

Name: Dr. Smita Bharne

Education: Ph.D. in Computer Science and Engineering specialization in Machine Learning and Cyber Security, M. Tech from G. H. Raisonni college of Engineering, Nagpur, B. E in Computer Engineering from KDK college of Engineering, Nagpur.

Designation: Associate Professor, Department of Engineering and Technology, Bharati Vidyapeeth Deemed University, Navi Mumbai, Maharashtra, India

Qualification: Ph.D. (CSE) Computer Science and Engineering, Sandip University, Nashik, October 2023, **M. Tech (CSE)** from G.H. Raisonni College of Engineering, Nagpur University in August 2012, and **B.E (Computer Technology)**, in August 2003 from K. D. K. college of Engineering.

Professional Experience:

- Dr. Smita Bharne brings over 19+ years of experience in teaching, research, and industry collaborations. She has spearheaded more than 100+ research-based and innovative projects that have gained national and international recognition.
- Approved Ph. D guide and PG guide in D. Y. Patil University. Approved PG teacher for Mumbai University.

Research Interests:

Her expertise spans a diverse range of cutting-edge fields, including: Machine Learning, Artificial Intelligence, Data Science, Generative AI, Cyber Security, Digital Forensics.

Courses Taught:

Database management systems, Data warehousing and mining, DevOps, C, C++ Programming, Object Oriented methodology, Machine Learning, System Programming, Python, Operating Systems, Digital Forensics, Software Engineering, Soft computing, Image Processing, Web Programming, Artificial Intelligence, Social Media Analysis

Publications and Patents:

- Dr. Smita Bharne is the author of 35+ research papers published in prestigious journals like IEEE Xplore, Springer, Taylor & Francis, and other Scopus-indexed and peer-

reviewed journals in open-access platforms. Many of her papers have earned Best Paper Awards at international conferences.

- She has also secured 12 copyright registrations and 2 patents in the Computer Software category, showcasing her innovative contributions to the field.

Achievements and Recognitions:

- A verified **Educator for the certification** course from **Celonis Academy on Process Mining Fundamentals and Business analytics** in 2023.
- Invited as **panelist** for panel discussion at Business-Jatra 2025 conference on AI Empowerment for MSMEs.
- Awarded with Young Scientific Award at, International Conference on Computational Technology, Nagpur in 2012.
- Verified Reviewer for journals such as IEEE Transactions, Elsevier, and other Scopus-indexed journals.
- **Session Chair and Technical Paper Judge** at various international conferences.

Leadership in Training and Development:

- Delivered expert talks and served as a trainer in 30+ skill development training programs, pre-placement sessions, and faculty development programs across institutions. Mentored over 15 M. Tech scholars, 5k+ UG students guiding their academic and research journeys.
- Verified Educator for Celonis Academy's certification course on Process Mining Fundamentals and Business Analytics.

Consultancy and Contributions:

- Provided consultancy for developing college management software in collaboration with reputed software industries.
- Engaged in the development and implementation of innovative technology solutions to streamline academic and administrative processes.

Certifications and Skills:

- Dr. Smita Bharne has earned numerous certifications from renowned platforms like Coursera, NPTEL, Udemy, Microsoft, IBM on Python Programming, Research Data

Management, Data Analytics, Data Science, Machine Learning, Power BI and Tableau, Generative AI.

- She has delivered impactful talks on topics like Artificial Intelligence, Generative AI, and Cyber Security at various forums.
- The training and certification list is below:
 1. 2025- **Edx Certification** on Introduction to Generative AI
 2. 2024-**Linked-In-Learning**, Hands-on Data Science using SQL, Tableau, Python and Spark
 3. 2024--**Linked-In-Learning**, Data Science Foundations: Fundamentals course
 4. 2023-**Edx Certification** on “Introduction to Prompt Engineering”
 5. 2023-**Edx Certification** on “How to Use ChatGPT in Education”
 6. 2023-**Udemy Certification** on The Complete Tableau Bootcamp for Data Visualization
 7. 2021-**Coursera certification** Deep Learning with PyTorch: Neural Style Transfer.
 8. 2021-**Coursera certification** Programming for Everybody (Getting Started with Python)
 9. **2020-Coursera certification** -Research Data Management and Sharing
 10. **2020-Coursera certification** -Python Data Structures
 11. **2020-IIT Bombay Spoken Tutorial Training Program** on- Python 3.4.3, Moodle Learning Management System, LATEX
 12. **2019-NPTEL certification** on Machine Learning
 13. **2018- NPTEL certification** on Data Science with Python

Research Publications List

- <https://scholar.google.com/citations?user=n1Qn1lQAAAAJ&hl=en>
- <https://orcid.org/0000-0003-1869-5552>
- Scopus Author ID: 56436534700
<https://www.scopus.com/authid/detail.uri?authorId=56436534700>

Journal Publications:

1. **2025-** Vaibhav Narawade, **Smita Bharne**, Puja Padiya, “Real-time Animal Intrusion Detection and Alert System using YOLOv8 for Enhanced Human-Wildlife Co-existence”, under **review** in International Journal of Image, Graphics and Signal Processing- Scopus indexed
2. **2025-** Shamal Salunkhe, **Smita Bharne**, “ResNeSt with Harmonic Tversky Dice Cross-Entropy Loss Network for Cross-Domain Video Steganalysis”, under **review** in International Journal of Image, Graphics and Signal Processing-Scopus indexed

3. **2025- Smita Bharne**, Ekta Sarda, Shamal Salunkhe, “Enhanced transfer learning framework for brain tumor detection from MRI scans using attention-based feature fusion” **Review stage 1 completed** in The International Journal of Informatics and Communication Technology (IJ-ICT), **Scopus indexed journal**
4. **2025-Smita Bharne**, Pallavi Sapkale, Ekta Sarda, Shamal Salukhe, “Towards Sustainable Image Synthesis: A Comprehensive Review of Text-to-Image Generation Models” Published in International Research Journal of Multidisciplinary Technovation, Volume 7, Issue 5, Year 2025- **Scopus indexed journal**
5. **2025- Snehal Jadhav, Smita Bharne**, Vaibhav Narawade, “Advancements in Brain Tumor Classification: A Survey of Transfer Learning Techniques” published in International Journal of Informatics and Communication Technology (IJ-ICT), Vol 14, No 3: December 2025-**Scopus indexed Journal**
6. **2025- Sumithra T.V, Puja Padiya, Smita Bharne**. “A Systematic review on hybrid approach for optimizing website usability using FULE methodology and usability heuristics reflecting user’s behavior and perception” published in Multidisciplinary Reviews- **Scopus indexed Journal**
7. **2025-Snehal Jadhav, Vaibhav Narawade, Smita Bharne**, “Brain Tumor Detection from MRI Images using Enhanced Transfer Learning” published in Journal of Information Systems Engineering and Management- Vol. 10 No. 33s (Feb 2025)
8. **2024- Apurva Mali, Smita Bharne**, Ekta Sarda “Deep learning Models for Multi-class Pneumonia Detection with emphasis on Covid-19” published in Journal of Information Systems Engineering and Management - Vol. 10 No. 3s (Dec2024)
9. **2024- Smita Bharne**, Pawan Bhaladhare, “Enhancing user profile authenticity through automatic image caption generation using a bootstrapping language–image pre-training model”-**Scopus index Journal , MDPI**
10. **2024-Priya Karkare, Vaibhav Narawade, Smita Bharne**, “The Artistry of Stochastic Gradient Boosting and Gradient Boosting Classifiers in Chronic Renal Disease Classification”, published in Journal of Electrical Systems (JES)- Vol. 20 No. 7s (2024)
11. **2023-Smita Bharne**, Pawan Bhaladhare, “An Enhanced Scammer Detection Model for Online Social Network Frauds Using Machine Learning” International Peer Reviewed Journal, Recent and Innovation Trends in Computing and Communication, -**Scopus indexed Journal**

Book Chapter Published:

1. **2025- Smita Bharne**, “Generative AI Algorithms and Techniques for Cognitive Computation: Comprehensive Study” –**under production Book chapter in Taylor & Francis**
2. **2025-Trushita Deshmukh, Anuj More, Tanmay Lad, Ananya Khanduri, Smita Bharne**, “Tackling Online Harassment: A Neural Network based Toxic Comment Classifier”- published in book chapter ADCIS 2024, Springer book chapter series-Scopus
3. **2025-Soham Sawant, Smita Bharne**, “A Comparative study of Hate Speech Detection Methods using Machine Learning Techniques”, published in book chapter in ICTCS 2024,

- Intelligent Strategies for ICT in **Springer book chapter series**
- 4. **2025**-Anushka, **Smita Bharne**, Vaibhav Narawade, “A Review of Real-time Sign language Translation with Augmented Reality Integration””, published in book chapter in ICTCS 2024, - Intelligent Strategies for ICT in **Springer book chapter series**
- 5. **2023-Smita Bharne**, Pawan Bhaladhare, “Comprehensive analysis of Online Social Network Frauds” published in International Conference on Advances in Data Driven Computing and Intelligent Systems (ADCIS-2022) during September 23-25, 2022 organized by BITS Pilani, Goa, India. **Book chapter Advances, Lecture Notes in Networks and Systems. Springer Scopus indexed.**
- 6. **2021-Smita Bharne**, Suryakant Patil, “Exploring in the Context of Development of Smart Cities in India” Proceedings of International Conference on Recent Trends in Machine Learning, IoT, Smart Cities and Applications. **Book Chapter** in Advances in Intelligent Systems and Computing, vol 1245. Springer **Scopus Indexed**
- 7. **2021-**, Smita Bhoir, **Smita Bharne** Jyoti J, “Application of Machine Learning in Fake News Detection”, **Book Chapter** in Design of Intelligent Applications Using Machine Learning and Deep Learning, by CRC press, Taylor & Francis. (2021) **Scopus Indexed**

Conference Publications:

1. **2025-** Deeptanshu Lal, Nauman Pathan, **Smita Bharne**, “Prompt Enhanced Diffusion Framework for Photorealistic Virtual try-on with multi modal pose and surface conditioning in 4th IEEE International conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)
2. **2025-** Nauman Pathan, Ayushi Pahadia, **Smita Bharne**, “Intelligent Bank Customer Churn Prediction: An AI Ensemble Approach Using Neural Networks and TabPFN Foundation Models”, conditioning in 4th IEEE International conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)
3. **2025-** Nalin Khare, **Smita Bharne**, “An Empirical Study of Dark Patterns in Indian Digital Applications” published in 2025-IEEE 7th International Conference on Computing, Communication and Automation (ICCCA), Galgotias University, Greater Noida, India
4. **2025-**Sakshi Devre, Sakshi Choudhari, **Smita Bharne**, “Instant Identity Verification and Document Sharing using Blockchain” , presented at 16th International Conference on Computing, Communication and Networking, IIT - Indore, Madhya Pradesh, India
5. **2024-** Priya Karkare, Vaibhav Narawade, **Smita Bharne**, “A Comparative Evaluation for Kidney Failure Prediction with Machine Learning Technologies” published in 15th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2024
6. **2023-Smita Bharne**, Pawan Bhaladhare, “Investigating Online Dating Fraud: An Extensive Review and Analysis” published in IEEE International Conference (ICMACC-2022) during December 28-30, 2022 organized by Vigna Jyoti Institute of Engineering & Technology-**Scopus Indexed**
7. **2023-** Rajvardhan K, Rohit Shetty, **Smita Bharne**, “Stroke Risk Prediction Using Deep Neural Networks: Empowering Healthcare Services for Early Identification and Prevention” **Best Paper Award** at International Conference -NMTCON IEEE **Scopus**

indexed

8. **2023-A** Damale, D Barthwal **S Bharne** “Identification of Fake Products using Blockchain” 7th International Conference on Computing, Communication, Control and Automation (ICCUBEA 2023) **IEEE Scopus Indexed**
9. **2023-J** Gangan, KS Suprith, N Jamdar, **S Bharne**, “Detection of Fake Twitter Accounts Using Ensemble Learning Model” 7th International Conference on Computing, Communication, Control and Automation (ICCUBEA 2023) **IEEE Scopus Indexed**
10. **2022-Y** Dandekar, **Smita Bharne**, K Shinde, J Gangan, “Weed Plant Detection from Agricultural Field Images using YOLOv3 Algorithm”, 6th International Conference on Computing, Communication, Control and Automation (ICCUBEA 2022) **IEEE Scopus Indexed**
11. **2022-C** Narkhede, A Hankare, R Redkar, **S Bharne**, “EtherRider: A Decentralized Intercity Ride-Sharing Platform using Block-Chain Technology” ITM Web of Conferences, **Open access**
12. **2022-T** Daware, P Ramteke, U Shaikh, **S Bharne**, “Crop Guidance and Farmer’s Friend–Smart Farming using Machine Learning”, ITM Web of Conferences, Open Access
13. **2022-AS** Chamria, AD Mane, PV Dambal, **Smita Bharne**, “Detecting Fake Profile in Online Social Networks using EnsemStack Classification Algorithm” 6th International Conference on Computing, Communication, Control and Automation (ICCUBEA 2022) **IEEE Scopus Indexed**
14. **2021-** Omkar Narvade, Rujuta Tambewag, **Smita Bharne** “Speech Emotion Recognition using Time Distributed CNN and LSTM”, in International Conference on Automation, Computing and Communication, ITM Web Conferences., Volume 40, **Open Access**
15. **2021-**Amisha Pupala, Samruddhi Mokal, **Smita Bharne**, Identification of Lost Children using Face Aging with Conditional GAN”, in International Conference on Automation, Computing and Communication, ITM Web Conferences., Volume 40, **Open Access**
16. **2020-**Aishwarya Kamtam, Akhil Kedare, **Smita Bharne** (2020), “Deep Learning- Based Surveillance System using Face Recognition”, in International Conference on Automation, Computing and Communication, ITM Web Conf., Volume 32. **Open Access**
17. **2017-**Ms. Priyanka Salunkhe, **Smita Bharne** “Data Analysis of File Forensic Investigation” International conference on Signal Processing, Communication, Power and Embedded System (SCOPES), published in **IEEE Scopus indexed**
18. **2016-**Snehal Shejale, **Smita Bharne**, “Forensic Analysis of Financial Document Using Dempster Shafer Approach”, International Conference on Automatic Control and Dynamic Optimization Techniques (ICACDOT), published in **IEEE explorer Scopus indexed.**
19. **2016-**Apurva Nalwade, Smita Bharne, Vanita Mane, “Forensic Analysis and Evidence Collection for Web Browser Activity”, International Conference on Automatic Control and Dynamic Optimization Techniques (ICACDOT). published in **IEEE explorer Scopus indexed**
20. **2016-**Prinyanka Salunke, **Smita Bharne**, “Filtering Unwanted Messages from OSN Walls”, International Conference on Innovation and Challenges in Cyber Security, Amity University, Greater Noida. published in **IEEE explorer Scopus indexed**
21. **2016-** Apurva Nalawade, **Smita Bharne**, Vanita Mane, Enhanced Vote Trust Algorithm for Sybil Detection", International Conference on Computational Intelligence and

Communication Networks. published in **IEEE Scopus indexed**

22. **2015**-Kamlesh Nenwani, **Smita Bharne**, Vanita Mane, “Enhancing Adaptability of Insertion Sort through 2-Way Expansion” “5th International Conference Confluence 2014: The Next Generation Information Technology Summit, Amity University Uttar Pradesh, published in **IEEE explorer**
23. **2014**-Kamlesh Nenwani, **Smita Bharne**, “Enhancing Adaptability of Bubble Sort by Delayed Exchanges”, International Conference & workshop on Advanced Computing 2014 (ICWAC 2014), also published in International Journal of Computer Applications
24. **2014**- Kamlesh Nenwani, **Smita Bharne**, “Adaptive Merge Sort”, International Journal of Applied Information Systems (IJAIS) – ISSN: 2249-0868
25. **2012**-**Smita Khangar (Bharne)**, Dr. L.G. Malik, “Handwritten Text Image Compression for Indic Script Document”, Published in International Journal of Computer Application, IJCA, Volume 47-No.5
26. **2012**-**Smita Khangar (Bharne)**, Dr. L.G. Malik, “Compression Strategy for Handwritten Gray Level Images”, Published in IEEE International Conference on Communication, Information and Computing Technology, Mumbai, published in **IEEE**
27. **2011**-**Smita Khangar (Bharne)**, Dr. Rajiv V. Dharaskar, “Digital Forensic Investigation for Virtual Machines”, 3rd IEEE International Conference on Modeling and Simulation (ICCMS January 7-9, 2011, Mumbai, India, Vol. 2, pp. 206-209. Also Published in **International Journal of Modelling and Optimization**

Patent Registered

1. 2024- **Smita Bharne**, Pawan Bhaladhare, registered a design patent on “Social Media Scammer Detection Device”, Registration Number, 428661-001
2. 2024-**Smita Bharne**, Vaibhav Narawade, Puja Padiya registered a design patent on, “AI enabled Multilingual Disaster Response Device” Registration Number- 434801-001

Copyright Registered

1. **2025**-Recipesense, Registration Number- SW-2025020495
2. **2025**- Nutrabling- AI Powered Nutritional Expert, Registration Number-
3. **2024**- ToxDetect: Safeguarding Digital Spaces, Registration Number- SW-19241/2024
4. **2024**-MelodyCraft: Crafting Melodies with RNN LSTM, Registration Number- SW-18489/2024
5. **2023**-Construction of Scammers Dataset for Cyber Security Scammer Detection Model in Online Social Network, Literacy work, Registration Number- L-132137/2023
6. **2023**-Registered Copyright on “Fake Profile Detection in Online Social Network Ensemstack classification algorithm” Registration Number- SW-16385/2023
7. **2023**- E-KRISHI MITRA- SMART FARMING, Registration Number- SW-16389/2023

8. **2023**-CounterfeitGuard using BlockChain, Registration Number- SW-17806/2023.
9. **2023**-NeuralStrokeGuard using Deep Learning, Registration Number- SW-17803/2023
10. **2023**-FauxGuard: Twitter Deception Detection, Registration Number- SW-17774/2023
11. **2022**- “OCEAN traits extraction from text, questionnaire and social media profile for personality prediction” Registration Number- SW-14874/2021

Contact:

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