



Dr. Smita Sanjay Ambarkar

Academic Summary:

- **Ph.D.** (Computer Engineering) from D.J Sanghvi College of Engineering, **University of Mumbai**.
- **M.Tech (First Class)** in Computer Engineering from G. H. Raisoni College of Engineering, Nagpur University, Nagpur.
- **B.E (Computer Engineering) (First Class)** from B.C.Y.R.C College of Engineering affiliated with Nagpur University
- Rich experience in teaching Post Graduation and Graduation classes like MCA, BCA, and BE.
- An achiever equipped with strong commitment, confidence, and good learning capability. A born hard worker who appreciates taking initiative and challenges.

Work Experience

1. Lokmanya Tilak College of Engineering, Navi Mumbai

July 2010-till date

Assistant. Professor. – HoD, Computer Engineering

Responsibilities

Academics:

- Working as Head of the Department since Feb 1,2024.
- Department received NBA accreditation under my leadership.
- Taking classes in undergraduate UG and Post Graduate PG programs of the Computer Science branch and guiding projects at UG and PG levels.

- Organizing Chair of 1st International Conference on Recent Trends in Multidisciplinary Research and Innovation”(ICRMIR-2023) on March 17th -18th 2023
- Ph.D. Co-ordinator (CSE)
- Innovation Ambassador.
- Faculty Incharge for AWS Academy program.
- Faculty Incharge of Google Cloud Readiness Program.
- Departmental Training and Placement Co-ordinator
- Departmental FDP In- charge.
- An Active member and co-ordinator for Organising workshops/Seminars/FDP/STTP in the Department.
- In charge of the Time-Table Committee.
- Minor project Co-ordinator
- An active member of the team preparing NBA documents for the department.
- Lifetime ISTE Member

Workshops Conducted as Speaker

- Workshop on **Introduction to NS2** at Terna Engineering College,Mumbai on 12th March 2022.
- Workshop on **Introduction to NS2** at K. J. Somaiya Institute of Technology,Sion ,Mumbai on 11th April 2023.

STTP/FDP Sessions Delivered

- Delivered a session on “Emerging trends in cyber security and digital Forensics” at Atal FDP, Pillai College of Engineering, Rasayani on 7th December 2023.
- Delivered a session on “Cyber Security Horizons” at STTP ,Shivajirao Jondhle College of Engineering, Dombivali on 11th January 2024.
- Delivered a session on “IoT Industrial Automation” at A.C.Patil college of Engineering,Navi Mumbai on 18th December 2023
- Delivered a session on “IoT Industry 4.0” at A.C.Patil college of Engineering,Navi Mumbai on 7th June 2023

• University Activities

- Syllabus setting Committee of Cryptography and System Security and Mobile Communication and Computing

- Paper setter for Cryptography and System Security, Computer Networks, Mobile communication and Computing, and Structured Programming Approach.

2. G.H. Raisoni Institute of Information Technology, Nagpur

June 2003- 2007 June

Lecturer-G.H.Raisoni Institute of Information Technology,Nagpur

Job Profile:

Academics: Taking classes in Post Graduate PG program of Master of Computer Applications PG level. Subjects have taken: Database Administration, Distributed Database System.

Publications:

1. Patent on “**A Deep Learning-Based Model or Detecting Driver Hypnotism On Expressways For Reducing Highway Accidents**” Published on **24/02/2024**
2. Patent on” **An Innovative Approach for Securing Low Constraint IoT Devices using Game Theory Based Intrusion Detection System**” is published on **26/11/2021**.
3. Ambarkar S.S., Shekokar N. (2020) **Toward Smart and Secure IoT Based Healthcare System**. In: Dey N., Mahalle P., Shafi P., Kimabahune V., Hassanien A. (eds) Internet of Things, Smart Computing and Technology: A Roadmap Ahead. Studies in Systems, Decision and Control, vol 266. Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-39047-1_13
4. **Ambarkar S.S.,Shekokar N(2021).”The Secure Model for Protecting the Healthcare IoT System from RPL Version Number and Rank Attacks”** Journal of University of Shanghai for Science and Technology, ISSN:1007-6735,Volume 23- Issue 2-2021,DOI: [10.51201/JUSST/21/05-187](https://doi.org/10.51201/JUSST/21/05-187)
5. Ambarkar S.S.,Shekokar N(2021),” An Efficient Authentication Technique to Protect IoT Networks from Impact of RPL Attacks SSRG International Journal of Engineering Trends and Technology ISSN:2349-091, EISSN 2231-5381

6. Deokar Sanjivani,Chaudhari Chaitrali,Smita Amabarkar,Rakhi akhare,Nidhi Ranjan,Mayuri Karnik ENHANCING CITRUS FRUIT HEALTH MONITORING USING DEEP LEARNING Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/Journal of Tianjin University Science and Technology ISSN (Online):0493-2137 E-Publication: Online Open Access Vol: 58 Issue: 05:2025 DOI: 10.5281/zenodo.15377864
7. Smita Amabarkar,Rakhi akhare,Deokar Sanjivani,Chaudhari Chaitrali,Nidhi Ranjan,Mayuri Karnik REDUCING ACCIDENTS ON EXPRESSWAYS: A DEEP LEARNING BASED DRIVER HYPNOSIS ALERT SYSTEM TO REDUCE ACCIDENTS ON EXPRESSWAYS Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/Journal of Tianjin University Science and Technology ISSN (Online):0493-2137 E-Publication: Online Open Access Vol: 58 Issue: 05:2025 DOI: 10.5281/zenodo.153778645
8. Smita Amabarkar,Rakhi akhare Innovative intelligent transport system using portable Bluetooth car model Goya Journal ISSN-0017-2715 DOI:12.163022.Gj.2024.v17.11.028
9. Ambarkar S.S., Shekokar N.M. (2020) Improving Security of IoT Networks Machine Learning-Based Intrusion Detection System. In: Vasudevan H., Michalas A., Shekokar N., Narvekar M. (eds) Advanced Computing Technologies and Applications. Algorithms for Intelligent Systems. Springer, Singapore. DOI:10.1007/978-981-15-3242-9_20
10. Ambarkar, S. S., & Shekokar, N. (2020). “Critical and Comparative Analysis of DoS and Version Number Attack in Healthcare IoT System.” Proceeding of First Doctoral Symposium on Natural Computing Research: DSNCR 2020, 169, 301–312. DOI https://doi.org/10.1007/978-981-33-4073-2_29.
11. Ambarkar, S. S., & Shekokar, N ,A paper on “Impact Analysis of RPL Attacks on 6LoWPAN based Internet of Things network” accepted in International conference on Electronics, Computing and Communication Technologies 2021, (IEEE-CONNECT- 2021) IEEE Bangalore section.

12. Ambarkar, S. S., & Shekokar, N. .A Chapter on "A comprehensive survey of existing security techniques in IoT protocol stack" accepted in book "Cyber Security hearts and challenges facing human life"Taylor and Francis, CRC Press Publication , USA. ISBN No: 9781032111285 HB EISBN No. : 9781003218555 EB
13. Smita Ambarkar,Rakhi Akhare(2015) "The chapter Bluetooth Low Energy based applications-The state of art" in the book "Handbook of Research on Industrial Informatics and the Internet of Things."IGI global publication DOI:10.4018/978-1-5225-3805-9.ch004
14. Smita Sanjay Ambarkar, Narendra M. Shekokar, Monika Mangla, RakhiAkhare (2021),"Authentication Braodcast On News On Socal Media Using Machine Learning"BookDesign of Intelligent Applications Using Machine Learning and Deep Learning TechniquesEdition1st EditionFirst Published 2021 Im print Chapman and Hall/CRCPages10 eBook ISBN9781003133681
15. Smita Sanjay Ambarkar, Narendra M. Shekokar, Monika Mangla, Rakhi Akhare A Proposed Framework To Achieve Cia In Iot Networks Springer International Conference on Artificial Intelligience and Sustainable Engineering ,18th-21stJanuary,NIT Goa.
16. Mangla M., Akhare R., Ambarkar S. (2019) Context-Aware Automation Based Energy Conservation Techniques for IoT Ecosystem. In: Mittal M., Tanwar S., Agarwal B., Goyal L. (eds) Energy Conservation for IoT Devices. Studies in Systems, Decision and Control, vol 206. Springer, Singapore. https://doi.org/10.1007/978-981-13-7399-2_6
17. A study to Analyze impact of social media on society: WhatsApp in particular mangla monika; Ambarkar Smita,Akhare Rakhi,International Journal of Education and Managment Engineerin HongKong Vol.10,Iss.1,(Feb2020):.DOI:10.5815 /ijeme.2020.01.01

18. Implementing Genetic Algorithm to solve Facility Location Problem, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056 Volume: 02 Issue: 05 | Aug-2015 www.irjet.net p-ISSN: 2395-0072

19. S. N. Pathak and U. Shrawankar, "Secured Communication in Real Time VANET," 2009 Second International Conference on Emerging Trends in Engineering & Technology, 2009, pp. 1151-1155, doi: 10.1109/ICETET.2009.198.

20. Smita Sanjay Ambarkar, Narendra M. Shekokar, Monika Mangla, Rakhi Akhare (2021), "Authentication Broadcast On News On Social Media Using Machine Learning" BookDesign of Intelligent Applications Using Machine Learning and Deep Learning Techniques Edition 1st Edition First Published 2021 Imprint Chapman and Hall/CRC Pages 10 eBook ISBN 9781003133681

21. Smita N. Pathak, Urmila Shrawankar "Infrastructure to Vehicle real Time Secured Communication Proceedings of 2009 International Symposium on Computing, Communication, and Control Singapore, 9-11 October, 2009.

Achievement:

- [1] Team of Final Year students under my mentorship received the 50000/- grant from "Bhashini Sprint", a Government of India Initiative
- [2] Received best paper award from **Springer Nature** for paper on "Critical and Comparative analysis of DoS and Version Number attack in Healthcare IoT system" at DSNCR-2020.
- [3] Received best paper award under the track "Ambient Applications" for paper on "Improving Security of IoT Networks Using Machine Learning-Based Intrusion Detection System" at ICACTA-2020.
- [4] Received Minor Research Grant from Mumbai University in the 2013 for Project on "Network coding based Multicast Routing"
- [5] The PhD project is selected for final round in Avishkar 2022 project competition at University of Mumbai

- [6] Best Paper at ICRMIR -2023 on "Leveraging Blockchain Technology for Hunger Relief through Decentralized Food Donation".

Books Published

- [1] Edited a book Titled "Towards sustainable society development using Internet of Things: A Technological comprehensive study for the benefits of mankind" by CRC Press Taylor & Francis. Indexed in Scopus
- [2] Cyber Security and Laws, Tech-Neo Publications.

Reviewer (Conference/Journal)

- [1] Reviewer for Int. J. of Intelligent Systems Technologies and Applications, Inderscience.
- [2] Reviewer for IEEE - ICAST – 2022 at K.J.Somaiya College of Engineering, Mumbai
- [3] Reviewer for EAI ICISML 2023 - EAI 2nd International Conference on Intelligent Systems and Machine Learning July 27-28, 2023 Odisha, India

STTP Attended

- [1] STTP on "Recent Trends and Challenges in Artificial Intelligence and Machine Learning" at G.H.Raisoni College of Engineering, Nagpur From 30/1/2023 to 3/2/23.
- [2] FDP on Cloud Computing by TCS iON 23rd and 24th May 2016
- [3] Organised webinar on Cloud and Devops by Prior Web Technologies on 27th and 28th May 2020.
- [4] participated in two days national symposium on academic challenges towards implementation of nep in hei's organized on 29th & 30th September, 2022, organised by LTJSS's Lokmanya Tilak college of Engineering, Navi Mumbai In association with National assessment and Accreditation Council, Bengaluru .