

Resume

Name of Teaching Staff	Dr. Ramchandra Sharad Mangrulkar	
Designation	Professor	
Department & Institute	Department of Information Technology, Dwarkadas J. Sanghvi College of Engineering, Mumbai-400056, India.	
Date of Joining the Institution	01.02.2017	
Professional Memberships	<ul style="list-style-type: none"> ▪ IEEE Senior Member (Membership No: 99230298) ▪ ISTE Member (Membership No: 61274) ▪ ACM Member (Membership No: 9524948) ▪ IACSIT Member (Membership No: 80338207) 	
Profile Links	<ul style="list-style-type: none"> ▪ Orcid Profile https://orcid.org/0000-0002-9020-0713 ▪ Vidvan Profile https://vidwan.inflibnet.ac.in/profile/268487 ▪ Website Dr.Ramchandra Mangrulkar (rammangrulkar.github.io) ▪ Web of Science Profile https://publons.com/researcher/2047994/ramchandra-s-mangrulkar/ ▪ Scopus Author Profile https://www.scopus.com/authid/detail.uri?authorId=55401536500 ▪ Google Scholar Profile https://scholar.google.co.in/citations?user=nLuft7kAAAAJ&hl=en ▪ LinkedIn Profile https://www.linkedin.com/in/dr-ramchandra-mangrulkar-07b51866/ ▪ Research Gate Profile https://www.researchgate.net/profile/Ramchandra_Mangrulkar 	
Proficient in	<ul style="list-style-type: none"> ▪ Microsoft's Power BI (Business Intelligence), Power Automate, Power Query, Power Virtual Agents ▪ Google's Dialog Flow ▪ Overleaf 	
Publication Count and H-Index	<ul style="list-style-type: none"> ▪ Google Scholar (Citation Count =542, H-index = 12, I10index = 16) ▪ Scopus (Publications = 54, Citation Count = 236, H-index = 8) (Scopus preview - Mangrulkar, Ramchandra S. - Author details - Scopus) ▪ Web of Science (Publications = 20, Citation Count = 44, H-index = 3, MANGRULKAR, RAMCHANDRA S - Web of Science Core Collection/) 	

Qualifications with Class/Grade:

1. **Doctor of Philosophy (Ph.D.)** in Computer Science and Engineering in the Faculty of Engineering and Technology, 2016}, From S.G.B. Amravati University (Formerly Known as Amravati University, Amravati, Maharashtra, India.
Thesis Topic: “Secured Energy Efficient Routing Protocol for Delay Tolerant Heterogeneous Network.”
Advisor: Prof. (Dr.) Mohammad Atique, Professor, PG Department of Computer Science, SGBAU Amravati.
2. **Master of Technology (MTech)** in Computer Science and Engineering completed in June 2008, From **National Institute of Technology, Rourkela** (Formerly Known as Regional Engineering College), Orissa, India with 8.78 CGPA.
Dissertation Topic: “Hybrid Routing Protocol for Mobile Adhoc Network.”
Advisor: Prof. (Dr.) Ashok Kumar Turuk, Professor, Department of Computer Science and Engineering, NIT Rourkela, Orissa, India.
3. **Bachelor of Engineering (B.E.)** in Computer Science and Engineering completed in June 2001 from B.N.College of Engineering, Pusad, Yavatmal, S.G.B.A.U, Amravati with 76.39 %.

Total Experience in Years (Teaching and Admin:22+ Years)

- **Professor**, Department of Information Technology, D.J. Sanghvi College of Engineering, Vile Parle (W), 24-08-2023 to till date.
- **Research Fellow**, INTI International University, Malesia, 15-10-2023 to till Date.
- **Associate Professor**, Department of Computer Engineering, D.J. Sanghvi College of Engineering, Vile Parle (W), 01-02-2017 to 23-08-2023.
- **Head of the Department** of Computer Engineering, Bapurao Deshmukh College of Engineering, Sevagram, Wardha, 27-07-2010 to 31-01-2017.
- **Associate Professor**, Department of Computer Engineering, Bapurao Deshmukh College of Engineering, Sevagram, Wardha, 01-05-2012 to 31-01-2017.
- **Assistant Professor**, Department of Computer Engineering, Bapurao Deshmukh College of Engineering, Sevagram, Wardha, 01-05-2009 to 30-04-2012.
- **Lecturer**, Department of Computer Engineering, Bapurao Deshmukh College of Engineering, Sevagram, Wardha, 23-10-2004 to 30-04-2009.
- **Lecturer (Adhoc)**, Department of Computer Engineering, Bapurao Deshmukh College of Engineering, Sevagram, Wardha, 07-08-2001 to 22-10-2004.

Courses Taught / Teaching

- Blockchain Technology (Final B. Tech-IT)
- Bayesian Computing (Final B.Tech-CE(Honors))
- Advanced System Security and Digital Forensics (M.Tech-CE)
- Blockchain Technology (Final B. Tech-CE)
- Information Security (TY B. Tech-CE, SY B. Tech-CSE-DS)
- Computer Networks (SY B. Tech-CE)
- Processor Organization and Architecture (TE-CE)

- Data Structure (SE-CE)
- Algorithm and Data Structures (SE- IT)
- Internet and Java Programming (BE-CE)
- Modern Computer Networking (BE-CE)
- Information Assurance and Network Security (BE-CE)
- Distributed System and Grid Computing (BE-CE)
- Introduction to Computer Network (SE-CE)
- Computer Graphics (SE-CE)
- High Performance Computer Architecture (MTech-I)
- TCP/IP and Internetworking (MTech-II)
- Object Oriented Analysis and Design (BE-CE)
- Mobile Communication and Computing (TE-CE)
- Cryptography and System Security (BE-CE & TE-CE)
- Cyber Security and Laws (Institute Level Elective-ME)
- Computer Network (TE-CE)
- Advanced Computer Networks and Design (ME/MTech - CE)
- Ethical Hacking and Digital Forensics (ME-CE)
- Advanced System Security and Digital Forensics (BE-CE)
- Data Storage Management (ME-CE)

Courses with Laboratory Designed / Developed:

- Blockchain Technology (Final B. Tech-CE)
- Information Security (T.Y.Tech-CE, S.Y. Tech-CSE-DS)
- Cryptography and System Security (BE-CE & TE-CE)
- Information Assurance and Network Security (BE-CE)
- Processor Organization and Architecture (TE-CE)
- Internet and Java Programming (BE-CE)
- Algorithm and Data Structure (SE- IT)
- Data Structure (SE-CE)
- Computer Graphics (SE-CE)
- Mobile Communication and Computing (TE-CE)
- Computer Network (TE-CE)
- Advanced System Security and Digital Forensics (BE-CE)
- Cryptography and System Security (BE-CE & TE-CE)
- Ethical Hacking and Digital Forensics (ME-CE)

Certification and Courses Completed

ICSI -CNSS

- *Certified Network Security Specialist* ICSI, UK on 16th June 2020.

IBM Training / Courses

- *Data Warehousing and Multidimensional Modelling*, IBM Course for Trainer July 2020.
- *Cloud Computing Architecture and Deployment Models (IBM)*, IBM Course for Trainer Dec 2020.

- *Predictive Analysis (IBM)*, IBM Course for Trainer Dec 2020.

MoE's Innovation Cell & AICTE

- *Innovation Ambassador training (Foundation Level), 1 Month Training from 30th June to 30th July 2021.*

Coursera Courses:

- *Data Warehousing and Business Intelligence* by University of California, Irvine completed on Jan 17, 2022.
- *Assessment in Higher Education: Professional Development for Teachers* by Erasmus University Rotterdam Completed on Aug 18, 2020.
- *Penetration Testing, Incident Response and Forensics*, IBM, Aug 07, 2020.
- *Learning to Teach Online* UNSW Sydney (The University of New South Wales) Completed on July 8, 2020.
- *Cloud Computing Security* University of Colorado System Completed on June 25, 2020.
- *Teamwork Skills: Communicating Effectively in Groups* University of Colorado Boulder Completed on June 18, 2020.
- *Exploratory Data Analysis with Seaborn* Coursera Project Network Completed on June 15, 2020.
- *Clustering Geolocation Data Intelligently in Python* Coursera Project Network Completed on June 13, 2020.
- *Building Candlestick Charts with Google Sheets* Coursera Project Network Completed on June 13, 2020.
- *Introduction to Data Science in Python* University of Michigan Completed on June 3, 2020.
- *Analyze Box Office Data with Plotly and Python* Coursera Project Network Completed on June 3, 2020.
- *Data Visualization with Plotly Express* Coursera Project Network Completed on May 26, 2020
- *Cyber Threats and Attack Vectors* University of Colorado System Completed on May 25, 2020.
- *Cyber Threats and Attack Vectors* University of Colorado System Completed on May 25, 2020
- *Classical Cryptosystems and Core Concepts* University of Colorado System Completed on May 6, 2020.
- *Create Your First Chatbot with Rasa and Python* Coursera Project Network Completed on May 21, 2020.
- *Cybersecurity Awareness and Innovation* EIT Digital Completed on May 17, 2020.
- *Introduction to TCP/IP* Yonsei University Completed on May 15, 2020.
- *Python Programming Essentials* Rice University Completed on May 11, 2020.

NPTEL Courses:

- *Blockchain and It's Applications – May 2023*

- Computer Network and Internet Protocol – Dec 2020
- Cryptography and Network Security – Dec 2020
- Effective Teaching Engineering in Practice – Mar 2021

Cognitive.AI Courses:

- Data Privacy Fundamentals – October 2020

Elsevier Researcher Academy Courses:

- Why you should know about SNIP & SJR-17th Jan 2023
- Introduction to Journal Impact Factor & H-index – 16th Jan 2023
- CiteScore for early career researchers – 16th Jan 2023
- 10 reasons to get – and use – an ORCID iD – 16th Jan 2023
- How to build empathy in research – 29th September 2021
- A guide to journal citation metrics – 26th Feb 2021
- How to prepare your manuscript – 19th October 2020
- How to peer review a review article – 19th October 2020

Patents, Copyrights, Journal Publications & Conferences:

1. Patent

1. Pranit Bari, Pankaj Sonawane, Harshal Dalvi, Narendra Shekokar, Ramchandra Mangrulkar, Published a patent on “Deep learning-based Language translator” (Application No: 202141049460, Date of Publication: 05/11/2021).

2. Copyrights

- a. *Govind Thakur, Harsh Vartak, Hrushikesh Avnoor, Pranit Bari, Pankaj Sonawane, Ramchandra Mangrulkar, Narendra Shekokar*, “Python Based Attendance Management Tool for Online Lecture during Covid 19 Pandemic”. (Application No/ROC No: L-110318/2022, Diary No: 24716/2021-CO/L, ROC Date: 11.01.2022).
- b. *Hari Vasudevan, Ashish Daptardar, Manali Godse, Vijaya Kumar Kottur. N, Ramchandra Mangrulkar*, “Applications of Microsoft Forms, Teams, and Power Automate for Online Admissions.” (Registration Number: L-117955/2022, ROC Date: 29.09.2022)

Refereed/Peer Reviewed International Journal Publications:

(Journal Publications: 24, Scopus Indexed Journal Publications: 18)

1. Dhairya Veera, Ramchandra Mangrulkar, Chetashri Bhadane, Kiran Bhowmick and Pallavi Chavan, “Modified Caesar Cipher and Card Deck ShuffleRearrangement Algorithm for Image Encryption”, **published** in Journal of Information and Telecommunication, Feb-2023. [**Emerging Sources Citation Index(ESCI), Scopus (Elsevier), Q2 (SJR: 0.49**, <https://doi.org/10.1080/24751839.2023.2285549>]
2. *Diti Dalal, Aditi Nair and Ramchandra Mangrulkar*, “Multimedia Cryptography using Rubik’s cube scrambling with Bitplane shuffling and Frame rotation”, **published in** International Journal of Cyber Security and Applications.

[Science Direct, Volume 2, 2024, 100030, <https://doi.org/10.1016/j.csa.2023.100030>]

3. *Vijay Harkare, Riddhi Sanghani, Shruti Prasad, Sanika Ardekar, Aruna Gawade, Ramchandra Mangrulkar*, “VRSS: A touch-to-vision-text-audio artificial multi-modal sensory system to demonstrate neural network processes”, **published in** International Journal of Intelligent Systems and Applications in Engineering (IJISAE). [**Scopus (Elsevier), Emerging Sources Citation Index, Q3(SJR:0.23)**, <https://ijisae.org/index.php/IJISAE/article/view/3275/1861>]
4. *Aryan Pathare, Kartik Suvarna, Govind Thakur, Aryan Parekh, Aruna Gawade, Ramchandra Mangrulkar*, “Comparison of Tabular Synthetic Data Generation Techniques using Propensity and Cluster Log Metric,” **published in** International Journal of Information Management Data Insights.[**Scopus (Elsevier), SNIF: 4.82, JIF: 15.658, Q1(SJR: 2.48)** <https://doi.org/10.1016/j.ijime.2023.100177>]
5. *Kanad Deshpande, Juniad Girkar and Ramchandra Mangrulkar*, “Security Enhancement and Analysis of Images using a Novel Sudoku-based Encryption Algorithm”, **published in** Journal of Information and Telecommunication, Feb-2023. [**Emerging Sources Citation Index(ESCI), Scopus (Elsevier), Q2 (SJR: 0.49)**, <https://doi.org/10.1080/24751839.2023.2183802>]
6. *Glen Dhingra, Karishni Mehta, Ramchandra Mangrulkar*, “Enhancing Multimedia Security using Shortest Weight First Algorithm and Symmetric Cryptography”, **published in** Journal of Applied Security Research. [**Scopus (Elsevier), Compendex (Elsevier), Emerging Sources Citation Index, Academic OneFile (Gale), ACM Digital Library, JIF: 1.24, Q2(SJR:0.29)**, <https://doi.org/10.1080/19361610.2022.2157193>]
7. *Vaishnavi Savant, Ahmed Solkar, Ramchandra Mangrulkar*, “Modified Symmetric Image Encryption Technique Combining Mixed Column and Substitution Box” **published in** Journal of Applied Security Research, Dec-2022.[**Scopus (Elsevier), Compendex (Elsevier), Emerging Sources Citation Index, Academic OneFile (Gale), ACM Digital Library, Impact Factor: 1.24, Q2(SJR:0.29)** <https://doi.org/10.1080/19361610.2022.2150498>]
8. *Dhruv Mehta, Manish Jha, Hartik Suhagia, Ramchandra Mangrulkar*, “DieRoll: A Unique Key Generation and Encryption Technique,” **published in** Journal of Applied Security Research, Nov-22. [**Scopus (Elsevier), Compendex (Elsevier), Emerging Sources Citation Index, Academic OneFile (Gale), ACM Digital Library, Impact Factor: 1.24, Q2(SJR:0.29)**, <https://doi.org/10.1080/19361610.2022.2124589>]
9. *Parth Kolkatwar, Rahil Kadakiya and Ramchandra Mangrulkar*, “3DL-PS: An Image Encryption Technique using 3D Logistic Map, Hashing Functions and Pixel Scrambling Techniques ”, **published in** International Journal of Computational Science and Engineering, 2022. [**Scopus (Elsevier), Compendex (Elsevier), Emerging Sources Citation Index, Academic OneFile (Gale), ACM Digital Library, Impact Factor: 1.32, Q3(SJR:0.38)**, <https://doi.org/10.1504/IJCSE.2022.10049693>]

10. *Sheel Sanghvi and Ramchandra Mangrulkar*, "BITSAT: An efficient approach to modern image cryptography", **published** in International Journal of Computational Science and Engineering, Jun-2023.[**Scopus (Elsevier), Compendex (Elsevier), Emerging Sources Citation Index, Academic OneFile (Gale), ACM Digital Library, Impact Factor: 1.32, Q3(SJR:0.38)**, <https://doi.org/10.1504/IJCSE.2022.10050834>]
11. *Onkar Thorat, Nirali Parekh and Ramchandra Mangrulkar*, "TaxoDaCML: Taxonomy based Divide and Conquer using machine learning approach for DDoS attack classification", **published** in International Journal of Information Management Data Insights Vol 1, Issue 2, Nov-2021, [**Scopus (Elsevier), SNIF: 4.82, JIF: 15.658, Q1(SJR: 2.48)**, <https://doi.org/10.1016/j.jjime.2021.100048>]
12. *Onkar Thorat, Ramchandra Mangrulkar*, "Combining DNA sequences and chaotic maps to improve robustness of RGB image encryption," **published** in International Journal of Computational Science and Engineering, Nov-2021.[**Scopus (Elsevier), Compendex (Elsevier), Emerging Sources Citation Index, Academic OneFile (Gale), ACM Digital Library, Impact Factor: 1.32, Q3(SJR:0.38)**, <https://doi.org/10.1504/IJCSE.2022.10050834>]
13. *Deevya Mehta, Jenil Savla, Shubham Shah, Anish Jaiswal*, "Designing A Smart System Monitoring Employees Work Efficiency," (*in press*) in International Journal of Student Project Reporting published by Inderscience [**Unpaid Peer Review Journal**, <https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijspr>, [DOI: 10.1504/IJSPR.2023.10054717](https://doi.org/10.1504/IJSPR.2023.10054717)].
14. *Mehadi Surani and Ramchandra Mangrulkar*, "Online Public Shaming Approach using Deep Learning Techniques", has been **published** in Journal of University of Shanghai for Science and Technology, Vol.23, Issue 21, March 2021, pp.214-217, ISSN:1007-6735. (**Scopus (Elsevier), UGC-CARE Group- II, Q4(SJR:0.11)**, <https://jusst.org/online-public-shaming-approach-using-deep-learning-techniques/>]
15. *Harshil Jhaveri, Himanshu Ashar and Ramchandra Mangrulkar*, "Leveraging Data Science in Cyber Physical Systems to Overcome Covid-19", **published** in Journal of University of Shanghai for Science and Technology, Vol.22, Issue 10, October 2020, pp.1993-2015, ISSN:1007-6735. [**Scopus (Elsevier), UGC-CARE Group- II, Q4(SJR:0.11)**, <https://jusst.org/leveraging-data-science-in-cyber-physical-systems-to-overcome-covid-19>]
16. *Bhavuk Sharma and Ramchandra S. Mangrulkar*, "Deep Learning Applications in Cyber Security: A Comprehensive Review, Challenges and Future prospects **published** in International Journal of Engineering Applied Science and Technology, 2019, Vol. 4, Issue 8, ISSN No. 2455-2143, Pages 148-159 ISSN:2455-2143,Q2(SJR:0.35) [**Index Copernicus, Unpaid Peer Review Journal with Impact Factor- 4.982** <https://www.ijeast.com/papers/148-159,Tesma408,IJEAST.pdf>]
17. *Burhanuddin Savliwala, Aditya Ajmera and Ramchandra Mangrulkar*, "Enhancing Data Encryption Standard for Multimedia Encryption: Scrambled DES with Dual CFB Algorithmic Mode", **submitted to** springer Journal of Ambient Intelligence and

Humanized Computing[UGC CARE, Scopus, Science Citation Index Expanded (SCIE), Q1 (SJR: 0.91)]

18. *Adithya Sanyal, Harit Koladia, Hitansh Surani and Ramchandra Mangrulkar*, “Ethereum-Powered Toll Collection: Advancing Road Infrastructure and Accountability”, **submitted to** Transportation Letters: the International Journal of Transportation Research.[**Scopus (Elsevier), Emerging Sources Citation Index**]
19. *Harvy Gandhi, Jinay Parekh and Ramchandra S. Mangrulkar*, “HATDES: A Multilayer Cryptographic Technique using a Fusion of Symmetric and Asymmetric Schemes”, **submitted to** Information Security Journal: A Global Perspective [**Scopus (Elsevier), Emerging Sources Citation Index(ESCI), Q2 (SJR: 0.43)**]
20. *Snehal P. Dongare, Ramchandra S. Mangrulkar*, “Optimal Cluster Head Selection Based Energy Efficient Technique for Defending against Gray Hole and Black Hole Attacks in Wireless Sensor Networks,” **published** in Elsevier Procedia Computer Science, Volume 78, 2016, Pages 423-430, ISSN 1877-0509, [**Scopus (Elsevier)**, <https://doi.org/10.1016/j.procs.2016.02.084>]
(<http://www.sciencedirect.com/science/article/pii/S1877050916000867>)
21. *Nilesh P. Dangare and Ramchandra S. Mangrulkar*, “Design and Implementation of Trust Based Approach to mitigate various attacks in Mobile Adhoc Network,” **published** in Elsevier Procedia Computer Science, Volume 78, Pages 342-349, 2016. [**Scopus (Elsevier)**, <https://doi.org/10.1016/j.procs.2016.02.070>]
(<https://www.sciencedirect.com/science/article/pii/S1877050916000727>)
22. *Ramchandra S. Mangrulkar and Dr. Mohammad Atique*, “SEDAR: Secured Energy Efficient Destination Aware Routing Protocol in Delay Tolerant Network” **published** in International Journal of Communication Networks and Distributed Systems (IJCND), Vol. 14, No. 3, 2015. [**Scopus (Elsevier), Compendex [formerly Ei] (Elsevier), Emerging Sources Citation Index (Clarivate Analytics), Academic OneFile (Gale), ACM Digital Library (Q3(SJR:0.35)**]
[DOI: 10.1504/IJCND.2015.068668]
23. *Ramchandra S. Mangrulkar and Dr. Mohammad Atique*, “Implementation and Testing of Delay tolerant Network using Self-Capable and Routing Nodes: A Case Study” **published** in International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC); ISSN(Print):2250-1568; ISSN (Online): 2278-9448; JIF(JCC): 2.5967, Vol. 3, Issue 1, Mar 2013, 231-244.[**Index Copernicus** <http://www.tjprc.org/publishpapers/2-3-1361178621-ABS%20-%20IMPLEMENTATION%20AND%20TES.pdf>]
24. *Heet Savla, Vruddhi Mehta and Ramchandra Mangrulkar*, “Prediction and Diagnosis of COVID-19 using Machine Learning Algorithms”, **published** in International Journal of Recent Technology and Engineering (IJRTE) Vol.9, Issue 3, September 2020, pp. 678-683, ISSN: 2277-3878 [**Previously Indexed in Scopus**]
[<https://www.ijrte.org/wp-content/uploads/papers/v9i3/C4676099320.pdf>].

Book Chapters with International Publishers:

(Scopus Indexed Book Chapters : 12)

1. The Chapter entitled, "Evolutionary Approaches for Multi-Objective Optimization and Pareto-Optimal Solution Selection in Data Analytics" authored by Vijay Harkare, Ramchandra Mangrulkar, Onkar Thorat, Sachin Jain submitted to Springer book series Springer Tracts in Nature-Inspired Computing.
2. The Chapter entitled, "Enhancing Feature Selection using Multi-Objective Optimization Concept" authored by Hetavi Mehta, Nirali Parekh, Ramchandra Mangrulkar, Aruna Gawade, Pallavi Chavan, Nitin Goje submitted to Springer book series Springer Tracts in Nature-Inspired Computing.
3. The Chapter entitled, "Textual Description of Facial Image Generation", authored by Vatsal Khandor, Naitik Rathod, Yash Gada, Nemil Shah and Ramchandra S. Mangrulkar has been published by CRC Press, Taylor, and Francis Series Book "Generative Adversarial Network and Deep Learning: Theory and Applications", March 2023.[**Scopus(Elsevier)**, [Textual Description to Facial Image Generation | 7 | Generative Advers](#) (taylorfrancis.com)]
4. The Chapter entitled, "Software-Defined Networks: A Brief Overview and Survey of Services," authored by Preet Sanghavi, Sheel Sanghvi, and Ramchandra S. Mangrulkar has been published in Software Defined Networking for Ad Hoc Networks by EAI/Springer Innovations in Communication and Computing, published on 9th Feb. 2022.[**Scopus(Elsevier)**, https://link.springer.com/chapter/10.1007/978-3-030-91149-2_1]
5. The chapter entitled, "*Blockchain and It's Applications in Healthcare*" authored by Sumukh Maduskar, Maitri Gohil, Vikrant Gajria and Ramchandra Mangrulkar has been published in Book "Enabling Blockchain Technology for Secure Networking and Communications" published by the by the United States of America IGI Global Information Science Reference (an imprint of IGI Global)701 E. Chocolate Avenue Hershey PA, USA [**Scopus(Elsevier)**, [Enabling Blockchain Technology for Secure Networking and Communications: 9781799858393: Security & Forensics Books | IGI Global \(igi-global.com\)](#)].
6. The chapter entitled, "*Application of Steganography for Secure Data Transmission Using Lossless Compression,*" authored by Kylyn Fernandes, Ankit Rishi Gupta, Pratik Panchal and Ramchandra Mangrulkar, published in: Multidisciplinary Approach to Modern Digital Steganography, IGI Global. [**Scopus(Elsevier)**, [Application of Steganography for Secure Data Transmission Using Lossless Compression: Security & Forensics Book Chapter | IGI Global \(igi-global.com\)](#)].
7. The Chapter entitled, "4S Framework: A Practical CPS Design Security Assessment & Benchmarking Framework", authored by Neel A. Patel, Dhairya A. Parekh, Yash A. Shah and Ramchandra Mangrulkar has been published in Wiley "Cyber Security and Digital Forensics" published by scrivener publishing in Jan 2022. [**Scopus(Elsevier)**, <https://www.scrivenerpublishing.com/cart/title.php?id=707>]

8. The chapter entitled, "*Recent Challenges in IoT*" authored by Sumukh Maduskar, Maitri Gohil, and Ramchandra Mangrulkar has been approved for publication in Book "Security Issues and Privacy Threats in Smart Ubiquitous Computing", published by the in-Springer book series Studies in Systems, Decision and Control. [**Scopus(Elsevier)**, [Recent Challenges in IoT | SpringerLink](#)].
9. The chapter entitled, "*Application of Internet of Things in Mishap Avoidance Due to Swamping: A Novel Approach*" authored by Neil Patel and Dr. Ramchandra S. Mangrulkar has been approved for publication "Security and Privacy Applications for Smart City Development" in Springer book series Studies in Systems, Decision and Control. [**Scopus(Elsevier)**, https://link.springer.com/chapter/10.1007/978-3-030-53149-2_10]
10. The chapter entitled, "*Few Shot Learning for Medical Imaging*", authored by Mr. Jai Kotia, Ms. Rishika Bharti, Mr. Adit Kotwal and Ramchandra S. Mangrulkar, **published** in Springer book titled "Machine Learning Algorithms for Industrial Applications" Part of the Studies in Computational Intelligence book series (SCI, volume 907) on 19th July 2020, pp. 107-132. [**Scopus(Elsevier)**, https://link.springer.com/chapter/10.1007/978-3-030-50641-4_7]
11. The chapter entitled, "*The Invisible Eye - A Security Mechanism to Protect Motorways: Architecture and Design Principles*" authored by Neel Patel, Pratik Panchal, Yash Shah, Pankaj Sonawane and Ramchandra S. Mangrulkar, **published** in Springer book entitled, "Internet of Things, Smart Computing and Technology: A Roadmap Ahead". [**Scopus(Elsevier)**, https://link.springer.com/chapter/10.1007/978-3-030-39047-1_17]
12. The chapter entitled, "*Applications of Machine Learning in Wireless Sensor Network,*" authored by Dr. Ramchandra S. Mangrulkar & Mr. Prashil D. Negandhi published in Soft Computing in Wireless Sensor Networks published by Chapman and Hall/CRC Press London, ISBN 9780815395300 - CAT# K344196. [**Scopus(Elsevier)**, <https://www.taylorfrancis.com/books/e/9780429438639/chapters/10.1201/9780429438639-3>]

Refereed/Peer Reviewed International Conference Publications:

(Scopus Indexed Conference Publications: 21)

1. T. Deshpande, K. Chavan, P. Gandhi and R. Mangrulkar, "Neurodegenerative Disease Detection using Deep Convolutional GANs and CNN," 2023 IEEE 8th International Conference for Convergence in Technology (I2CT), Lonavla, India, 2023, pp. 1-7, [**Scopus(Elsevier)**, <https://doi.org/10.1109/I2CT57861.2023.10126492>]
2. N. Shah, R. Patel, R. Mistry and R. Mangrulkar, "Realtime Risk Monitoring System using Convolutional Neural Network for COVID19 Pandemic," **published** in 2022 6th International Conference On Computing, Communication, Control And Automation (ICCUBEA), Pune, India, 2022, pp. 1-6, [**Scopus(Elsevier)**, doi: <https://doi.org/10.1109/ICCUBEA54992.2022.10010899>]

3. R. Patanwadia and R. Mangrulkar, "Divide and Scramble - A Recursive Image Scrambling algorithm utilizing Rubik's Cube," **published** in 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), Bangalore, India, 2021, pp. 859-863. [**Scopus(Elsevier)**, doi: <https://doi.org/10.1109/RTEICT52294.2021.9573949>]
4. Govind Thakur, Shreya Nayak and Ramchandra Mangrulkar, "MalDeXA - A Malware Detection system using XGBoost on Amazon Web Services", **published** in International Conference on Innovative Computing, Intelligent Communication and Smart Electrical systems (ICSES -2021), organized by St. Joseph's Institute of Technology, Chennai, India on 24th Sept. 2021. [**Scopus(Elsevier)**, Doi: [10.1109/ICSES52305.2021.9633927](https://doi.org/10.1109/ICSES52305.2021.9633927)]
5. Prashil Negandhi, Yash Trivedi & Ramchandra Mangrulkar, "Intrusion Detection System using Random Forest on the NSL-KDD Dataset," **published** in Springer Approved Fifth International Conference on "Emerging Research in Computing, Information, Communication and Applications (ERCICA 2018)" organized by "Nitte Meenakshi Institute of Technology (NMIT), Yelahanka, Bangalore, India during 27th to 28th July 2018[**Scopus(Elsevier)**, https://doi.org/10.1007/978-981-13-6001-5_43].
6. Ms.Gargee Bhase and Mr. Ramchandra Mangrulkar, "An Access Control System using Visual Cryptography and Steganography," **published** in IEEE 14th International Conference on Information Processing ICInPro 2018, organized by Computing Professional Charitable Trust, Bengaluru and University Visvesvaraya College of Engineering, Bangalore University Bengaluru during 21st to 23rd Dec. 2018. [**Scopus(Elsevier)**, Doi: <https://doi.org/10.1109/ICINPRO43533.2018.9096673>]
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 8. The chapter entitled, “A Comprehensive Review of the Security and Privacy Issues in Blockchain Technologies”, authored by Mangesh Manikrao Ghonge, N. Pradeep, Renjith V. Ravi and Ramchandra Mangrulkar has been published in “Blockchain Technologies and Applications for Digital Governance” in Jan 2022, [<https://www.igi-global.com/chapter/a-comprehensive-review-of-the-security-and-privacy-issues-in-blockchaintechnologies/293840>]
 9. The chapter entitles, “Study of Machine Learning techniques for Recommendation System,” has been accepted for publication in Bentham Science Publisher, Book “Artificial Intelligence and Data Science for Recommendation Systems: Current Trends, Technologies and Applications.” [[Pre-Order Enquiry \(benthambooks.com\)](#)]
 10. The chapter entitles, “Federated Learning for Brain Tumor Segmentation on Cloud,” authored by Deep Gandhi, Jash Mehta, Nemil Shah, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor, and Francis Series Book “Cloud Computing Technologies for Smart Agriculture and Healthcare,” published on 29th Dec. 2021. [[Cloud Computing Technologies for Smart Agriculture and Healthcare - 1s \(routledge.com\)](#)]
 11. The chapter entitled, ‘*Data Acquisition and Preparation for Artificial Intelligence and Machine Learning Applications,*’ authored by Kallol Bosu Roy Choudhuri, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor, and Francis Series Book ‘Design of Intelligent System using Machine Learning and Deep Learning’ [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]

12. The chapter entitled, '*Application of Deep Learning in Counting WBCs, RBCs And Blood Platelets Using Faster Region Convolutional Neural Network,*' authored by Nirav Jain, Shail Shah, Ramchandra Mangrulkar, Pankaj Sonawane, has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
13. The chapter entitled, '*Application of Machine Learning and Deep learning for Thyroid Disease Prediction,*' authored by Aditi Vora, Ramchandra Mangrulkar, Narendra Shekokar, Meera Narvekar, has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
14. The chapter entitled, '*Applications of Deep Learning in Facial Recognition,*' authored by Jimit Gandhi, Aditya Jeswani, Fenil Doshi, Parth Doshi, Ramchandra Mangrulkar, has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
15. The chapter entitled, '*Application of Deep Learning in Deforestation Control & Prediction of forest fire calamities,*' authored by Muskan Goenka, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
16. The chapter entitled, '*Machine Learning Techniques to classify Breast Cancer,*' authored by Drashti Shah, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
17. The chapter entitled, '*Application of Deep Learning in Video Question Answering System,*' authored by Mansi Pandya, Arnav Parekhji, Aniket Shahane, Palak Chavan, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
18. The chapter entitled, '*Implementation and analysis of Machine Learning and Deep Learning algorithms,*' authored by Samip Kalyani, Neel Vasani, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
19. The chapter entitled, '*Comprehensive Study of Failed & Semi-Failed Machine Learning Applications Using a Novel 3C Approach,*' authored by Neel Patel, Prem Bhajaj, Pratik Panchal, Tanmai Prabhune, Pankaj Sonawane, Ramchandra Mangrulkar has been accepted for publication in CRC Press, Taylor and Francis Series Book 'Design of

Intelligent System using Machine Learning and Deep Learning’. [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]

20. The chapter entitled, “*Impact Analysis of COVID 19 News Headlines on Global Economy*”, authored by Ananya Malik, Yash Jhaveri and Dr. Ramchandra S. Mangrulkar has been scrutinized for publication in Elsevier Book entitled “Cyber Physical Systems: AI and COVID-19” [<https://doi.org/10.1016/B978-0-12-824557-6.00001-7>], October 2022.
21. The chapter entitled, “*Training a Feed Forward Neural Network using Cuckoo Search*” authored by Adit Kotwal, Rishika Bharti, Jai Kotia (BE) and Dr. Ramchandra S. Mangrulkar has been accepted for publication in Springer book titles “Applications of Cuckoo Search Algorithm and its variants” in Springer Tracts in Nature-Inspired Computing. [https://link.springer.com/chapter/10.1007/978-981-15-5163-5_5]
22. The chapter entitled, “*Applications of Bat algorithm for brain tumor segmentation*” authored by Rishika Bharti, Adit Kotwal, Mansi Pandya, Harshil Jhaveri (BE) and Dr. Ramchandra S. Mangrulkar has been accepted publication in Springer book titles “Applications of Bat Algorithm and its variants” in Springer Tracts in Nature-Inspired Computing. [https://link.springer.com/chapter/10.1007/978-981-15-5097-3_7]
23. The chapter entitled, “*Chaos Theory and Systems in Cloud Content Security*” authored by Ms.Kanksha Zaveri, Ms. Niti Shah and Dr. Ramchandra S. Mangrulkar is published in the book, “Handbook of Research on Cloud Computing and Big Data Applications in IoT” by the United States of America IGI Global Information Science Reference (an imprint of IGI Global) 701 E. Chocolate Avenue Hershey PA, USA 17033, ISBN13: 9781522584070. [DOI:10.4018/978-1-5225-8407-0.ch017] [<https://www.igi-global.com/chapter/chaos-theory-and-systems-in-cloud-content-security/225424>]
24. The chapter entitled, “*Direction-Aware Routing Protocol for Delay Tolerant Network: Architecture, Design, and Implementation*” authored by Dr. Ramchandra S. Mangrulkar and Dr. Mohammad Atique has been Published as Chapter 6 in the book, "Routing Protocols and Architectural Solutions for Optimal Wireless Networks and Security" by the United States of America IGI Global Information Science Reference (an imprint of IGI Global) 701 E. Chocolate Avenue Hershey PA, USA 17033, ISBN13: 9781522523420. [<https://www.igi-global.com/chapter/direction-aware-routing-protocol-for-delay-tolerant-network/181169>]

Grants fetched / Proposal submitted:

- **Proposal accepted at Mumbai University entitled,** “Development of Few Shots Learning for Medical Imaging,” under Minor Research Grant for the Academic Year 2019-20.
- **Proposal submitted to AICTE-ISTE Induction /Refresher program entitled,** "Computer Security from Data Science and Machine Learning Perspective” for the year 2017-18.

▪ **Personal (Grant in aid)**

Research Project proposed on the topic, “A Secured Energy Efficient Routing Protocol for Delay Tolerant Hybrid Network”, is considered and approved and Rs. 3, 50,000- is sanctioned under RPS scheme of AICTE, New Delhi, for year 2013-14 and onwards. It was also preliminary short listed in year 2011-12 under RPS scheme of AICTE, New Delhi.

▪ **Computer Engineering Department (BDCE)**

CSIR: Rs. 40,000/- (Sanctioned) [Ref. No: SYM/7691/12-HRD dated 24th Dec 2012]
UGC: Rs. 96,750/- (Received out of Rs. 1,29,000) [Ref. No.: F.No.-24-158/12 (WRO) dated 06th May 2013 and F.No.-24-159/12 (WRO) dated 06th May 2013]

Research and Projects Guided and Evaluated:

▪ **Ph.D. Research Guided:**

1. Approved Ph.D. Supervisor at Mumbai University.
[Letter No.: Thesis/ICD/2021-22/4203 dt.26/02/2022]
2. Approved Ph.D. Co-Supervisor at D.Y. Patil Deemed to be university.
[Letter No.: DYPU/CIDR/Ph.D. Co-guide/Ramrao Adik Institute of Technology/2023/01 dt. 18.04.2023]

▪ **Ph.D. Examiner:**

1. Evaluated Ph.D. thesis of Ms. Priyanka V. Deshmukh, “Efficient Question Generation System Using Supervised Learning”, under the guidance of Dr. A. S. Kapse submitted to **SGBAU, Amravati**, 2022-23.
2. Evaluated Ph.D. thesis of Ms. Khushbu R Khandait, “Efficient Question Generation System Using Supervised Learning”, under the guidance of Dr. Sohel A. Bhura submitted to **SGBAU, Amravati**, 2022-23.
3. Evaluated Ph.D. thesis of Mr. Chetankumar Dhule, “Pareto Optimal Seamless Live Migration of Virtual Machines for Green Cloud Computing”, Under the guidance of Dr. Urmila Shrawankar submitted to **RTM Nagpur University, Nagpur**, 2022-23.
4. Evaluated Ph.D. thesis of Mr. Amit Kumar, “Hybrid Optimization and Lasso Regression Technique for Cloud Database Migration”, Under the guidance of Dr. M. Sivak Kumar submitted to **Sarvepalli Radhakrishnan University, Bhopal**, 2021-22.
5. Evaluated Ph.D. thesis of Mr. Harshal Datir, “An Efficient Hybrid Data Migration Technique for Intrusion Detection System”, under the guidance of Dr. P.M.Jawandhiya submitted to **SGBAU, Amravati**, 2021-22.

▪ **Ph.D. Progress Evaluator/Thesis Advisory Committee Member**

1. Evaluating Progress of Ph.D. titled “Wireless Sensor Networks (WSNs) for Indoor Smart Grid Applications” of Mr. M. Ravinder under the supervision of Dr. Vikram Kulkarni (**NMIMS-MPSTME Mumbai**).
2. Evaluating Progress of Ph.D. titled “Futuristic control System for water conservation in residential areas” of Mr. Salvi Loukik under the supervision of Dr. Ashish Jadhav (**DY Patil's RAIT Navi Mumbai**).

3. Evaluating Progress of Ph.D. titled “Smart Active Warden System for Timing Covert Communication Prevention” of Mrs. Uttarwar Vrushali under the supervision of Dr. Dhananjay Dakhane (**DY Patil's RAIT Navi Mumbai**).
4. Evaluating Progress of Ph.D. titled “An automated melody conditioned song generator for text based lyrics” of Ms. Shaikh Tarannum under the supervision of Dr. Ashish Jadhav (**DY Patil's RAIT Navi Mumbai**).

▪ **M.E. Dissertation Guided:**

1. A Secured Routing Method for Detecting False Reports and Gray Hole Attacks Along with Elliptical Curve Cryptography in Wireless Sensor Network. (Completed in 2014 by Ms. Sneha M. Sakharkar).
2. An Optimal Path Determination of Moving Beacons Using Localized Directional Routing Protocol in Mobile Adhoc Network. (Completed in 2014 by Ms. Kajal K. Kapoor).
3. Geographical Locations Based Energy Efficient Direction Restricted Routing in Delay Tolerant Network. (Completed in 2014 by Ms. Snehal V. Alone).
4. A Secured Method for Wireless Sensor Networks Using Elliptical Curves Cryptography. (Completed in 2014 by Ms. Reena S. Satpute).
5. Designed and Implementation of Peer-to-Peer Web Caching Technique for Mobile Adhoc Network. (Completed in 2016 by Ms. Bhagashri V. Vaidya).
6. Designed and Development of Trust Based Approach to Mitigate Various Attacks in Mobile Adhoc Network. (Completed in 2016 by Mr. Nilesh N. Dangre).
7. Designed and Development of Energy Efficient Technique for Wireless Sensor Networks. (Completed in 2016 by Ms. Snehal P. Dongre).
8. Design and Development of Novel Sentence Clustering Technique for Text Mining. (Completed in 2016 by Ms. Rakhi Waghmare).
9. Design and Development of Decision-Making Model for Spam Email Classification Using Neural Network. (Completed in 2016 by Mr. Rahul M. Bansod).
10. Artery / Vein Classification of Retinal Images to identify Diabetes using Graph Based Approach. (Completed in July 2016 by Ms. Vishakha Fursule).
11. Lung Nodule Detection using Patched Based Context Analysis Method with Support Vector Machine. (Completed in July 2016 by Ms. Mayuri Bamnote).
12. Design and Implementation of Smart Healthcare System Using IoT. (Completed in July 2017 by Mr. Durga Amarnath M. Budida)
13. Deep Learning Approach for Detecting Online Shaming (Completed in August 2021 by Mehadi Surani).

▪ **B.E. Project: More than 50.**

Guest Editor of Journal / Book series / Book

1. Working as Guest Editor for Special Issue of journal "**Applications of Blockchain, Machine Learning and Deep Learning in Data Security**" [[Tech Science Press](#)]

Books Published (Authored):

1. “**Blockchain Essentials-A Programming Approach**” – (Apress –Springer) - Ongoing

Books Published (Edited):

1. Narendra Shekokar, Hari Vasudevan, Surya Durbha, Antonis Michalas, Ramchandra Mangrulkar, Tatwadarshi P Nagarhalli and Monika Mangla, “**Cyber Security Threats and Challenges facing Human Life**” published by Taylor and Francis, CRC Press [[Cyber Security Threats and Challenges Facing Human Life | Narendra M S \(taylorfrancis.com\)](#), ISBN: 9781003218555, September 2022]
2. Pallavi Chavan, Parikshit N Mahalle, Ramchandra Mangrulkar and Idongesit Williams, “**Data Science: Techniques and Intelligent Applications**” published by Taylor and Francis, CRC Press [[Data Science | Techniques and Intelligent Applications | Pallavi Vijay \(taylorfrancis.com\)](#), ISBN: 9781003283249 , August 2022].
3. Ramchandra Mangrulkar, Antonis Michalas, Narendra Shekokar, Meera Narvekar and Pallavi Chavan, “**Design of Intelligent Applications using Machine Learning and Deep Learning**” published by Taylor and Francis, CRC Press. [[Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#), ISBN:9780367679798]
4. Mangesh M. Ghonge, Sabyasachi Pramanik and Ramchandra Mangrulkar and Dac Nhung Le, “**Cyber Security and Digital Forensics**” published by Wiley, Scrivener [<https://www.waterstones.com/book/cyber-security-and-digital-forensics/mangesh-m-ghonge/sabyasachi-pramanik/9781119795636>, ISBN: 9781119795636].
5. Mangesh M. Ghonge, Ramchandra Mangrulkar, Pradip M. Jawandhiya and Nitin Goje, “**Future Trends in 5G and 6G: Challenges, Architecture, and Applications**”, to be published by Taylor and Francis, CRC Press. [[Future Trends in 5G and 6G: Challenges, Architecture, and Applications \(routledge.com\)](#), ISBN: 9781032006826]

Editor/Reviewer of International Journals

- Journal of Societal Impact (Elsevier) [Editorial board - Societal Impacts | ScienceDirect.com by Elsevier](#)
- Journal of Experimental & Theoretical Artificial Intelligence [<https://www.tandfonline.com/journals/teta20>]
- Journal of Cyber Security and Mobility, River Publication [[Journal of Cyber Security and Mobility \(riverpublishers.com\)](#)]
- Journal of Computational Science and Engineering (IJCSE) [<https://www.inderscience.com/ijcse>]
- Mathematical Problems in Engineering, Hindavi Publications [[Mathematical Problems in Engineering | Hindawi](#)]
- Reviver of International Journal of Computer Applications (IJCA) <http://www.ijcaonline.org/review-board>
- Journal of Network and Computer Applications [<http://www.elsevier.com/wps/nd/reviewershome.reviewers>]
- International Journal of Computational Science and Applications (IJCSA) <http://airccse.org/journal/ijcsa/editorialBoard.html>

Reviewer of Book (International Publishers)

- Reviewed a Book Proposal, “Automata Theory and Formal Languages” authored by Pallavi Chavan and Ashish Jadhav [[Automata Theory and Formal Languages - 1st Edition \(elsevier.com\)](#)]

- Reviewed a Book Proposal, “Cognition-based Smart Computing: Foundations, Frameworks and Applications” by Sangita S. Chaudhari, Pallavi Chavan, Parikshit Mahalle and Pranav Pawar .

Ph.D. / M. E / MTech Dissertation Examiner

- Worked as PhD Thesis Evaluator at Sarvepalli Radhakrishnan University, Bhopal, Madhya Pradesh (Title of Thesis: Hybrid Optimization and Lasso Regression Technique for Cloud Database Migration, submitted by Mr. Amit Kumar, 2021)
- Worked as PhD Thesis Evaluator at RTM Nagpur University, Nagpur (Title of Thesis: Pareto-Optimal Seamless Live Migration of Virtual Machines For Green Cloud Computing, submitted by ChetanKumar A. Dhule, 2022)
- Worked as PhD Thesis Evaluator at SGBAU Amravati, Maharashtra (Title of Thesis: An Efficient Hybrid Data Mining Technique for Intrusion Detection System, submitted by Mr. Harshal Datir, 2021)
- Worked as MTech Paper Setter for the Subject “Cyber Security and Data Laws” at Dy Patil's RAIT Nerul, 2021.
- Working as PhD Thesis Advisory Committee Member (Internal) at MPSTE Mumbai, affiliated to NMIMS (Deemed to be University), Mumbai.
- Worked as Examiner for evaluation of M.E. / MTech Examiner at RTMNU Nagpur, SRTMNU Nanded, Gondwana University Gadchiroli, Savitribai Phule Pune University.
- Worked as Examiner for evaluation of M.E. / MTech Examiner at Government Engineering College, Aurangabad.

Special Work Done for Curriculum Design BOS (Boards of Studies) Member:

1. Board of Studies Member on IT Board of St. Vincent Pallotti College of Engineering and Technology (Autonomous Institute affiliated to RTM Nagpur University, Nagpur.
2. Board of Studies Member on Artificial intelligence and Data Science Board of Sandip Institute of Technology and Research Centre, Nashik.

2023-24

3. Prepared syllabus of Introduction to Blockchain Technology and its laboratory in Autonomy Scheme of V Sem B.Tech Computer Science and Engineering (IoT, Cyber Security and Blockchain)
4. Prepared syllabus of Information Security and its laboratory in Autonomy Scheme of VII Sem B.Tech Computer Engineering, 2022-23.

1.

2022-23

5. Prepared syllabus of Information Security and its laboratory in Autonomy Scheme of V Sem B.Tech Computer Science and Engineering (Data Science), 2022-23.
6. Prepared syllabus of Information Security and its laboratory in Autonomy Scheme of VII Sem B.Tech Computer Engineering, 2022-23.

2021-22

7. Prepared syllabus of Information Security and its laboratory in Autonomy Scheme of VI Sem TE Computer Engineering, 2021-22.
8. Prepared syllabus of Blockchain Technology in Autonomy Scheme of MTech in Computer Engineering, 2019-20.

2020-21

9. Prepared syllabus of Processor Organization and Architecture and its laboratory in Autonomy Scheme of V Sem TE Computer Engineering, 2021-22.
10. Prepared syllabus of Blockchain Technology and its laboratory in Autonomy Scheme of TE Computer Engineering, 2021-22.
11. Prepared syllabus of Network Architecture in Autonomy Scheme of TE Computer Engineering, 2021-22.

2019-20

12. Prepared syllabus of Ethical Hacking and Digital Forensics Autonomy Scheme of MTech in Computer Engineering, 2019-20.
13. Prepared syllabus of Data Storage Technology of Autonomy Scheme of MTech in Computer Engineering, 2019-20.
14. Reviewed syllabus for BTech Computer Engineering for AY: 2020-21, Sardar Patel Institute of Technology, Mumbai.
15. Reviewed syllabus of Operating System Course syllabus in Second Year B. Tech. Computer Engineering, Rajashri Shahu College of Engineering, Pune (Autonomous College Affiliated to University of Pune).
16. Reviewed syllabus of Human Computer Interaction under (Humanities) and Software Engineering and Project Management (Under Humanities & Social Science) Courses in Second Year B. Tech. Computer Engineering, Pimpri Chinchwad College of Engineering, Pune (Autonomous College Affiliated to University of Pune).
17. Reviewed syllabus for BTech Computer Science and Engineering, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (Faculty of Science and Technology).
18. Reviewed syllabus scheme and content of syllabus for Undergraduate course and (Computer Engineering and Information Technology) for Nirma University Ahmedabad.

2018-19

19. Review syllabus of Operating System Course syllabus in Second Year B. Tech. Computer Engineering, SP Pune University.
20. Review syllabus scheme and content of syllabus of Human Computer Interaction & Software Engineering and Project Management for BTech (Information Technology) for PCCOE Pune.

2016-17

21. Review syllabus scheme and content of syllabus for Undergraduate course and (Computer Engineering and Information Technology) for Nirma University Ahmedabad.

2014-15

22. Syllabus of BECME703T: Information Assurance and Network Security is proposed at RTMNU Nagpur.
23. Syllabus of BECME802T: Distributed System and Grid Computing is proposed at RTMNU Nagpur.

2013-15

24. Syllabus of BECME5034T: TCP/IP and Internet is proposed at RTMNU Nagpur.
25. Syllabus of BECME602T: Design and Analysis of Algorithms is reviewed at RTMNU Nagpur.

2012-13

26. Syllabus of BECME304T: Programming Methodology and Data Structure is proposed at RTMNU Nagpur.

27. Syllabus of BECME305T: Introduction to Computer Network is reviewed at RTMNU Nagpur.

Academic Duties:

Organization Level Activities (SVKM)

1. Working as NAAC Institute Level Coordinator from AY: 2023-24.
2. Working as **Nodal officer** for Vidvan and IRINS (<https://djsce.irins.org>)
3. Working as one of the Coordinators for **SVKM's IBM Advanced Technology Courses** from 2019-20 to till date.
4. Worked as **Co-coordinator** for **IEEE sponsored Capacity Building Program** on Blockchain-Future of Cyber Security jointly organized by SPIT, DJSCE and MSSS Mumbai.
5. Worked as a **Coordinator** for organizing One Day Faculty development program for SVKM's Institutes on "*Applications of Power Automate, Power Virtual Assistant for AI Educational Bot*" on 5th June 2020 at DJSCE Mumbai.
6. Worked as one of the **Initiator for training Faculty Members and Staffs** for Online Admission Process (Document Verification and Upload) during Admissions of AY: 2020-21 at NMIMS affiliated Institutes.
7. Conducted technical Hands-on session on developing Document upload and Verification system on 24th July & 26th July 2020 at SVKM Level.
8. Training on Document verification process for Custodians Team and Document Verification Team on 4th August 6th August 14th August 18th Dec 2020.

College Level and University Level Responsibilities:

1. **Institute Level Elective** in charge from AY 2022-23, AY: 2023-24.
2. **Coordinator** for organizing a Two Day FDP on "*Advanced Computing and Communication Technology for Industry 4.0*" during 12th June to 13th June 2020 at DJSCE Mumbai.
3. Organized Orientation Program of ASSDF-BE: CE and CSL: IL in Association with University of Mumbai on 12th July 2019.
4. **In-charge of Seminar Hall/2nd Floor** during Institute Level Admissions in 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23.
5. **ME Admission In-charge** 2019-20, 2020-21 at Institute Level.
6. **Co-Convener (NAAC)** and **In-charge of IT Support Team** for NAAC.
7. **Coordinators** for a "Degree Distribution Ceremony," on 16th Feb. 2019 for the graduating batch 2018-2019.
8. **Coordinators** for organizing a "Expert talk on Natural Language Processing and Sentiment Analysis of Text" on 27th Feb. 2019 for the Third Year Students.
9. One of the **coordinators** for celebration of "Women's Day" on 8th March 2019.
10. Appointed as Examiner in the subject Computer Network Lab for TE CE on 30th Oct. 2018 and 3rd Nov. 2018 at Terna College of Engineering.
11. Appointed as Examiner for conducting Oral Examination in the Subject High-Performance Computing for M.E. Computer Engineering (Sem-II) on 11th May 2018 at SPIT Mumbai.

12. Appointed as Examiner for conducting Oral Examination in the Subject High-Performance Computing for M.E. Computer Engineering (Sem-II) on 11th May 2018 at SPIT Mumbai.
13. Appointed as M.E. Examiner for Seminar and Dissertation of ME (Computer Science and Engineering) on 29th September 2018 at Babasaheb Naik College of Engineering, Pusad, Yavatmal.
14. Appointed as Examiner in the subject Minor Project-I for TE CE during 1st Nov. 2018 to 2nd Nov. 2018 at SPIT Mumbai.
15. Appointed as Examiner in the subject Project-I for BE CE on 31st Oct. 2018 at SPIT Mumbai.
16. Appointed as Examiner in the subject Project-I for BE CE during 31st Oct. 2018 at RGIT Mumbai.
17. Worked as one of the Coordinator for Organizing AICTE-ISTE Approved One Week STTP on “Insights of Machine Learning and Deep Learning,” Organized during 2nd to 6th July 2018 at DJSCE Mumbai.
18. Working as a Member / Coordinator of Research Committee, Program Assessment Committee, Project, and Internship Cell in the Department of Computer Engineering at DJSCE Mumbai.
19. Worked as one of the Coordinator for Organized Two Days Faculty Development Program on the topic, “Research Areas in IoT (RAIoT 2017)”, organized during 14th to 15th July 2017 at DJSCE Mumbai.
20. Worked as BOS Member of Computer Science and Engineering and Computer Technology Board from Dec. 2016 to Jan 2017.
21. Worked as Examiner for Paper Setting and Moderation for Ph.D. Aptitude Test (PAT), RTMNU Nagpur during 2016-17.
22. Worked as District Coordinator (Wardha District) for “Padmabhushan Dr. Vijay Bhatkar Gaurav Mahotsav” and State Level Working Model & Poster Competition on “Innovative Technologies for Rural Development in Maharashtra” organized on 9th Oct 2016 held at Govt. Polytechnic Murtizapur.
23. Worked as SPOC Coordinator for NPTEL Local Chapter and Successfully Hosted Local Server at Institute.
24. Worked as VC nominee for conducting UGC (University Grants Commission) interview at Cummins College of Engineering on 13th April 2017.
25. Worked as VC nominee for conducting UGC interview at G.H.R.I.E.T.W, Nagpur on 9th May 2016.
26. Worked as VC nominee for conducting UGC interview at Vilasrao Deshmukh College of Engineering, Nagpur on 17th June 2016.
27. Worked as VC nominee for conducting UGC interview at OM College of Engineering, Wardha on 20th June 2016.
28. Worked as DTE Committee Expert for Nuva College of Engineering on 18th Feb. 2016.
29. Worked as DTE Committee Expert for Abha Gaikwad Patil college of Engineering on 18th Feb. 2016.

30. Worked as one of the Panellist in 3rd Industry Institute Interaction Meet (III Meet) on 23rd April 2016 organized at Bapurao Deshmukh College of Engineering in association with Wardha IT Park, Wardha and ECPA.
31. Worked as Convener for Curtain Raiser of Wheelspin 2016 (A National Technical Festival) by the hands of Padmashri Dr. Vijay Bhatkar organized on 16th Feb. 2016.
32. Worked as coordinator for Gathering Information from whole college and presenting in proper format to be submitted to DTE during NOV 2015.
33. Worked as coordinator for “Semester Exit Meet,” organized on 10th Nov. 2015 at
34. APJ Hall, BDCE Sevagram.
35. Worked as coordinator for 84th Birth Anniversary of Bharat Ratna Dr. APJ Abdul Kalam on 15th Oct. 2015 at BDCE Sevagram.
36. Worked as coordinator and organized a Centennial Talk by The World-Renowned Scientist Padamshri Dr. T. Padmanabhan on 13th July 2015. The topic of centennial talk was “The Enigma of Gravity.”
37. Worked as coordinator for Digital India Week Program organized on 7th July 2015 at BDCE Sevagram.
38. Worked as Member on LEC Committee at Govindrao Wanjari College of Engineering, Nagpur on 04th March 2015.
39. Worked as Member on LEC Committee at AVBIT College of Engineering on 11th March 2015.
40. Worked as Member on LEC Committee at G.H.Raisoni Academy of Engineering,
41. MIDC Hingana, Nagpur on 11th July 2014.
42. Worked as Member on LEC Committee at Agnihotri College of Engineering, Nagthana, Wardha on 10th July 2014.
43. Worked as Expert Committee member at Anjuman College of Engineering, Nagpur on 18th June 2014.
44. Worked as Organizing Secretary of 3rd Int. Conference, IC-QUEST 2014 organized by BDCE in association with Institution of Engineers and in collaboration with IJCA, IJERT and IJRET on 19th April 2014.
45. Worked as Coordinator of “Ganesh Fest 2013” organized during 9th to 18th Sept 2013 in BDCE Campus.
46. Worked as Coordinator for framing syllabus for Computer Engineering implemented from session 2013-14 for B.E., RTMNU Nagpur.
47. Worked as co-opted member of Computer Engineering and IT Board during 2009, 2010, 2011 and 2012 for both summer and winter examination.
48. Worked as member of Selection and Appraisal committee for Walk-in-interview and Appraisal Interview during April 2012, 2013.
49. Worked as member of Selection and Appraisal committee for Walk-in-interview and Appraisal Interview during June 2010, June 2011.
50. Worked as Officer- in-Charge of University Exam conducted during winter 2010 for Ex-Students of FYBE and Even Semesters.
51. Interviews of Lecturer at Bapurao Deshmukh College of Engineering, Sevagram, Wardha on 16th and 17th June 2010.

National and International Level Responsibilities:

1. Chaired a session in International Conference (ICASTM-2023) on 28th July 2023, organized by S.B.Jain Institute of Technology, Management and Research, Nagpur.
2. Reviewer for [1st International Conference on Integration of computational Intelligent System 2023](#), [2023 7th International Conference On Computing, Communication, Control And Automation](#), [International Conference on Artificial Intelligence: Theory and Applications](#), [2023 IEEE World Conference on Applied Intelligence and Computing](#), [2nd INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN INTELLIGENT COMPUTING](#), [5th International Conference on Data & Information Sciences](#), [8th International Conference for Convergence in Technology 2023](#), [3rd International Conference on Computer Vision and Robotics](#), [4th International Conference on Communication and Intelligent Systems](#), [6th International Conference on Computing Communication Control and Automation ICCUBEA- 2022](#)
3. Program Committee Member and Reviewer in 4th International Conference on Communication and Intelligent Systems (ICCIS 2022) organized by National Institute of Technology, Delhi during December 19-20, 2022.
4. Reviewer for International Conference on big data and security (ICBDS 2022), IEEE Pune Section.
5. Worked as Reviewer for a manuscript titled "FASTER R-CNN Algorithm for Detection of Plastic Garbage in the Ocean: A Case for Turtle Preservation" submitted to Journal of Mathematical Problems in Engineering, Hindawi Publications.
6. Reviewer and Session Chair in IEEE Pune Section International Conference Innovation in Engineering, Design and Holistic Education IEEE Pune Con 2021 during December 16-19, 2021, organized by MIT-ADT Pune.
7. Reviewer in IEEE International Conference on Computational Intelligence and Computing Applications-21 (IICCICA-21) organized by GHRCE Nagpur.
8. Reviewer in International Conference on Automation, Computing and Communication 2021 (ICACC-2021), organized by RAIT Nerul, Navi Mumbai.
9. Session Chair & Reviewer in National Conference on "Role of recent technology in nation – building" organized by the Department of Electrical Engineering, VISHWANIKETAN's Institute of Management Entrepreneurship and Engineering Technology held during 09th July 2021 to 10th July 2021.
10. Academic expert in Search Conference to identify and validate technical skills in Computer Science and Engineering Department organized by Tulsiramji Gaikwad- Patil College of Engineering, Nagpur on 25th March 2021.
11. Session Chair at "Innovation in Research Tools and Technology: Past, Present and Future" in AICTE Sponsored Two Days International e- Conference on "Innovations in Engineering & Technology" (ICIET-20) at Gyan Ganga Institute of Technology & Sciences, Jabalpur on 27th November 2020.
12. Session Chair for the Computing track in an International Conference organized by Ramrao Adik Institute of Technology (RAIT), Navi Mumbai on 28th June 2020.
13. Session Chair for Track "AI Algorithms, tools & Applications" in an Online National Conference on "Emerging Trends in AI and Big Data (ETAB-2020)" on 12th June 2020 organized by Pune Institute of Computer Technology, Pune

14. Technical Chair for Second International Conference on Advance Computing and Application (ICACTA 2020) on the theme "Intelligent Computing" to be organized during 28th and 29th February 2020 at DJSCE Mumbai.
15. Member of Technical Advisory Committee Member for 5th International Conference on Engineering, Research, and Innovations (EQUINOX 2020) to be organized on 19th and 20th March 2020 at Terna Engineering College Nerul, Navi Mumbai.in Association with IEEE Mumbai (Bombay) section.
16. Reviewer for ICMISC 2020 (21-22 May 2020), Karad, Pune.
17. Reviewer for ICAICSIT-2020, RSCOE Pune.
18. Advisory Committee Member for National Conference on Emerging Trends in AI and Big Data to be organized on 3rd and 4th April at Pune Institute of Computer Technology (PICT) in association with IEEE Computer Society, Pune.
19. Reviewer for IEEE 18th International Conference, ICIT (International Conference on Information Technology) which will be held at International Institute of Information Technology (IIIT), Bhubaneswar (<https://www.iiit-bh.ac.in/>) in collaboration with Odisha IT Society (<http://www.oits-icit.org/>).
20. Reviewer for IEEE 9th International Conference on emerging Trends in Engineering & Technology and Signal and Information Processing (ICETET-SIP-19) to be organized by IEEE Aerospace and Electronics System Society, GHRCE Nagpur.
21. Lead Guest Editor of Special Issue on Impact of Machine Learning on Technology and Society, in the International Journal of Science, Technology and Society (IJSTS).
22. Judge for Project Presentation RGIT Mumbai on 16th March 2019.
23. Session Chair for First International Conference on "Smart City and Emerging Technologies" on 5th Jan 2018 organized by Universal College of Engineering, Palghar.
24. Program committee member Second International Conference on Advanced Wireless Information, Data and Communication Technologies (AWICT 2017) to be held at Paris, France during 13th to 14th Nov. 2017.
25. Guest Editor for International Conference on Computing, Communication, and Information Security (CCIS 2017) organized by IRET Bengaluru, Karnataka during 19th-20th June 2017.
26. Session Chair for the cPGCON-2017 at Sandip Foundations Sandip Institute of Technology and Research Centre, Nashik held during 24th-25th March 2017.
27. Jury member for "Young Innovator Award Z 24 Tass "on 9th Feb. 2017.
28. Advisory Committee Member for 5th International Conference IC-QUEST 2016 organized on 12th May 2016 at BDCE Sevagram.
29. Convener for Wheelspin 2016, A National Technical Festival organized on 26th Feb. 2016.
30. Secretary for IC-QUEST 2015, International Conference on Quality Up-gradation in Engineering, Science and Technology held at BDCE, Sevagram on 19th April 2014.
31. Judge for Technovenza: National Level Techfest at BDCE on 24th March 2014.
32. Session Chair in International Conference organized by Shri Shankar Prasad Agnihotri College of Engineering, Wardha.

33. Session Chair in International conference on eco friendly and Energy Saving Product and Process on 15th Feb 2013 at Shri Shankar Prasad Agnihotri College of Engineering, Wardha Maharashtra.
34. Session Chair in National Level Tech. Paper Presentation, BLITZKRIEG 2012 organized by Datta Meghe Institute of Engineering, Technology and Research, Wardha.
35. Session Co-chair, member of advisory committee, in-charge of certification committee in international conference on "Benchmarks in Engineering Science and Technology", held during 7th and 8th Sept. 2012 organized by BDCE Sevagram.
36. Session Co-chair, member of advisory committee, in-charge of certification committee in AICTE Sponsored international conference on "Emerging Frontiers in Rural Technology", held during 17-18 March 2012 organized by BDCOE Sevagram.
37. Judge for INNOVATIONS & INVENTIONS-2012, A National Level Project Competition for Degree & Diploma Students on 4th February 2012 organized by Shri Shankar Prasad Agnihotri College of Engineering, Sevagram, Wardha.
38. Member of local advisory committee in National Level Techfest, Wheelspin 2011 organized on January 25, 2011, and Wheelspin'12 organized on 21st Feb 2012 by BDCOE Sevagram.
39. Judge for BLITZKRIEG '11, National Level Technical Event organized by Datta Meghe Institute of Engineering, Technology and Research, Wardha on 17th Feb 2010.
40. Judge for Paper Presentation Event organized by G.S. Commerce College Wardha on 4th Jan 2010.
41. Coordinator of paper presentation event in 13th ISTE Annual Students Convention of Maharashtra and Goa Section and National Level Techfest WHEELSPIN 2010.
42. Chairman and Judge in ISTE student's convention of Maharashtra and Goa Section, National Level Techfest, Threshold-2009, during 15th-16th Feb 2009 organized by B.N.C.O.E Pusad, Yavatmal.
43. Chairman in National Level Techfest, Technoxtream 2009 during 27-28th Feb 2009 organized by J.D.I.E.T Yavatmal.
44. Judge in National Level Techfest, WHEELSPIN 09 on 20th Feb 2009 organized by B.D.C.O.E Sevagram.
45. In charge of Registration and Certificate committee in National Level Techfest, WHEELSPIN'09 on 20th Feb 2009 organized by B.D.C.O.E Sevagram.
46. Judge in Genesis 2008, Software Programming Context organized ISTE Students Chapter, B.D.C.O.E Sevagram.
47. Committee Member in MESH 2003, MESH 2004 and Eureka 2002 organized by B.D.C.O.E Sevagram.
48. Judge in BLITZKRIEG 2004, ISTE 3rd Convention of students organized ISTE Students Chapter, B.D.C.O.E Sevagram.
49. Judge in Poster Competition and Model Exhibition organized by J. L. Chaturvedi College of Engineering, Nagpur.
50. Judge in Paper Presentation Competition organized G. S. College of Commerce, Wardha.

Interaction with Professional Institutions:

1. Conducted Lab Session on “Embedded Programming using Python” in AICTE Training And Learning (ATAL) Academy sponsored One Week Faculty Development Program on “Evolution of Embedded System in Artificial Intelligence of Things: ES-AIOT” organized by Vishwakarma Institute of Technology, Pune, during 09th to 14th October 2023.
2. Delivered a Talk, “How to Harness the Power of Vidvan Portal” organized by SVKM on 2nd August 2023.
3. Delivered a Talk, “Blockchain Programming” in One Week ISTE Approved National Level STTP On “Blockchain Technology & it’s Application” 25th July 2023 to 29th July 2023 organized by KJEI’s K J College of Engineering and Management Research, Department of Computer Engineering, Pune.
4. Delivered a Talk, “Peer-to-Peer Networks, Peer-to-Peer communication protocols and Blockchain Implementation” in IEEE Capacity Building Program on Blockchain jointly organized by SPIT Mumbai, DJSCE Mumbai and MHSSCOE Mumbai on 4th July 2023.
5. Delivered a Talk, “Emerging Industry 4.0 Standard: A Blockchain Technology”, in ISTE Approved STTP/FDP on “Industry 4.0 Paradigm Shift in Technology” on 26th June 2023, organized by Vidyavardhini's College of Engineering and Technology VCET, Vasai
6. Delivered a Talk in the Refresher Course on Machine Learning and Big Data Analytics, being organized by the HRDC, Gauhati University on 3rd March 2023.
7. Delivered a Talk on “Research and Publications” in one-day workshop organized by DJSCE on 13th Feb 2023.
8. Delivered a Talk on “Conversational AI using Google’s Dialog Flow”, in FDP on “Data Science” organized by DY Patil Institute of Engineering, Management and Research on 11th Feb 2023.
9. Delivered a Talk on, “Vidvan profile: Importance, Creation and Impact,” organized by DJSCE on 25th Jan 2023.
10. Delivered a Talk on, “Manuscript Preparation using Web Based Tools,” organized by SVKM on 6th Dec 2022.
11. Conducted two days Project Induction Program at MIT-ADT Pune on 27th and 28th July 2022.
12. Delivered a Talk on “Innovation in Research using Cloud and Web Based Tools” in AICTE-ISTE Approved STTP on “Recent Trends in Chemical and Manufacturing Industries,” at Shivajirao Jondhale College of Engineering, Thane, on 7th July 2022.
13. Delivered a Talk on “Health Informatics” in NITTRCHD sponsored FDP at Guru Ghasidas Vishwavidyalaya Bilaspur (CG) on 27th April 2022.
14. Conducted a Hands-on Training Session on “Innovation in Research using Cloud and Web Based Tools” organized by IQAC Cell, DJSCE on 26th February 2022.
15. Conducted a Hands-on Training Session on “Automation, Visualization and Reporting” organized by IQAC Cell, DJSCE on 21st February 2022.
16. Conducted a Hands-on Session on “Power Automate for Everyone” in 15 November 2021 Tech Series organized by SVKM (HR-Training).

17. Conducted a Hands-on Session on, “Applications of Google's DialogFlow in Knowledge Base” in AICTE ATAL Academy sponsored Online Short-Term Training Programme (STTP) on "Recent Advancement in AI and Machine Learning" during 8th November 2021 to 13th November 2021 organized by Deptt. of CSE, Asam Kaziranga University, Asam.
18. Conducted a Hands-on Session on, “Artificial Intelligence Bot for Academia: Case Studies with Google's DialogFlow and Microsoft Virtual Assistant” in AICTE ATAL Academy sponsored Online Short-Term Training Programme (STTP) on "Artificial Intelligence and Machine Learning with Data Science" on 15th July 2021.
19. Conducted One Day Hands on Workshop on “Scientific Research Writing: A Cloud Based Approach” in ISTE Approved One Week FDP on “Research for Beginners”, organized by Nutan Maharashtra Institute of Engineering and Technology, Talegaon, Pune on 14th July 2021.
20. Conducted a Hands-on Session on “Artificial Intelligence Bot for Academia: Case Studies with Google's DialogFlow and Microsoft Virtual Assistant” at Babasaheb Naik College of Engineering, Pusad in AICTE ATAL Academy sponsored Online Short-Term Training Programme (STTP) on "Recent Advances in Artificial Intelligence" on 13th July 2021.
21. Conducted One Day Hands on Workshop on “Applications of Power Automate, Power Virtual Assistant on AI Educational Bot” at DJSCE Mumbai on 5th June 2021.
22. Delivered a Talk on “Role of AI Bots in Education” at ARMIET, Shahpur, Mumbai on 20th May 2020.
23. Conducted One Day Hands on Workshop on “Research Writing, Research Preparation and Research Tools” at SMMCA Nagpur on 17th April 2021.
24. Delivered a Talk on “Innovation tools for Research” in Two Days workshop on “Research Publications” (RTCEIT-2021) at SKNSITS Lonawala, Pune on 26th February 2021.
25. Delivered a Talk on “Innovation in Research Tools” in One Week Online Faculty Development Program on “Research Trends in Computer Engineering and Information Technology” (RTCEIT-2021) at Smt. Kashibai Navale College of Engineering, Pune on 8th January 2021.
26. Delivered a Talk on “Innovation in Research; Tools and Technology” in AICTE-ISTE One Week Refresher Course on “Research Methodology and Data Analysis at JSPM’s Rajarshi Shahu College of Engineering, Pune 18th December 2020.
27. Delivered a Keynote on “Innovation in Research Tools and Technology: Past, Present and Future” in AICTE Sponsored Two Days International e-Conference on “Innovations in Engineering & Technology” (ICIET-20) at Gyan Ganga Institute of Technology & Sciences, Jabalpur on 27th November 2020.
28. Delivered a Talk on "*Microsoft forms and Flow*" in Three days' workshop for support staff on "Effective use of IT and Security Services during Covid-19" on 9th June 2020 organized by DJSCE Mumbai.

29. Delivered a Talk on "*Data Handling and Visualization use Plotly Express*" in Online FDP on "Disruptive Technologies in Industry 4.0" on 2nd June 2020 Organised by FRCRCE Bandra, Mumbai.
30. Delivered a Talk on "*Applications AI BOT in Education 4.0*" in Two Weeks Online International FDP on "Emerging Trends in Industry 4.0" Technically sponsored by ACM, on 22nd May 2020 Organised by RSCOE, Pune.
31. Delivered a Talk on "*Manuscript Preparation using Overleaf*" in one-week faculty development program on "Research Methodology and Tools", on 13th May 2020, organized by the Department of Computer Engineering, Sandip Foundation's SITRC, Nashik.
32. Delivered an expert talk as Resource Person for FDP on "*Fundamental Digital Skills for 21st Century Teachers*", scheduled on 8th Jan 2020 at SVKM's NMIMS MPTP Shirpur.
33. Delivered talk as resource person and conducted Hands-on Session on "*Network Simulator 2 (NS2)*" in Faculty Development Program (FDP) during 1st to 2nd March 2019 organized by department of Electronics and Telecommunication Engineering at K. J. Somaiya Institute of Engineering and Technology (KJSIEIT) Sion, Mumbai.
34. Delivered expert talk and conducted Hands-on Session "*Programming using NS2 along with Simulation and Implementation of New Routing Protocol in NS2*" in ISTE approved STTP on "Recent Trends in Wireless Networks" on 7th Jan 2019 at DJSCE Mumbai.
35. Delivered expert talk on "*Applications of Machine Learning in Wireless Networks*" and "*Design and Simulation of Routing Protocol in NS2*" in AICTE-ISTE Approved and Sponsored Induction/Refresher Programme on "*Mitigation and Finding the Generic Solution for Network Security in the Wireless Domain*" from 17th -22nd Dec. 2018 organized by JD College of Engineering, Nagpur.
36. Delivered expert talk in Pre-Ph.D. Course work organized for c1 (*Research Methodology*) and C3(*Seminar & Report*) scheduled on 17th and 18th June 2017 at Bapurao Deshmukh College of Engineering, Sevagram, Wardha.
37. Delivered guest lecture on the topic, "*Research Writing using Latex (IEEE Paper writing, Report writing)*" at Vidyavardhini College of Engineering, Vasai on 11th August 2017.
38. Delivered Expert Lecture in ISTE Approved STTP on "*Energy Conservation in Smart Cities*" at J.D.I.E.T Yavatmal on 21st April 2016.
39. Delivered Expert Lecture on "*Latex and Its Application in Manuscript Preparation,*" in Sinhgad Karandak, SKNCOE Pune on 15th Jan. 2016.
40. Delivered Expert Lecture on "*Simplified Programming in Network Simulator 2(NS2): My own Way*", in ISTE Approved STTP on Advanced Wireless Networking and Hands on Protocol Simulation" on 29th Oct. 2015.
41. Conducted One Day workshop on "*Latex and Its Importance in Thesis Writing*", organized by PG Department of Computer Science, G.H.R.I.E.T.W Nagpur on 10th Oct. 2015.
42. Delivered Expert talk on "*Latex and its Importance in Manuscript Preparation*", at Umrer College of Engineering, Umrer, Nagpur on 9th Sept 2015.

43. Delivered Expert Talk on "*Latex and its Importance in Manuscript Preparation*", at SSPACE Wardha on 2nd Sept 2015.
44. Delivered Expert Talk on "*Practical Approach to NS2*", in ISTE Sponsored STTP (AEECIT-14) organized by St. Vincent Pallotti College of Engineering, Nagpur on 25th April 2015.
45. Conducted Two Days Workshop on "*Network Simulator Programming*" on 8th and 9th April at College of Engineering, Ambejogai.
46. Conducted TWO Days Workshop in "*Latex and Its Importance in Manuscript Preparation*" on 17-18 March 2014 at BDCE Sevagram.
47. Conducted Two Days Workshop on "*Basics of NS2*" on 1st and 2nd March 2014 at BDCE Sevagram.
48. Conducted TWO Days workshop on "*Latex: No one can format it as I can*" in Sinhgad Karandak, Techtonic on 5-6 Feb 2014 organized by Department of Computer Engineering, SKNCOE Pune.
49. Delivered expert lecture in one-day workshop on *Network Simulator Programming Approach* on 13th Dec 2013 organized by dept. of Computer Technology, YCCE Nagpur.
50. Delivered Guest Lecture on "Latex", at B.N.C.O.E Pusad on 20th Dec 2013.
51. Conducted One Day Workshop on "Latex and Its Importance in Manuscript Preparation at Padmashri Vasant dada Patil Institute of Technology, Bawdhan, Pune, Maharashtra on 21st Sept 2013.
52. Conducted One Day Workshop on "Latex and Its Importance in Manuscript Preparation at M.G.M College of Engineering, Nanded, Maharashtra on 1st April 2013.
53. Delivered expert lecture in AICTE Sponsored One Week STTP on "Research Methodology" Organized by Priyadarshini Institute of Engineering and Technology, Nagpur, Maharashtra on 26th April 2012.
54. Delivered expert lecture in TEQIP-II sponsored one-week STTP on "Research Methodology", at Shri. Guru Govind Singh Institute of Engineering and Technology, Nanded, Maharashtra on 12th March 2012.
55. Conducted One Day Workshop on *Latex and Its Importance in Manuscript Preparation* at Smt. Kashibai Nawale College of Engineering, Wadgaon(Bk), Pune, Maharashtra on 11th March 2012.
56. Conducted One Day, Two Session on *Latex, and Its Importance* in ISTE Sponsored STTP on Research Methodology on 11th Jan 2013 organized by Priyadarshini Institute of Engineering and Technology (PIET), Nagpur.
57. Conducted One Day workshop on "*Latex and its use for Manuscript Preparation*" on 7th Jan 2013 organized by Suresh Deshmukh College of Engineering, Selukate Wardha, Maharashtra.
58. Conducted practical oriented sessions on "*NS2: Wired and Wireless Simulation*" in ISTE-STTP on Advance Wireless Networking organized by B.D.C.E during 26th Nov to 1st Dec 2012.

59. Conducted One Day workshop on "*Latex and its use for Manuscript Preparation*" on 27th Oct 2012 organized by ISTE Staff Chapter, Rajiv Gandhi College of Engineering Research and Technology, Chandrapur.
60. Delivered Expert lecture on topic "*Synopsis Writing, Report Writing, IEEE Paper Writing in Latex*" in ISTE-STTP on Image and Video Processing during 28th Feb to 3rd March 2012 at BDCE Sevagram.
61. Delivered Guest lecture on "*Research Paper Preparation and Presentation*", on 20th July 2011 organized by IE Students chapter BDCE. Delivered Guest lecture on topic "*NS2 Simulation and how to implement new protocol in NS2.*" On 21st Jan 2009 at J.D.I.E.T Yavatmal, Maharashtra. Delivered Guest lecture on topic "*Sensor Network*" On 15/02/2010 at J.D.I.E.T Yavatmal, Maharashtra
62. Delivered Expert Lecture on topic, "*Introduction to MaNet and Protocol Implementation in NS2*", in ISTE STTP organized during 1-6 Dec 2008 at B.D.C.O.E Sevagram, Wardha, Maharashtra.

Workshop, lecture series & conferences attended:

1. Attended One Week Capacity Building Program on “Blockchain: Future of Cyber Security”, Jointly organized by IEEE and SPIT, DJSCE and MHSSCOE Mumbai during 3rd to 8th July 2023.
2. Attended One Week Faculty Development Program on "Deep Learning Application Development, Tools and Research" organized by Dept. of Artificial Intelligence and Data Science, VIIT, Pune held from 28th February to 4th March 2023.
3. Attended One Week Faculty Development Program on “AI-Based Nature Inspired Optimization Method,” organized by Jhulelal Institute of Technology, Nagpur during 9th to 14th Jan 2023.
4. Attended “Outcome Based Education (OBE) & Curriculum” by Dr. Bhalchandra Chaudhari, Principal, Sardar Patel Institute of Technology on 24th February 2022.
5. Attended One Week AICTE Sponsored Online Short-Term Training Programme (STTP) on "Robust AI: Building through data exploration, preprocessing and representation " from 4th February 2022 to 8th February 2022.
6. Attended One Week Refresher Course on "Blockchain Technology and Its Uses" from 17th Dec 2021 to 23rd Dec 2021, organized by MMCOE Pune.
7. Attended one-week AICTE Sponsored Online Short-Term Training Programme (STTP) on "Recent Advancement in AI and Machine Learning" from 25th October 2021 to 30th October 2021.
8. Attended online seminar on “Cybersecurity in the era of Digital Transformation", organized by DJSCE Mumbai on 24th August 2021.
9. Attended one-week AICTE Training and Learning (ATAL) Academy Online Elementary FDP on, “IoT Applications with Blockchain Techniques,” during 17th July to 21st July 2021 organized by National Institute of Technology Meghalaya.
10. Attended one-week AICTE Training and Learning (ATAL) Academy Online Elementary FDP on, “Semantic Intelligence- The Way Forward with Artificial Intelligence (Part I)- Elementary,” during 1st July to 5th July 2021 organized by National Institute of Technology, Kurukshetra.
11. Attended Two Weeks Faculty Development Program (Online) on “Machine Learning and AI using Python” during 14th to 26th May 2021 organized by Knowledge Solutions India (Microsoft Partner).
12. Attended Three Days Faculty Development Program (Online) on “Role of Machine Learning & Artificial Intelligence in Data Analytics” during 24th to 26th March 2021 organized by Bajaj Institute of Technology, Wardha.
13. Attended one-week faculty development program (Online) on "*Modern Education Tools and Pedagogical Practices for Online Teaching*" during 21st June 2020 to 25th June 2020 organized by VIT Mumbai.
14. Attended a Two-Day Faculty Development Program (Online) on "*Advanced Computing and Communication Technology for Industry 4.0*" during 12th June 2020 to 13th June 2020 organized by DJSCE Mumbai.
15. Attended a Webinar on "*A Dive into the World of Cloud*" on 11th June 2020, organized by DJSCE Mumbai.

16. Attended a National Webinar on "*Data Science, Artificial Intelligence and Robotics: Future and Prospects*" on 2nd June 2020, organized by Narsee Monjee College of Commerce & Economics, Mumbai.
17. Attended 5 Day Online STTP (online) on "*Recent Trends and Applications of Machine Learning and Deep Learning in IT*" organized by the Department of Information Technology, RAIT (Ramrao Adik Institute of Technology), Navi Mumbai during 25th May 2020 to 29th May 2020.
18. Online seminar on "*Star Python Programming*" on 23rd May 2020.
19. Attended One-week faculty development program (Online) on "*Research Methodology and Tools*" during 11th May 2020 to 15th May 2020, organized by Dept. of Computer Engineering., SITRE, Nashik.
20. Attended Two weeks' faculty development program (Online) on "*Machine Learning and AI using Python*" during 27th April 2020 to 6th May 2020, organized by EICT, IIT (Indian Institute of Technology) Roorkee.
21. Completed training on "*Python 3.4.3*" during 3rd May 2020 to 5th May 2020, organized by DJSCE in association with IIT Spoken Tutorial Project, IIT Bombay.
22. Completed training on "*Spoken Tutorial Technology*" during 3rd May 2020 to 9th May 2020, organized by Zulailal Institute of Technology, Nagpur in association with IIT Spoken Tutorial Project, IIT Bombay.
23. Completed training on "*Latex*" during 25th April to 1st May 2020, organized by S.B. Patil College of Engineering, Indapur in association with IIT Spoken Tutorial Project, IIT Bombay.
24. Completed training on "*Linux and AWK*" during 26th April 2020 to 2nd May 2020, organized by SKNCOE Pune in association with IIT Spoken Tutorial Project, IIT Bombay.
25. Completed training on "*Php and MySQL*" 24th April 2020 to 30th April 2020, organized by SKNCOE Pune in association with IIT Spoken Tutorial Project, IIT Bombay.
26. Attended Microsoft's, Unlock Limitless Learning #LearnTheNext "*Higher Education Customer Workshop*" on 3rd March 2020 organized by Microsoft Corporation India Pvt Ltd Mumbai.
27. Attended RED HAT Forum 2019 on 5th Nov. 2019.
28. Attended Veritas Vision Solution Day at Grand Hyatt, Mumbai on 16th October 2019 organized by Veritas.
29. Attended Syllabus orientation program on ASSDF (BE) and CSL(IL) on 12th July 2019, organized by department of Computer Engineering in association with University of Mumbai.
30. Attended Two Days Faculty Development Program on "*Active Teaching Learning Strategies using Innovative Technology,*" organized by DJSCE Mumbai during 25th to 26th Feb. 2019.
31. Attended One Day Faculty Development Program on "*Lateral Thinking*" organized by Tata Consultancy Services at Department of Computer Engineering, DJSCE Mumbai on 12th Feb. 2019.

32. Worked as one of the Coordinator for Organizing AICTE-ISTE Approved One Week STTP on "*Insights of Machine Learning and Deep Learning*," Organized during 2nd to 6th July 2018 at DJSCE Mumbai.
33. Attended Two Days Faculty Development Program on "*Intellectual Property Rights*" organized by Department of Computer Engineering, DJSCE Mumbai during 4th to 5th Jan 2019.
34. Attended ISEA and TEQIP-III Sponsored one-week STTP on "*Cyber Forensics and Information Security (CFIS-2017)*" during 4th Dec. 2017 to 8th Dec. 2018 organized by COE Pune.
35. Attended Two Days National Seminar on "*Technologies for Development of Rural Areas*" during 27th Nov. 2017 to 28th Nov. 2017 at SPIT Mumbai.
36. Attended Two Days Faculty Development Program on the topic, "*Research Areas in IoT (RAIoT 2017)*", organized during 14th to 15th July 2017 at DJSCE Mumbai.
37. Attended Syllabus Revision Workshop at D.J. Sanghvi College of Engineering for TE and BE computer Engineering syllabus at Mumbai University on 10th March 2017.
38. Attended BDI Division, DST sponsored 4-day Training Programme on "*Recent Trends and Applications in Big Data Analytics [Data Science Research]*" at RCOEM, Nagpur during 19-22 Dec. 2016.
39. Attended in the One Day Syllabus Restructuring of MTech / M.E (CSE / WCC / SS/ ESC) organized by TGPCET Nagpur and RTM Nagpur University, Nagpur on 30th March 2016.
40. Contributed to the syllabus revision of Nirma University Institute of Technology, Computer Science and Engineering Department for the course B. Tech. in Computer Engineering.
41. Attended Syllabus Up-gradation Workshop at St. Vincent Pallotti College of Engineering, Nagpur on 23rd March 2015.
42. Attended Syllabus Review workshop on 24th Jan 2014 at Priyadarshini Indira Gandhi College of Engineering, Nagpur.
43. Attended Syllabus Review workshop on 17th Oct 2013 Zulelal Institute of Technology Nagpur.
44. Attended One Week Faculty development program on Network Simulator (NS2) organized by Department of Computer Engineering, Sinhgad College of Engineering, Vadgaon(Bk), Pune during 14-19 October 2011.
45. Attended Syllabus Modification meeting workshop on 24th Dec 2011 at TGPCOE Nagpur.
46. Attended Pre-Conference Tutorial on "*Wireless and Sensor Network*" during 15-17 Dec 2010 organized by Indian Institute of Technology (IIIT) Allahabad.
47. Attended Four days training workshop as a part of IBM Software Education Program on "*Object Oriented Analysis and Design Using UML with Essentials of Rational Software Architect*" organized by Department of Computer Engineering and IT, B.D.C.O.E Sevagram, Wardha, during 29th Oct to 1st Nov 2010.
48. Attended three days Faculty Development Program on IBM DB2 Software during 27-29 Sept. 2010 organized by J. D. College of Engineering, Nagpur.

49. Attended Two Days Conference on Advances in Wireless Communications (NCAWC 2010) during 7-8 May 2010 organized by S.S.G.M.C.O.E Shegaon, Maharashtra.
50. Attended One-week workshop on "*Open-Source Applications*" organized by Sipna College of Engineering, Amravati, during 28th Dec to 01 Jan 2010.
51. Attended one-day workshop on "*NBA accreditation and its importance*" conducted by Dr. Gupta from NITTR on 2nd April 2009 at B.D.C.O.E Wardha.
52. Attended 10th International Conference on Soft Computing, held at National Institute of Technology, Rourkela Odisha.
53. Attended SECNET 04 National Level Three Days Workshop on Network Security, Indian Institute of Technology, Mumbai, Maharashtra during 11-13 Feb 2004.
54. Attended All India Seminar on "Avenues in Computing, Comm. & Information Technology (ACCIT-05)" organized by Kavikulguru Institute of Technology & Science, Ramtek in association with The Institution of Engineers (India), Nagpur Local Centre Nagpur during 12-13 March 2005.
55. Attended Two Week STTP on "Role of Information Technology in Education" organized by Walchand College of Engineering, Sangli, Maharashtra during 12-24 Dec 2005.
56. Attended One Day Workshop on "Library Development" organized by ISTE at B.D.C.O.E Sevagram.
57. Attended Project Demonstration on "Face Recognition System" in the office premise of the Addl. Director General of Police, State CID, Pune along with Superintendent of Police, Wardha on 4th September 2004.

Awards and Achievements

- Nominated to AICTE for “National Award to Teachers” under sub category Engineering & Technology, Architecture, any other.
- Self-nominated for the "International Research Awards on Communications and Media Studies" under the category of "Best Researcher Award".
- Short listed for award for “Distinguished HOD (Head of Department)” at the (Spoken Tutorial, FOSSEE) IIT Bombay & Computer Society of India-Mumbai (CSI) TechNext India 2017 Symbiosis of Academicians and IT Industry Annual Academic Conference & Awards to Academia during 14 & 15 Jan. 2017.
- Awarded Gold Medal from B.N.C.O.E Pusad on account of securing 7th merit position in Amravati University, Computer Science and Engineering branch.
- Received I prize in National Conference “Technologia 2007” in paper presentation for paper “Use of secret sharing scheme in remote voting”.
- Certificate of Appreciation from Supretendant of Police, Wardha.
- Certificate of Appreciation from DIG Spl. Crime Branch Pune.
- Certification of Achievement from IIT Kanpur and ACM.
- Certificate of Appreciation from DJSCE Mumbai for SIH (Smart India Hackathon) 2023.