Artificial Intelligence, Big Data Analytics and Cloud Computing	Dr. Sunita Patil, Dr. Hariram Chavan & Prof. Reena Lokare	HORIZON-2020	€ 98767,50	Rejected.

5	2019-20	Affordable Cancer Therapy for Socio-Economically Background Indians	Dr. Sunita Patil, & Prof. Reena Lokare	DST	INR 26,38,000	Rejected
7	2019-20	Prediction and Recommendation of Precision Medicine for Cancer using Machine Learning Techniques	Dr. Sunita Patil & Prof. Reena Lokare	AICTE	INR 26,38,000	Rejected

Responsibilities handled:

Global Level:

1. Reviewer for the IEEE International Conference on Artificial Intelligence, Computer, Data Sciences and Applications- ACDSA 2024.
2. Reviewer- International Journal of Intelligent Networks.
3. Reviewer-3rd International Conference on Advanced Computing Technologies and Applications-2023
4. Track Coordinator for the 4th International Conference on Advances in Science and Technology (ICAST-2021) organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai in association with University of Mumbai and The Institution of Engineering and Technology (IET) on 7th May,2021.

Institute Level:

1. Member-Alumni Committee
2. Member-Library Committee
3. Member-Technical Committee
4. Member-Women Development Cell
5. Member-Earn and Learn Committee
6. Organizing member in National Level poster cum project competition-KJSIEIT-IET-INTECH 23
7. Judge for “KJSIEIT-IET INTECH 2K22” National Level Project Competition
8. Member-Vigilance squad for FY B.Tech./M.Tech. examinations held in November,2023.
9. Virtual Lab, IIT Bombay Coordinator, academic year: 2022-23.

Department Level:

1. Project Coordinator
2. Term test coordinator
3. Class Teacher
4. Department Library Coordinator
5. Proctor
6. Time Table In-charge

Activities Organized:

1. Interactive Session on placement preparations, industry roles, choosing right career path, master studies and above all tips on becoming successful engineer.
2. Webinar on Data Analytics using PowerBI on October 21, 2023 for LYIT.
3. Webinar on Unlock Your Dream Job on September 30, 2023 for LYIT.

4. Webinar on Preparing for Coding Competitions on April 1, 2023 for SYIT.
5. AICTE (AQIS) Sponsored Short Term Training Program on “Leveraging Artificial Intelligence and Data Analytics for Healthcare” from December 14-19, 2020.
6. Conducted Competitive Programming Series 2019-20 on August 2020 for TYIT.
7. Conducted Competitive Programming Practice Test Series from April - May 2020 for SYIT and TYIT.
8. Seminar on “Current Trends in Database Technology” on October 11, 2019.
9. Interactive session on Software Project Development in IT Industry using Scrum Methodology on October 11, 2018.
10. Expert talk on ‘Neural Networks’ by Mr. Badal Kotak on 18th February, 2018.
11. Industrial Visit to Reliance Jio Infocomm Ltd. Ghansoli on 10th July, 2017 for SY, TY and LY students.

Training Programs/Workshops attended:

1. ATAL Academy Faculty Development Program on “AI Driven Growth: Shaping India’s Economy and Global Leadership” at MCT’s Rajiv Gandhi Institute of Technology, Mumbai from 24th February 2025 to 1st March 2025.
2. ATAL Academy Faculty Development Program on “Leveraging Artificial Intelligence for Climate and Sustainability” at K. J. Somaiya Institute of Technology, Mumbai from 3rd February 2025 to 8th February 2025.
3. ATAL Academy Faculty Development Program on “Next Gen Solutions for Medical Challenges Powered by AI Based Intelligent Systems” at Malla Reddy College of Engineering & Technology from 16th December 2024 to 21st December 2024.
4. Faculty Development Program on “AI Applications in Banking and Healthcare Industry” organized by K. J. Somaiya Institute of Technology, Sion from 12th December 2024 to 18th December 2024 in online mode.
5. ATAL Academy Faculty Development Program on “Artificial Intelligence Edge-Soft Computing” by Dr. Sivanthi Aditanar College of Engineering from 9th December 2024 to 14th December 2024 in online mode.
6. ISTE approved Self-Financing Faculty Development Program on “Building Intelligence: Hands-on for Deep Learning, Generative AI and toolkits” held during 9th December 2024 to 14th December 2024 organized by K. J. Somaiya Institute of Technology, Sion.
7. AICTE-Wani approved STTP on “**Atamnirbhar Bharat: Antaral aani Sarakshan Khshetratil Swadeshi Tantradyan Vikas**” from 8th July 2024 to 10th July, 2024.
8. ISTE approved online FDP on “**Cloud Computing and its Services**” from 1st January 2024 to 6th January 2024 in online mode conducted by A.C. Patil College of Engineering, Kharghar, Navi Mumbai.
9. Webinar on “**Performing AI-Powered Content**” on September 27, 2023 in online mode conducted by Wiley India Webinar Series.
10. One Week National Level FDP on “**Cloud Infrastructure (AWS)**” from August 21-25, 2023 organized by KJSIT in association with Brainovision Solutions India Pvt. Ltd. and AICTE.
11. Faculty Development Program on “**Innovation and Entrepreneurship**” from 10th December, 2021 to 10th January, 2022.
12. Expert Talk on “**Technology - How it is going to impact Education in the Future?**” on June 07, 2021 in online mode organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai-22.

13. Motivational Talk on "Chhatrapati **Shri. Shivaji Maharaj--an Inspirational Ruler!**" on June 06, 2021 organized by Department of Basic Science & Humanities in Association with The Student Council of KJSIEIT, Sion, Mumbai.
14. AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "**Ability and Inability of AI**" from 21st June, 2021 to 25th June, 2021 at Gandhi Institute of Technology.
15. FDP on Research Funding Projects & IPR from June 7-June 9, 2021 organized by K.C. College of Engineering, Thane.
16. One-week Short Term Training Program on "**Being an Autonomous Institute: Roles, Responsibilities and Action Plan**" from May 14th-June 7, 2021 organized by K J Somaiya Institute of Engineering and Information Technology, Sion.
17. Workshop on "**Intellectual Property Rights and IP Managements for startup**" on 16th May, 2021 organized by Institution's Innovation Council, K. J. Somaiya Institute of Engineering and Information Technology, Sion.
18. Short-Term Training Program on "**Leveraging Artificial Intelligence and Data Analytics for Healthcare**" sponsored by AICTE under AQIS (2019-20) from January 04-09 2021 organized by K J Somaiya Institute of Engineering and Information Technology, Sion.
19. **IBM T3 Training Program** from 1st December, 2021 to 4th December, 2021 organized IBM.
20. Guided a research proposal titled "**Chemotherapy Suitability Prediction**" in Pure Science category and UG level for the selection round of 15th Inter-collegiate/Institute/Department Avishkar Research Convention 2020-21.
21. Participated and submitted research proposal titled "**Prediction and Recommendation of Precision Medicine for Cancer Treatment using Machine Learning**" in Engineering and Technology category and PPG level for the selection round of 15th Inter-collegiate/Institute/Department Avishkar Research Convention 2020-21.
22. Faculty Orientation Program on "**Automata Theory**" on 5th February, 2021 organized by Vidyalankar Institute of Technology, Mumbai.
23. AICTE (AQIS) Sponsored Short Term Training Programme on "**Leveraging Artificial Intelligence and Data Analytics for Healthcare**" from December 14-19, 2020 organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai in online mode.
24. Attended National Level Webinar on "**Artificial Intelligence**" under National Level Webinar Series on July 13, 2020 organized by Department of Information Technology, K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai in online mode.
25. Sponsored by NBA on "**Awareness Webinar on Outcome Based Education and Accreditation**" on November 27, 2020 conducted by Directorate of Technical Education, Maharashtra State, College of Engineering, Pune in online mode.
26. One Week Faculty Development Program and Online Training on "**Moodle Learning Management System**" organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai in association with Spoken Tutorial Project, IIT Bombay from 26th May, 2020 to 30th May, 2020.
27. Online Instructor-led Live Workshop from April 27-28, 2020 organized by Finland Labs on "**ML & AI using Covid-19 Virus Data Analysis**".
28. One Week Faculty Development Program on "**Python**" organized by Universal College of Engineering, Kaman, Maharashtra from 4th May, 2020 to 8th May, 2020 in association with Spoken Tutorial, IIT Bombay.
29. Webinar by Star Certified **DevOps** Expert on May 11, 2020 organized by Star Certification.
30. Two Days Live Online Workshop on "**ML & AI Using Covid-19 Virus Data Analysis**" from April 27-28, 2020 organized by Finland Lab in association with IIT Roorkee.

31. One Week Online FDP on Engineering Education & the Industry: A Post COVID 19 Perspective from June 01-05, 2020 organized by Rajiv Gandhi Institute of Technology, Mumbai.
32. Artificial Intelligence, Deep learning and Machine Learning from June 24-29, 2019 organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion.
33. CEP Course on “Deep Learning: From Basics to Practice” conducted by IIT Bombay from 18th June, 2019 to 22th June, 2019.
34. Machine Learning and its applications with Hand-on using Python 3rd January, 2019 to 9th January, 2019 organized by Xavier Institute of Engineering, Mahim.
35. Faculty Development Program on “Team Building Through the Power of Emotional Intelligence” on 4th January, 2019 organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion in association with Mann-The Mind, Mumbai.
36. Somaiya public lecture of Dr. R. Chidambaram, DAE-Homi Bhabha Professor in Bhabha Atomic Research Center (BARC) at K. J. Somaiya College of Engineering, Vidyavihar on 10th January, 2019.
37. Two-day workshop on “Outcome based Education” from 7th May 2018 to 8th May 2018 organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion.
38. Faculty development program on “IoT Applications and Development” from 2nd May, 2016 to 7th May, 2016 in association with the Institution of Engineering and Technology (IET) and K. J. Somaiya Institute of Engineering and Information Technology, Sion.
39. Two Week ISTE STTP on Introduction to Design of Algorithms, 25th May - 30th May, 2015 by IIT Kharagpur.
40. One-week University of Mumbai approved Faculty Development Program (FDP) on "**Recent Advances in Big Data Technologies & Applications**" from 4th May 2015 to 8th May 2015 organized by K. J. Somaiya Institute of Engineering and Information Technology, Sion.
41. Faculty Development Program on “**Research Methodology for PhD Aspirants**” 5th May 2014 to 16th May, 2014.
42. Attended 3 week UGC sponsored refresher course on “**Dot Net Technology**” at SRM, Chennai.
43. Attended 1 week ISTE approved STTP on Immerging trend sin wireless technology.
44. Attended 1 week ISTE approved STTP on Advanced in wired and wireless communication networks.

Courses Done:

1. Data Science in Stratified Healthcare & Precision Medicine on April 19, 2020 by an online non-credit course by the University of Edinburgh Coursera.
2. Big Data, Genes & Medicine on June 26, 2020 by an online non-credit course by the State University of New York offered through Coursera.
3. Bioconductor for Genomic Data Science on 18th July, 2020 an online non-credit course by John Hopkins University offered through Coursera.
4. Learning to teach online on 22th July, 2020 an online non-credit course by UNSW Sydney (The University of New South Wales) through Coursera.