


## Resume

Name of Teaching Staff	Dr. Ramchandra S. Mangrulkar	
Designation	Associate Professor	
Department & Institute	Computer Engineering, D. J. Sanghvi College of Engineering, Mumbai-400056	
Date of Joining the Institution	01.02.2017	

<b>Professional Memberships</b>	<ul style="list-style-type: none"><li>▪ ISTE (Membership No: 61274)</li><li>▪ ACM Member (Membership No: 9524948)</li><li>▪ IACSIT (Membership No: 80338207)</li><li>▪ Web of Science Researcher ID (P-5004 2017)</li><li>▪ Scopus Author Id (55401536500)</li></ul>
<b>Profile Links</b>	<ul style="list-style-type: none"><li>▪ Website <a href="http://Dr.RamchandraMangrulkar.github.io">Dr.Ramchandra Mangrulkar (rammangrulkar.github.io)</a></li><li>▪ Mendeley Profile <a href="https://www.mendeley.com/profiles/ramchandra-mangrulkar/">https://www.mendeley.com/profiles/ramchandra-mangrulkar/</a></li><li>▪ Web of Science Profile <a href="https://publons.com/researcher/2047994/ramchandra-s-mangrulkar/">https://publons.com/researcher/2047994/ramchandra-s-mangrulkar/</a></li><li>▪ Scopus Author Profile <a href="https://www.scopus.com/authid/detail.uri?authorId=55401536500">https://www.scopus.com/authid/detail.uri?authorId=55401536500</a></li><li>▪ Google Scholar Profile <a href="https://scholar.google.co.in/citations?user=nLuft7kAAAAJ&amp;hl=en">https://scholar.google.co.in/citations?user=nLuft7kAAAAJ&amp;hl=en</a></li><li>▪ LinkedIn Profile <a href="https://www.linkedin.com/in/dr-ramchandra-mangrulkar-07b51866/">https://www.linkedin.com/in/dr-ramchandra-mangrulkar-07b51866/</a></li><li>▪ Research Gate Profile <a href="https://www.researchgate.net/profile/Ramchandra_Mangrulkar">https://www.researchgate.net/profile/Ramchandra_Mangrulkar</a></li><li>▪ Publons Profile</li></ul>
	<ul style="list-style-type: none"><li>▪ Google Scholar Citation Statistics (Citation Count =241, h-index = 8, i10index = 7)</li><li>▪ Scopus Citation Statistics (Citation Count = 99, h-index = 5)</li></ul>

### **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 (M.Tech)** 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, Dist: Yavatmal, S.G.B.A.U, Amravati with 76.39 %.

#### **Total Experience in Years (Teaching:19+ Years)**

- Associate Professor, Department of Computer Engineering, D.J.Sanghvi College of Engineering, Vile Parle (W), 01-02-2017 to Till Date.
- Head of Computer Engineering Department, 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 / Currently Teaching**

- Data Structure (SE-CE)
- Algorithm and Data Structure (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 (M.Tech-I)
- TCP/IP and Internetworking (M.Tech-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/M.Tech - CE)
- Ethical Hacking and Digital Forensics (ME-CE)
- Advanced System Security and Digital Forensics (BE-CE)

- Data Storage Management (ME-CE)

#### **Courses with Experiments Designed / Developed:**

- 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)
- Cryptography and System Security (BE-CE & TE-CE)
- Information Assurance and Network Security (BE-CE)
- Computer Network (TE-CE)
- Advanced System Security and Digital Forensics (BE-CE)
- Cryptography and System Security (BE-CE & TE-CE)

#### **Certification and Courses Completed (Online)**

##### **ICSI -CNSS**

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

##### **IBM**

- *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**

- *Classical Cryptosystems and Core Concepts University of Colorado System Completed on May 6, 2020.*
- *Python Programming Essentials Rice University Completed on May 11, 2020*
- *Introduction to TCP/IP Yonsei University Completed on May 15, 2020.*
- *Cybersecurity Awareness and Innovation EIT Digital Completed on May 17, 2020.*
- *Create Your First Chatbot with Rasa and Python Coursera Project Network Completed on May 21, 2020.*
- *Cyber Threats and Attack Vectors University of Colorado System Completed on May 25, 2020.*
- *Data Visualization with Plotly Express Coursera Project Network Completed on May 26, 2020.*
- *Analyze Box Office Data with Plotly and Python Coursera Project Network Completed on June 3, 2020.*
- *Introduction to Data Science in Python University of Michigan Completed on June 3, 2020.*
- *Building Candlestick Charts with Google Sheets Coursera Project Network Completed on June 13, 2020.*
- *Clustering Geolocation Data Intelligently in Python Coursera Project Network*

Completed on June 13, 2020.

- *Exploratory Data Analysis with Seaborn* Coursera Project Network Completed on June 15, 2020.
- *Teamwork Skills: Communicating Effectively in Groups* University of Colorado Boulder Completed on June 18, 2020.
- *Cloud Computing Security* University of Colorado System Completed on June 25, 2020.
- *Learning to Teach Online* UNSW Sydney (The University of New South Wales) Completed on July 8, 2020.
- *Penetration Testing, Incident Response and Forensics*, IBM, Aug 07, 2020.
- *Assessment in Higher Education: Professional Development for Teachers* by Erasmus University Rotterdam Completed on Completed on Aug 18, 2020.

#### **NPTEL Courses:**

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

#### **Cognitive.AI:**

- Data Privacy Fundamentals – October 2020

#### **Projects Guided:**

- Ph.D Research Guided: **Nil**
- M.E. Dissertation Guided: **14**
- 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. RakhiWaghmare).
- 9. Design and Development of Decision-Making Model for Spam Email Classification Using Neural Network. (Completed in 2016 by Mr. Rahul M. Bansod).
- 10. Arteri / 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).
13. Robust Waste Collection exploiting IoT potentiality in Smart Cities. (Completed in July 2017 by Mr. Durga Amarnath M. Budida)
14. Deep Learning Approach for Detecting Online Shaming (ongoing).

▪ **B.E. Project: More than 35.**

**Special Work Done for Curriculum Design**

2012-13

1. Syllabus of BECME304T: Programming Methodology and Data Structure is proposed at RTMNU Nagpur.
2. Syllabus of BECME305T: Introduction to Computer Network is reviewed at RTMNU Nagpur.

2013-15

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

2014-15

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

2016-17

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

2018-19

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

2019-20

1. Reviewed syllabus for B.Tech Computer Engineering for AY: 2020-21, Sardar Patel Institute of Technology, Mumbai.
2. 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).
3. Reviewed syllabus of Human Computer Interaction under (Humanities) and Software Engg. 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).
4. Reviewed syllabus for B.Tech Computer Science and Engineering, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (Faculty of Science and Technology).
5. Reviewed syllabus scheme and content of syllabus for Undergraduate course and (Computer Engineering and Information Technology) for Nirma University Ahmedabad.

**Academic Duties:**

**1. Organization Level Activities (SVKM Management)**

1. 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 5<sup>th</sup> June 2020 at DJSCE Mumbai.
2. 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.
  - A. Technical Hands-on session on developing Document upload and Verification system on 24<sup>th</sup> July & 26<sup>th</sup> July 2020.
  - B. Training on Document verification process for Custodians Team and Document verification Team on 4<sup>th</sup> August 6<sup>th</sup> August 14<sup>th</sup> August 18<sup>th</sup> Dec 2020.

**2. College Level and University Level Responsibilities: (Total=50)**

1. Worked as a Coordinator for organizing a Two Day FDP on "*Advanced Computing and Communication Technology for Industry 4.0*" during 12<sup>th</sup> June to 13<sup>th</sup> June 2020 at DJSCE Mumbai.
2. Organized Orientation Program of ASSDF-BE: CE and CSL: IL in Association with University of Mumbai on 12<sup>th</sup> July 2019.
3. Worked as In-charge of Seminar Hall during Institute Level Round of Admissions in 2017-18, 2018-19 and 2019-20.
4. Worked as ME Admission In-charge 2019-20 at Institute Level.
5. Working as Co-Convener (NAAC) and In-charge of IT Support Team for NAAC.
6. Worked as one of the coordinators for a "Degree Distribution Ceremony," on 16<sup>th</sup> Feb. 2019 for the graduating batch 2018-2019.
7. Worked as one of the coordinators for organizing a "Expert talk on Natural Language Processing and Sentiment Analysis of Text "on 27<sup>th</sup> Feb. 2019 for the Third Year Students.
8. Worked as one of the coordinators for celebration of "Women's Day" on 8<sup>th</sup> March 2019.
9. Appointed as Examiner in the subject Computer Network Lab for TE CE on 30<sup>th</sup> Oct. 2018 and 3<sup>rd</sup> Nov. 2018 at Terna College of Engineering.
10. Appointed as Examiner for conducting Oral Examination in the Subject High-Performance Computing for M.E. Computer Engineering (Sem-II) on 11<sup>th</sup> May 2018 at SPIT Mumbai.
11. Appointed as Examiner for conducting Oral Examination in the Subject High-Performance Computing for M.E. Computer Engineering (Sem-II) on 11<sup>th</sup> May 2018 at SPIT Mumbai.
12. Appointed as M.E. Examiner for Seminar and Dissertation of ME (Computer Science and Engineering) on 29<sup>th</sup> September 2018 at Babasaheb Naik College of Engineering, Pusad, Yavatmal.
13. Appointed as Examiner in the subject Minor Project-I for TE CE during 1<sup>st</sup> Nov. 2018 to 2<sup>nd</sup> Nov. 2018 at SPIT Mumbai.
14. Appointed as Examiner in the subject Project-I for BE CE on 31<sup>st</sup> Oct. 2018 at SPIT Mumbai.
15. Appointed as Examiner in the subject Project-I for BE CE during 31<sup>st</sup> Oct. 2018 at RGIT Mumbai.

16. Worked as one of the Coordinator for Organizing AICTE-ISTE Approved One Week STTP on “Insights of Machine Learning and Deep Learning,” Organized during 2<sup>nd</sup> to 6<sup>th</sup> July 2018 at DJSCE Mumbai.
17. Working as a Member / Coordinator of Research Committee, Program Assessment Committee, Project, and Internship Cell in the Department of Computer Engineering at DJSCE Mumbai.
18. Worked as one of the Coordinator for Organized Two days Faculty Development Program on the topic, “Research Areas in IoT (RAIoT 2017)”, organized during 14<sup>th</sup>to15<sup>th</sup>July 2017 at DJSCE Mumbai.
19. Worked as BOS Member of Computer Science and Engineering and Computer Technology Board from Dec. 2016 to Jan 2017.
20. Worked as Examiner for Paper Setting and Moderation for Ph.D Aptitude Test (PAT), RTMNU Nagpur during 2016-17.
21. 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 9<sup>th</sup> Oct 2016 held at Govt. Polytechnic Murtizapur.
22. Worked as SPOC Coordinator for NPTEL Local Chapter and Successfully Hosted Local Server at Institute.
23. Worked as VC nominee for conducting UGC interview at Cummins College of Engineering on 13<sup>th</sup> April 2017.
24. Worked as VC nominee for conducting UGC interview at G.H.R.I.E.T.W, Nagpur on 9<sup>th</sup>May 2016.
25. Worked as VC nominee for conducting UGC interview at Vilasrao Deshmukh College of Engineering, Nagpur on 17<sup>th</sup>June 2016.
26. Worked as VC nominee for conducting UGC interview at OM College of Engineering, Wardha on 20th June 2016.
27. Worked as DTE Committee Expert for Nuva College of Engineering on 18<sup>th</sup>Feb. 2016.
28. Worked as DTE Committee Expert for Abha Gaikwad Patil college of Engineering on 18<sup>th</sup>Feb. 2016.
29. Worked as one of the Panellist in 3rd Industry Institute Interaction Meet (III Meet) on 23<sup>rd</sup>April 2016 organized at Bapurao Deshmukh College of Engineering in association with Wardha IT Park, Wardha and ECPA.
30. 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.
31. Worked as coordinator for Gathering Information from whole college and presenting in proper format to be submitted to DTE during NOV 2015.
32. Worked as coordinator for “Semester Exit Meet,” organized on 10<sup>th</sup> Nov. 2015 at
33. 1APJ Hall, BDCE Sevagram.
34. Worked as coordinator for 84<sup>th</sup>Birth Anniversary of Bharat Ratna Dr. APJ Abdul Kalam on 15<sup>th</sup> Oct. 2015 at BDCE Sevagram.
35. Worked as coordinator and organized a Centennial Talk by The World-Renowned Scientist Padamshri Dr. T. Padmanabhan on 13<sup>th</sup> July 2015. The topic of centennial talk was “The Enigma of Gravity.”
36. Worked as coordinator for Digital India Week Program organized on 7<sup>th</sup> July 2015 at

BDCE Sevagram.

37. Worked as Member on LEC Committee at Govindrao Wanjari College of Engineering, Nagpur on 04<sup>th</sup> March 2015.
38. Worked as Member on LEC Committee at AVBIT College of Engineering on 11<sup>th</sup> March 2015.
39. Worked as Member on LEC Committee at G.H.Raisoni Academy of Engineering,
40. MIDC Hingana, Nagpur on 11<sup>th</sup> July 2014.
41. Worked as Member on LEC Committee at Agnihotri College of Engineering, Nagthana, Wardha on 10<sup>th</sup> July 2014.
42. Worked as Expert Committee member at Anjuman College of Engineering, Nagpur on 18<sup>th</sup> June 2014.
43. Worked as Organizing Secretary of 3<sup>rd</sup> Int. Conference, IC-QUEST 2014 organized by BDCE in association with Institution of Engineers and in collaboration with IJCA, IJERT and IJRET on 19<sup>th</sup> April 2014.
44. Worked as Coordinator of “Ganesh Fest 2013” organized during 9<sup>th</sup> to 18<sup>th</sup> Sept 2013 in BDCE Campus.
45. Worked as Coordinator for framing syllabus for Computer Engineering implemented from session 2013-14 for B.E., RTMNU Nagpur.
46. Worked as co-opted member of Computer Engineering and IT Board during 2009, 2010, 2011 and 2012 for both summer and winter examination.
47. Worked as member of Selection and Appraisal committee for Walk-in-interview and Appraisal Interview during April 2012, 2013.
48. Worked as member of Selection and Appraisal committee for Walk-in-interview and Appraisal Interview during June 2010, June 2011.
49. Worked as Officer- in-Charge of University Exam conducted during winter 2010 for Ex-Students of FYBE and Even Semesters.
50. Interview of Lecturer at Bapurao Deshmukh College of Engineering, Sevagram, dist: Wardha on 16<sup>th</sup> and 17<sup>th</sup> June 2010.

**1. National and International Level Responsibilities: (Total=43)**

1. Worked as Reviewer in International Conference on Automation, Computing and Communication 2021 (ICACC-2021), organized by RAIT Nerul, Navi Mumbai.
2. Worked as 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 09<sup>th</sup> July 2021 to 10<sup>th</sup> July 2021.
3. Worked as 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 25<sup>th</sup> March 2021.
4. Worked as 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 27<sup>th</sup> November 2020.
5. Worked as Session Chair for the Computing track in an International Conference organized by Ramrao Adik Institute of Technology (RAIT), Navi Mumbai on 28<sup>th</sup>



June 2020.

6. Worked as a 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
7. Worked as Technical Chair for Second International Conference on Advance Computing and Application (ICACTA 2020) on the theme “Intelligent Computing” to be organized during 28<sup>th</sup> and 29<sup>th</sup> February 2020 at DJSCE Mumbai.
8. Worked as Member of Technical Advisory Committee Member for 5<sup>th</sup> International Conference on Engineering, Research, and Innovations (EQUINOX 2020) to be organized on 19<sup>th</sup> and 20<sup>th</sup> March 2020 at Terna Engineering College Nerul, Navi Mumbai.in Association with IEEE Mumbai (Bombay) section.
9. Worked as a Reviewer for ICMISC 2020 (21-22 May, 2020), Karad, Pune.
10. Worked as a Reviewer for ICAICSIT-2020, RSCOE Pune.
11. Working as Advisory Committee Member for National Conference on Emerging Trends in AI and Big Data to be organized on 3<sup>rd</sup> and 4<sup>th</sup> April at Pune Institute of Computer Technology (PICT) in association with IEEE Computer Society, Pune.
12. Working as Reviewer for IEEE 18<sup>th</sup> 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/>).
13. Working as Reviewer for IEEE 9<sup>th</sup> 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.
14. Working as 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).
15. Worked as Judge for Project Presentation RGIT Mumbai on 16<sup>th</sup> March 2019.
16. Worked as Session Chair for First International Conference on “Smart City and Emerging Technologies” on 5<sup>th</sup> Jan 2018 organized by Universal College of Engineering, Palghar.
17. Worked as 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.
18. Worked as Guest Editor for International Conference on Computing, Communication, and Information Security (CCIS 2017) organized by IRET Bengaluru, Karnataka during 19<sup>th</sup>-20<sup>th</sup>June 2017.
19. Worked as Session Chair for the cPGCON-2017 at Sandip Foundations Sandip Institute of Technology and Research Centre, Nashik held during 24<sup>th</sup>-25<sup>th</sup>March 2017.
20. Worked as Jury member for “Young Innovator Award Z 24 Tass "on 9<sup>th</sup> Feb. 2017.
21. Worked as Advisory Committee Member for 5th International Conference IC-QUEST 2016 organized on 12<sup>th</sup> May 2016 at BDCE Sevagram.
22. Worked as Convener for Wheelspin 2016, A National technical Festival organized on 26<sup>th</sup> Feb. 2016.
23. Worked as Secretary for IC-QUEST 2015, International Conference on Quality Up-

- graduation in Engineering, Science and Technology held at BDCE, Sevagram on 19<sup>th</sup> April 2014.
24. Worked as Judge for Technovenza: National Level Techfest at BDCE on 24<sup>th</sup> March 2014.
  25. Worked as Session Chair in International Conference organized by Shri Shankar Prasad Agnihotri College of Engineering, Wardha.
  26. Worked as Session Chair in International conference on eco friendly and Energy Saving Product and Process on 15<sup>th</sup> Feb 2013 at Shri Shankar Prasad Agnihotri College of Engineering, Wardha Maharashtra.
  27. Worked as Session Chair in National Level Tech. Paper Presentation, BLITZKRIEG 2012 organized by Datta Meghe Institute of Engineering, Technology and Research, Wardha.
  28. Worked as Session Co-chair, member of advisory committee, in-charge of certification committee in international conference on "Benchmarks in Engineering Science and Technology", held during 7<sup>th</sup> and 8<sup>th</sup> Sept. 2012 organized by BDCE Sevagram.
  29. Worked as 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.
  30. Worked as Judge for INNOVATIONS & INVENTIONS-2012, A National Level Project Competition for Degree & Diploma Students on 4<sup>th</sup> February 2012 organized by Shri Shankar Prasad Agnihotri College of Engineering, Sevagram, Wardha.
  31. Worked as a member of local advisory committee in National Level Techfest, Wheelspin 2011 organized on January 25, 2011, and Wheelspin'12 organized on 21<sup>st</sup> Feb 2012 by BDCOE Sevagram.
  32. Worked as Judge for BLITZKRIEG '11, National Level Technical Event organized by Datta Meghe Institute of Engineering, Technology and Research, Wardha on 17<sup>th</sup> Feb 2010.
  33. Worked as Judge for Paper Presentation Event organized by G.S. Commerce College Wardha on 4<sup>th</sup> Jan 2010.
  34. Worked as Coordinator of paper presentation event in 13<sup>th</sup> ISTE Annual Students Convention of Maharashtra and Goa Section and National Level Techfest WHEELSPIN 2010.
  35. Worked as Chairman and Judge in ISTE student's convention of Maharashtra and Goa Section, National Level Techfest, Threshold-2009, during 15<sup>th</sup>-16<sup>th</sup> Feb 2009 organized by B.N.C.O.E Pusad, Dist: Yavatmal.
  36. Worked as Chairman in National Level Techfest, Technoxtream 2009 during 27-28<sup>th</sup> Feb 2009 organized by J.D.I.E.T Yavatmal.
  37. Worked as Judge in National Level Techfest, WHEELSPIN 09 on 20<sup>th</sup> Feb 2009 organized by B.D.C.O.E Sevagram.
  38. Worked as in charge of Registration and Certificate committee in National Level Techfest, WHEELSPIN'09 on 20<sup>th</sup> Feb 2009 organized by B.D.C.O.E Sevagram.
  39. Worked as Judge in Genesis 2008, Software Programming Context organized ISTE Students Chapter, B.D.C.O.E Sevagram.
  40. Worked as Committee Member in MESH 2003, MESH 2004 and Eureka 2002 organized by B.D.C.O.E Sevagram.

41. Worked as Judge in BLITZKRIEG 2004, ISTE 3rd Convention of students organized ISTE Students Chapter, B.D.C.O.E Sevagram.
42. Worked as Judge in Poster Competition and Model Exhibition organized by J. L. Chaturvedi College of Engineering, Nagpur.
43. Worked as Judge in Paper Presentation Competition organized G. S. College of Commerce, Wardha.

**Interaction with Professional Institutions: (Total =45)**

1. 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.
2. 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 14<sup>th</sup> July 2021.
3. 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.
4. Conducted One Day Hands on Workshop on “Applications of Power Automate, Power Virtual Assistant on AI Educational Bot” at DJSCE Mumbai on 5<sup>th</sup> June 2021.
5. Delivered a Talk on “Role of AI Bots in Education” at ARMIET, Shahapur, Mumbai on 20<sup>th</sup> May 2020.
6. Conducted One Day Hands on Workshop on “Research Writing, Research Preparation and Research Tools” at SMMCA Nagpur on 17<sup>th</sup> April 2021.
7. Delivered a Talk on “Innovation tools for Research” in Two Days workshop on “Research Publications” (RTCEIT-2021) at SKNSITS Lonawala, Pune on 26<sup>th</sup> February 2021.
8. 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 8<sup>th</sup> January 2021.
9. 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.
10. 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 27<sup>th</sup> November 2020.
11. 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.
12. 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 FRRCRCE Bandra, Mumbai.
13. 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.
  14. 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.
  15. Delivered an expert talk as Resource Person for FDP on "*Fundamental Digital Skills for 21st Century Teachers*", scheduled on 8<sup>th</sup> Jan 2020 at SVKM's NMIMS MPTP Shirpur.
  16. Delivered talk as resource person and conducted Hands-on Session on "*Network Simulator 2 (NS2)*" in Faculty Development Program (FDP) during 1<sup>st</sup> to 2<sup>nd</sup> March 2019 organized by department of Electronics and Telecommunication Engineering at K. J. Somaiya Institute of Engineering and Technology (KJSIEIT) Sion, Mumbai.
  17. 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 7<sup>th</sup> Jan 2019 at DJSCE Mumbai.
  18. 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 17<sup>th</sup> -22<sup>nd</sup> Dec. 2018 organized by JD College of Engineering, Nagpur.
  19. Delivered expert talk in Pre-Ph.D. Course work organized for c1 (*Research Methodology*) and C3(*Seminar & Report*) scheduled on 17<sup>th</sup> and 18<sup>th</sup> June 2017 at Bapurao Deshmukh College of Engineering, Sevagram, Wardha.
  20. 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.
  21. Delivered Expert Lecture in ISTE Approved STTP on "*Energy Conservation in Smart Cities*" at J.D.I.E.T Yavatmal on 21<sup>st</sup> April 2016.
  22. Delivered Expert Lecture on "*Latex and Its Application in Manuscript Preparation,*" in Sinhgad Karandak, SKNCOE Pune on 15th Jan. 2016.
  23. 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 29<sup>th</sup> Oct. 2015.
  24. 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.
  25. Delivered Expert talk on "*Latex and its Importance in Manuscript Preparation*", at Umrer College of Engineering, Umrer, Dist: Nagpur on 9<sup>th</sup> Sept 2015.
  26. Delivered Expert Talk on "*Latex and its Importance in Manuscript Preparation*", at SSPACE Wardha on 2nd Sept 2015.

27. Delivered Expert Talk on "*Practical Approach to NS2*", in ISTE Sponsored STTP (AEECIT-14) organized by St. Vincent Pallotti College of Engg., Nagpur on 25<sup>th</sup> April 2015.
28. Conducted Two Days Workshop on "*Network Simulator Programming*" on 8<sup>th</sup> and 9<sup>th</sup> April at College of Engineering, Ambejogai.
29. Conducted TWO Days Workshop in "*Latex and Its Importance in Manuscript Preparation*" on 17-18 March 2014 at BDCE Sevagram.
30. Conducted Two Days Workshop on "*Basics of NS2*" on 1st and 2nd March 2014 at BDCE Sevagram.
31. 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.
32. Delivered expert lecture in one day workshop on *Network Simulator Programming Approach* on 13<sup>th</sup> Dec 2013 organized by dept. of Computer Technology, YCCE Nagpur.
33. Delivered Guest Lecture on "Latex", at B.N.C.O.E Pusad on 20<sup>th</sup> Dec 2013.
34. Conducted One Day Workshop on "Latex and Its Importance in Manuscript Preparation at Padmashri Vasant dada Patil Institute of Technology, Bawdhan, Pune, Maharashtra on 21<sup>st</sup> Sept 2013.
35. Conducted One Day Workshop on "Latex and Its Importance in Manuscript Preparation at M.G.M College of Engineering, Nanded, Maharashtra on 1<sup>st</sup> April 2013.
36. Delivered expert lecture in AICTE Sponsored One Week STTP on "Research Methodology" Organized by Priyadarshini Institute of Engg. and Tech., Nagpur, Maharashtra on 26<sup>th</sup> April 2012.
37. Delivered expert lecture in TEQIP-II sponsored one-week STTP on "Research Methodology", at Shri. Guru Govind Singh Institute of Engg. and Technology, Nanded, Maharashtra on 12<sup>th</sup> March 2012.
38. 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.
39. 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.
40. 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
41. 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.
42. Conducted One Day workshop on "*Latex and its use for Manuscript Preparation*" on 27<sup>th</sup> Oct 2012 organized by ISTE Staff Chapter, Rajiv Gandhi College of Engineering Research and Technology (RCERT) Chandrapur.
43. Delivered Expert lecture on topic "*Synopsis Writing, Report Writing, IEEE Paper Writing in Latex*" in ISTE-STTP on Image and Video Processing during 28<sup>th</sup> Feb to 3<sup>rd</sup> March 2012 at BDCE Sevagram.

44. Delivered Guest lecture on "*Research Paper Preparation and Presentation*", on 20<sup>th</sup> July 2011 organized by IE Students chapter BDCE. Delivered Guest lecture on topic "NS2 Simulation and how to implement new protocol in NS2." On 21<sup>st</sup> 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
45. 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: (Total=48)**

1. Attended one-week AICTE Training and Learning (ATAL) Academy Online Elementary FDP on, "IoT Applications with Blockchain Techniques," during 17<sup>th</sup> July to 21<sup>st</sup> July 2021 organized by National Institute of Technology Meghalaya.
2. 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 1<sup>st</sup> July to 5<sup>th</sup> July 2021 organized by National Institute of Technology, Kurukshetra.
3. Attended Two Weeks Faculty Development Program (Online) on "Machine Learning and AI using Python" during 14<sup>th</sup> to 26<sup>th</sup> May 2021 organized by Knowledge Solutions India (Microsoft Partner).
4. Attended Three Days Faculty Development Program (Online) on "Role of Machine Learning & Artificial Intelligence in Data Analytics" during 24<sup>th</sup> to 26<sup>th</sup> March 2021 organized by Bajaj Institute of Technology, Wardha.
5. Attended one week faculty development program (Online) on "*Modern Education Tools and Pedagogical Practices for Online Teaching*" during 21<sup>st</sup> June 2020 to 25<sup>th</sup> June 2020 organized by VIT Mumbai.
6. Attended a Two-Day Faculty Development Program (Online) on "*Advanced Computing and Communication Technology for Industry 4.0*" during 12<sup>th</sup> June 2020 to 13<sup>th</sup> June 2020 organized by DJSCE Mumbai.
7. Attended a Webinar on "*A Dive into the World of Cloud*" on 11<sup>th</sup> June 2020, organized by DJSCE Mumbai.
8. Attended a National Webinar on "*Data Science, Artificial Intelligence and Robotics: Future and Prospects*" on 2<sup>nd</sup> June 2020, organized by Narsee Monjee College of Commerce & Economics, Mumbai.
9. 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 25<sup>th</sup> May 2020 to 29<sup>th</sup> May 2020.
10. Online seminar on "*Star Python Programming*" on 23<sup>rd</sup> May 2020.
11. Attended One week faculty development program (Online) on "*Research Methodology and Tools*" during 11<sup>th</sup> May 2020 to 15<sup>th</sup> May 2020, organized by Dept. of Computer Engineering., SITRE, Nashik.
12. Attended Two weeks faculty development program (Online) on "*Machine Learning and AI using Python*" during 27<sup>th</sup> April 2020 to 6<sup>th</sup> May 2020, organized by EICT, IIT Roorkee.

13. 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.
14. 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.
15. Completed training on "*Latex*" during 25th April to 1<sup>st</sup> May 2020, organized by S.B. Patil College of Engineering, Indapur in association with IIT Spoken Tutorial Project, IIT Bombay.
16. 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.
17. 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.
18. Attended Microsoft's, Unlock Limitless Learning #LearnTheNext "*Higher Education Customer Workshop*" on 3rd March 2020 organized by Microsoft Corporation India Pvt Ltd Mumbai.
19. Attended RED HAT Forum 2019 on 5th Nov. 2019.
20. Attended Veritas Vision Solution Day at Grand Hyatt, Mumbai on 16th October 2019 organized by Veritas.
21. Attended Syllabus orientation program on ASSDF (BE) and CSL(IL) on 12<sup>th</sup> July 2019, organized by department of Computer Engineering in association with University of Mumbai.
22. Attended Two Days Faculty Development Program on "*Active Teaching Learning Strategies using Innovative Technology*," organized by DJSCE Mumbai during 25th to 26th Feb. 2019.
23. 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.
24. Worked as one of the Coordinator for Organizing AICTE-ISTE Approved One Week STTP on "*Insights of Machine Learning and Deep Learning*," Organized during 2<sup>nd</sup> to 6<sup>th</sup> July 2018 at DJSCE Mumbai.
25. Attended Two Days Faculty Development Program on "*Intellectual Property Rights*" organized by Department of Computer Engineering, DJSCE Mumbai during 4th to 5th Jan 2019.
26. Attended ISEA and TEQIP-III Sponsored one-week STTP on "*Cyber Forensics and Information Security (CFIS-2017)*" during 4<sup>th</sup> Dec. 2017 to 8<sup>th</sup> Dec. 2018 organized by COE Pune.
27. Attended Two Days National Seminar on "*Technologies for Development of Rural Areas*" during 27<sup>th</sup> Nov. 2017 to 28<sup>th</sup> Nov. 2017 at SPIT Mumbai.
28. Attended Two days Faculty Development Program on the topic, "*Research Areas in IoT (RAIoT 2017)*", organized during 14<sup>th</sup> to 15<sup>th</sup> July 2017 at DJSCE Mumbai.
29. 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.
30. 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.
31. Attended in the One Day Syllabus Restructuring of M.Tech / M.E (CSE / WCC / SS/ ESC) organized by TGPCET Nagpur and RTM Nagpur University, Nagpur on 30th March 2016.
  32. Contributed to the syllabus revision of Nirma University Institute of Technology, Computer Science and Engineering Department for the course B. Tech. in Computer Engineering.
  33. Attended Syllabus Up-gradation Workshop at St. Vincent Pallotti College of Engg. , Nagpur on 23rd March 2015.
  34. Attended Syllabus Review workshop on 24th Jan 2014 at Priyadarshini Indira Gandhi College of Engineering, Nagpur.
  35. Attended Syllabus Review workshop on 17th Oct 2013 Zulelal Institute of Technology Nagpur.
  36. 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.
  37. Attended Syllabus Modification meeting workshop on 24th Dec 2011 at TGPCOE Nagpur.
  38. Attended Pre-Conference Tutorial on "Wireless and Sensor Network" during 15-17 Dec 2010 organized by Indian Institute of Technology (IIT) Allahabad.
  39. 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 Engg. and IT, B.D.C.O.E Sevagram, Wardha, during 29th Oct to 1st Nov 2010.
  40. Attended three days Faculty Development Program on IBM DB2 Software during 27-29 Sept. 2010 organized by J. D. College of Engineering, Nagpur.
  41. 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.
  42. Attended One week workshop on "*Open-Source Applications*" organized by Sipna College of Engineering, Amravati, during 28th Dec to 01 Jan 2010.
  43. 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.
  44. Attended 10th International Conference on Soft Computing, held at National Institute of Technology, Rourkela Odisha.
  45. Attended SECNET 04 National Level Three Days Workshop on Network Security, Indian Institute of Technology, Mumbai, Maharashtra during 11-13 Feb 2004.
  46. 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.
  47. Attended Two Week STTP on "Role of Information Technology in Education" organized by Walchand College of Engineering, Sangli, and Maharashtra during 12-24 Dec 2005.
  48. Attended One Day Workshop on "Library Development" organized by ISTE at



B.D.C.O.E Sevagram.

49. 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.

**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]

**Publication & Conferences:**

**A. Refereed International / National Journal Publications: 12**

1. 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.
2. Harshil Jhaveri, Himanshu Ashar and Ramchandra Mangrulkar, "Leveraging Data Science in Cyber Physical Systems to Overcome Covid-19", has been published in Journal of University of Shanghai for Science and Technology, Vol.22, Issue 10, October 2020, pp.1993-2015, ISSN:1007-6735.
3. Heet Savla, Vruddhi Mehta and Ramchandra Mangrulkar, "Prediction and Diagnosis of COVID-19 using Machine Learning Algorithms", has been published in International Journal of Recent Technology and Engineering (IJRTE) Vol.9, Issue 3, September 2020, pp. 678-683, ISSN: 2277-3878.
4. Fenil Doshi, Parth Doshi, Jimit Gandhi, Khushman Dwivedi and Ramchandra Mangrulkar, "Image Modification using Text with GANs," has been published in International Journal of Computer Applications Technology and Research Vol.9, Issue 11, pp. 287-294, 2020, ISSN: -2319-8656.
5. Aditya Jeswani, Shruti More, Kabir Kapoor, Sifat Sheikh and Ramchandra

Mangrulkar, "Document Summarization using Graph Based Methodology," has been published in International Journal of Computer Applications Technology and Research Vol.9, Issue 8, pp. 240-245, 2020, ISSN: -2319–8656.

6. Mr. Bhavuk Sharma and Ramchandra S. Mangrulkar, "Deep Learning Applications in Cyber Security: A Comprehensive Review, Challenges and Future prospects" has been accepted for publication in International Journal of Engineering Applied Science and Technology, 2019, Vol. 4, Issue 8, ISSN No. 2455-2143, Pages 148-159 ISSN:2455-2143.
7. 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 (IJCNDs), Vol. 14, No. 3, 2015. [ DOI: [10.1504/IJCNDs.2015.068668](https://doi.org/10.1504/IJCNDs.2015.068668)]
8. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "Implementation and Testing of Delay tolerant Network using Self-Capable and Routing Nodes: A Case Study" in International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC); ISSN(Print):2250-1568; ISSN (Online): 2278-9448; Impact Factor (JCC): 2.5967, Vol. 3, Issue 1, Mar 2013, 231-244.
9. 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," in Procedia Computer Science, Volume 78, 2016, Pages 423-430, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2016.02.084>. (<http://www.sciencedirect.com/science/article/pii/S1877050916000867>)
10. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "Simulative Comparison between Delay Tolerant Routing Protocol: MaxProp and Prophet" in Global International Journal of Computer Application and Technology, GJCAT, Vol 1 (4), 2011, 590-594, ISSN: 2249-1945.
11. Kajal K. Kapoor, Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "An optimal path determination of moving beacons using Localized Directional Routing Protocol in Mobile Adhoc Network", published in International Journal of Enhanced Research in Science Technology & Engineering, vol 3 issue 1, pp. 38-46, March 2014.
12. Ramchandra S. Mangrulkar, P. M. Jawandhiya, Dr. Mohammad Atique and Dr. M. S. Ali, "A Novel Hybrid Routing Protocol for Mobile Adhoc Network", published in International Journal of Advancement in Technology, <http://ijict.org> , ISSN 0976-4860, Vol 1, No 2 (October 2010) @IJoAT, pp. 185-196.

#### **B. Non-Referred International / National Journal Publications: 12**

1. Dipankar Roy, Pratiksha Barman, Prachi Sorte, Trushna Wankhade, Vibhor Sharma and Ramchandra S. Mangrulkar, "A Pi-to-Mobile communication system to monitor mobile devices across a network using Raspberry Pi as an access point" published in Academia
2. Ramchandra S. Mangrulkar and Pallavi V. Chavan, "Encrypting Informative Image by Key Image using Hill Cipher Technique", published in International Joint Journal of

Recent Trends in Engineering ISBN978-952-5726-05-3, May 2009.

3. Ramchandra S. Mangrulkar, Makrand R. Shahade, M. A. Pund and Dr. C. A. Dhote, "Hybrid Routing Protocol with Broadcast Reply for Mobile Adhoc Network", published in International Journal of Computer Applications, IJCA, Number 10 (ISBN: 978-93- 80746-09-8), February 2010, pp 131-136.
4. R.S.Waghmare, Ramchandra S. Mangrulkar and V.G.Bhujade, "Sentence level Clustering Using Natural Language Processing," published in the International Journal of Engineering Research (IJOER), Volume 3, S2, June 2015, ISSN- 2321-7758.
5. R.S.Waghmare, Ramchandra S. Mangrulkar and V.G.Bhujade, "Study on Different Sentence Level Clustering Algorithms for Text Mining," published in the International Journal of Pure and Applied Research in Engineering and Technology.
6. Sneha.M. Sakharkar and Ramchandra S. Mangrulkar, "Implementation on Secure Routing Method for Detecting False Reports and Gray-hole Attacks along with Elliptic Curve Cryptography in Wireless Sensor Network", published in International Journal of Engineering and Computer Science, pp.8865-8870.
7. Reena Satpute, A.N.Thakre and Ramchandra S. Mangrulkar, "Performance Analysis of Wireless Sensor Networks using Elliptical Curves Cryptography," published in International Journal of Engineering Research & Technology (IJERT), Vol. 3 - Issue 7 (July -2014).
8. Snehal V. Alone and Ramchandra S. Mangrulkar, "A Review on Geographical Location Based Energy Efficient Direction Restricted Routing in DTN", published in International Journal of Research in Engineering and Science (IJRES). [DOI: [10.1109/INPAC.2014.6981149](https://doi.org/10.1109/INPAC.2014.6981149)]
9. Rahul Bansod, Ms.Vaishali Bhujade and Ramchandra S. Mangrulkar, "Spam Classification using Arti\_cial Neural Network with Weight Measures", published in International Journal of Advanced Computer Technology (IJACT), pp.68-72.
10. Rahul Bansod, Ms.Vaishali Bhujade and Ramchandra S. Mangrulkar, "Text and Image based Spam Email Classification using an ANN Model-an Approach," published in International Journal on Recent and Innovation Trends in Computing and Communication
11. P.M. Jawandhiya, Pravin R. Satav, Suresh A. Asole, Ramchandra S. Mangrulkar and Dr. M. S. Ali, "Image Indexing for Fast Retrieval of Image from Image Database Using Color Feature", published in International Journal of Advancement in Technology, <http://ijict.org> , ISSN 0976-4860, Vol 1, No 2 (October 2010) @IJoAT, pp. 174-184.
12. Ramchandra S. Mangrulkar and Pallavi V. Chavan, "Sharing a Secret in Network", IETECH Journal of Information Systems, volume 4, No. 02, 84-87, 2010, ISSN: 0973-8096.

### Papers presented in International Conferences: 47

1. Govind Thakur, Shreya Nayak and Ramchandra Mangrulkar, "MalDeXA - A Malware Detection system using XGBoost on Amazon Web Services", accepted for presentation in International Conference on Innovative Computing, Intelligent Communication and Smart Electrical systems (ICSES -2021), organized by St. Joseph's Institute of Technology, Chennai, India.
2. Nishant Nimbare, Parth Shah, Shail Shah, Ramchandra Mangrulkar, "A Hybrid Approach for Landmark Recognition using Deep Local Features and Residual Network-50", presented in 2nd International Conference on Automation Computing and Communication (ICACC2021), organized by DY Patil's RAIT Navi Mumbai.
3. Preet Soni, Yash Gandhi, Vrudhi Mehta, Ramchandra Mangrulkar, "HealthDesk- A One Stop Health Application Using Machine Learning Techniques ", presented in 2nd International Conference on Automation Computing and Communication (ICACC2021), organized by DY Patil's RAIT Navi Mumbai.
4. Mehdi Surani, Ramchandra Mangrulkar, "Comparative Analysis of Deep Learning Techniques to detect Online Public Shaming", presented in 2nd International Conference on Automation Computing and Communication (ICACC2021), organized by DY Patil's RAIT Navi Mumbai.
5. Dev Savla, Kaustubh Kekre, Amogh Parab, Jay Gala, Ramchandra Mangrulkar and Pankaj Sonawane, "*Virtual Farmer,*" presented in 11<sup>th</sup> International Conference on Computing Communication and Networking Technologies (ICCNT) during 1<sup>st</sup> July 2020 to 3<sup>rd</sup> July 2020, organized by IEEE Kharagpur Section, IIT Kharagpur. [doi: 10.1109/ICCNT49239.2020.9225686]
6. Mr.Anish Pandita, Mr.Mit Parekh, Mr.Jitendra Sachwani, Mr.Romil Shah and Mr. Ramchandra Mangrulkar, "*Design and Implementation of Library Shelf Management using Machine Learning*" has been accepted for oral presentation in Springer Second International Conference on Advanced Computing Technologies and Applications 2020, Theme: Intelligent Computing" during 28<sup>th</sup> Feb. 2020 to 29<sup>th</sup> Feb. 2020 organized by DJSCE Mumbai.[[https://doi.org/10.1007/978-981-15-3242-9\\_5](https://doi.org/10.1007/978-981-15-3242-9_5)]
7. Ms.Mrunal Teli, Ms. Riya Singh, Ms.Minal Kyada, and Mr. Ramchandra Mangrulkar, "*Network Intrusion Detection using Machine Learning*" presented in Springer Second International Conference on Advanced Computing Technologies and Applications 2020, Theme: Intelligent Computing" during 28<sup>th</sup> Feb. 2020 to 29<sup>th</sup> Feb. 2020 organized by DJSCE Mumbai. [[https://doi.org/10.1007/978-981-15-3242-9\\_5](https://doi.org/10.1007/978-981-15-3242-9_5)]
8. Ms.Gargee Bhasse and Mr. Ramchandra Mangrulkar, "*An Access Control System using Visual Cryptography and Steganography,*" published in IEEE 14<sup>th</sup> International Conference on Information Processing ICInPro 2018, organized by Computing

- Professional Charitable Trust, Bengaluru and University Visvesvaraya College of Engineering, Bangalore University Bengaluru during 21<sup>st</sup> to 23<sup>rd</sup> Dec. 2018.[doi: 10.1109/ICINPRO43533.2018.9096673]
9. Mr. Ramchandra Mangrulkar, "*Design of Neuromuscular Stimulation to Supervise Parallelized Arm using Human-Machine-Human Interaction,*" published in 4th International Conference on Computing, Communication, Control and Automation (ICCUBEA 18) during 16th to 18th Aug. 2018[doi: 10.1109/ICCUBEA.2018.8697505]
  10. Mr. Prashil Negandhi and Mr. 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 27<sup>th</sup> to 28<sup>th</sup> July 2018.
  11. Mr. Durga Amarnath M. Budida & Ramchandra S. Mangrulkar, "*Design and Implementation of Smart Health Care System using IoT* ", published in IEEE Sponsored 4th International. Conference on Innovation and Information Embedded and Communication System (ICIIECS17), held on 17th and 18th March 2017, organized by Karpagam College of Engineering, Coimbatore, Tamilnadu, India. [DOI: [10.1109/ICIIECS.2017.8275903](https://doi.org/10.1109/ICIIECS.2017.8275903)]
  12. Ramchandra S. Mangrulkar, "*Retinal Image Classification Technique for Diabetic Identification*", in IEEE International Conference on Engineering and Technology (ICET) organized by Karpagam College of Engineering, Coimbatore during 16 to 17 Dec. 2016. [DOI: [10.1109/I2C2.2017.8321873](https://doi.org/10.1109/I2C2.2017.8321873)]
  13. 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 68, Pages 342-349, 2016. [DOI: [10.1016/j.procs.2016.02.070](https://doi.org/10.1016/j.procs.2016.02.070)]
  14. KomalPakojwar, Vaishali Bhujade and Ramchandra S. Mangrulkar, "*Web Data Extraction and Alignment using Tag and Value similarity,*" published in IEEE International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS), Coimbatore, India [DOI: [10.1109/ICIIECS.2015.7193044](https://doi.org/10.1109/ICIIECS.2015.7193044)]
  15. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "*Design and Implementation of Delay Tolerant Network: A Case Study*", IEEE International Conference, NuiCone 2012, Organized by Nirma University Ahmedabad, Gujarat. [DOI: [10.1109/NUICONE.2012.6493181](https://doi.org/10.1109/NUICONE.2012.6493181)]
  16. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "*Performance Evaluation of*

- Delay Tolerant Routing Protocols by Variation in Buffer Size,*” in International Conference on Advances in Engineering, Science and Management. organized by ESG Pillay Engineering College, Nagapattinam during 30 to 31 March 2012. ISBN: 978-1-4673-0213-5 [DOI: [10.1109/ICCCCT.2010.5670553](https://doi.org/10.1109/ICCCCT.2010.5670553)]
17. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, “*Trust Based Secured Adhoc on Demand Distance Vector Routing Protocol for Mobile Adhoc Network*”, published in 6th IEEE International conference on Wireless and Sensor Network during 15 to 19 Dec. 2010 organized by Indian Institute of Technology, Allahabad, Uttar Pradesh, IEEE catalogue no. CFP1075DPRT having ISBN No: 978-1-4244-9728-7. [DOI: [10.1109/WCSN.2010.5712310](https://doi.org/10.1109/WCSN.2010.5712310)]
  18. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, “*Routing Protocol for Delay Tolerant Network: A Survey and Comparison*”, published in 2010 IEEE International Conference on Communication, Computing and Control during 07 to 10 Oct. 2010 organized by St. Xavier's Catholic College of Engineering (SXCCE) and Syed Ammal Engineering College (SAEC), Ramanathapuram, IEEE Catalog Number: CFP1044K-ART ISBN: 978-1-4244-7770-8.
  19. Pallavi V. Chavan and Ramchandra S. Mangrulkar, “*Encrypting Informative Color Image using Color Visual Cryptography*”, published in IEEE 3rd International Conference on Emerging Trends in Engineering and Technology, Venue-Birla Institute of Technology, Goa, pp.277-281. [DOI: [10.1109/ICETET.2010.94](https://doi.org/10.1109/ICETET.2010.94)]
  20. Ramchandra S. Mangrulkar and Makrand Shahade, “*Hybrid Routing Protocol using Unicast Reply*” published in proceeding of International Conference and Workshop on Emerging Trends in Tech. in 2010 organized by Thakur College of Engineering in collaboration with ACM Sigart and Sigarch USA, Mumbai during 26 to 27 Feb. 2010, ISBN:978- 1-60558-812-4, pp:138-140. [DOI: [10.1145/1741906.1741930](https://doi.org/10.1145/1741906.1741930)]
  21. Ramchandra S. Mangrulkar and Yogesh Bani, “*Visual Cryptography using Modified Data Hiding in Halftone Images using Conjugate Error Diffusion*” published in 3rd Innovative Conference on embedded Systems, Mobile Communication and Computing will be held at Infosys Mysuru (Mysore), India during 11 to 14 Aug. 2008. ISBN: 10:0230-63618- 7, ISBN13:978-0230-63618-7, pp.115-120.
  22. Ramchandra S. Mangrulkar and Dr.Ashok Kumar Turuk, “*A Novel Routing Protocol in Ad hoc Network*”, Int. Conference-ICDEM'08 at Bishop Haber College of Engg. Tiruchirapalli on 9th Feb. 2008, ISBN-978-81-906267-0-5, pp.282-286.
  23. Ms. S. P. Dongare, Ramchandra S. Mangrulkar, “*An Improved Cluster Head Selection Approach for Energy Efficiency in Wireless Sensor Networks: A Review*” in proceedings of IEEE Communication Society Chapter, Pune Section, India of International Conference on Pervasive Computing ICPC 2015 organized by Sinhgad

College of Engineering, Pune during 8 to 10 Jan. 2015.  
[DOI: [10.1109/PERVASIVE.2015.7087190](https://doi.org/10.1109/PERVASIVE.2015.7087190)]

24. Ms. B. V. Vaidya and Ramchandra S. Mangrulkar, "*Design and Development of Peer-to-Peer Web Caching Technique for Mobile Ad-Hoc Network - A Review*", in proceedings of IEEE International Conference on Advances in Computer Engineering and Applications (ICACEA) from IMS Engineering College (UP) organized during 19 to 20 March 2015. [ DOI: [10.1109/ICACEA.2015.7164687](https://doi.org/10.1109/ICACEA.2015.7164687)]
25. Ms. S. P. Dongare, Ramchandra S. Mangrulkar, "*Implementing Energy Efficient Technique for Defence Against Grey-Hole and Black-Hole Attacks in Wireless Sensor Networks*," in proceedings of IEEE UP Section, India of International Conference on Advances in Computer Engineering, and applications ICACEA (International Conference on Advances in Computer Engineering and Applications) 2015 organized by IMS Engineering College, Ghaziabad during 19 to 20 March 2015. [ DOI: [10.1109/ICACEA.2015.7164689](https://doi.org/10.1109/ICACEA.2015.7164689)]
26. Ms. B. V. Vaidya and Ramchandra S. Mangrulkar, "*Implementation and Testing of Peer-to-Peer Web Caching Technique for Mobile Ad-Hoc Network*", in proceedings of 4th International Conference on Quality Up-Gradation in Engineering, Science and Technology (IC-QUEST), from Bapurao Deshmukh College of Engineering, Sevagram, Wardha organized on 11th April 2015.
27. Mr. Rahul Bansod, Ramchandra S. Mangrulkar and Prof.V.G. Bhujade, "*Text and Image based Spam Email Classification using an ANN Model- an Approach*" 2nd international Conference on Science and Technology for Society (ICSTS-2015), Jhulelal Institute of Technology, Nagpur (India) 19th May 2015.
28. Ms. S. M. Sakharkar, Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "*A Survey: Secure Routing Method for Detecting False Report and Gray-Hole Attack with Elliptic Curve Cryptography in Wireless Sensor Networks*", in proceedings of IEEE Student's Conference on Ele., Electronic and Computer science, from MANIT(Bhopal) organized on 1st and 2nd March 2014. [DOI: [10.1109/SCEECS.2014.6804514](https://doi.org/10.1109/SCEECS.2014.6804514)]
29. Ms. S. M. Sakharkar, Ramchandra S. Mangrulkar, "*Implementation of Elliptic Curve Cryptography for Wireless Sensor Network*", in proceedings of 3rd International Conference on Quality Up-gradation in Engineering, Science and Technology (IC-QUEST), 2014.
30. Ms. Vishakha Fursule and Ramchandra S. Mangrulkar, "*Artery / Vein Classification of Retinal Images to identify Diabetes*", published in 5th International Conference on Quality Up-gradation in Engineering, Science and Technology on 12th April 2016 at BDCE Sevagram.
31. Ms. Mayuri Bamnote, Prof.A. D.Gotmare and Ramchandra S. Mangrulkar, "*Lung*

- Nodule Detection Using Patched Based Context Analysis Method with Support Vector Machine*", published in 5th International conference on Quality Up-gradation in Engineering, Science and Technology on 12th April 2016 at BDCE Sevagram.
32. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "*Design and Implementation of Direction Aware Routing Protocol for Delay Tolerant Network in Heterogeneous Environment*", published in IJCA Proceedings on International Conference on Quality Up-gradation in Engineering, Science and Technology, Volume 1, Number 1, pp. 19-22,2014.
  33. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "*Performance Evaluation of Flooding Based Delay Tolerant Routing Protocols*", in International Journal of Computer Applications Volume NCETCSIT - Number 1, 2012, ISSN 0123-4560.
  34. Ramchandra S. Mangrulkar, Pallavi V. Chavan and S. N. Dagadkar, "*Improving Route Selection Mechanism using Trust Factor in AODV Routing Protocol for MaNeT*", published in International Journal of Computer Applications, IJCA, Vol 7, Number 10 (0975- 8887) October 2010, pp 36-39.
  35. Mr.Nilesh N. Dangare and Ramchandra S. Mangrulkar, "*A survey on Various Attacks in Mobile Ad-hoc Network*", Presented in International Conference (ICETPITM-2015) at St. Aloysius' College (Autonomous), Jabalpur, Madhya Pradesh during 5 to 6 Jan. 2015 and published in "Journal of Multidisciplinary Research Studies" (ISSN: 2394-6911), pp. 38-42, Vol. 1(1), January 2015. <http://www.ijcaonline.org/proceedings/icquest2015/number6/23018-2904>.
  36. R.S.Waghmare, Ramchandra S. Mangrulkar and V.G.Bhujade, "*Study on Different Sentence Level Clustering Algorithm for Text Mining*", Presented and Published in 3rd Int. Journal of Pure and Applied Research in Engineering and Technology (IJPRET) at IBSS Collage, Amravati, April 2015.
  37. Ms Reena S. Satpute, Ramchandra S. Mangrulkar, Prof. Amit N. Thakare, "*An Efficient Clustering Algorithm for Wireless Sensor Networks*", in proceedings of 3rd International Conference on Quality Up-gradation in Engineering Science and Technology (IC-QUEST 2014) organized by B.D.College of Engineering Sevagram, Wardha, April 2014.
  38. Ramchandra S. Mangrulkar and Dr. Mohammad Atique, "*Design and Development of Delay Tolerant Network: A Case Study*" in IEEE International Conference, Nuicone 2012 organized by Nirma University Ahmedabad, Gujarat during 6 to 8 Dec. 2012.
  39. Ramchandra S. Mangrulkar and P.V.Chavan, "*Encrypting Informative Color Image using Color Visual Cryptography*", IEEE 3rd International conference on Emerging Trends in Engineering and Technology, Venue-Birla Institute of Technology, Goa,



paper indexed in IEEE digital library CSI, during 19 to 21 Nov. 2010.

40. Ramchandra S. Mangrulkar and P.V.Chavan and P.M.Jawandhiya, "*Energy Efficient Routing Protocol for MaNeT*" published in proceeding of National Conference on Advances in Wireless communications (NCAWC 2010) during 7 to 8 May 2010 organized by S.S.G.M.C.O.E, Shegaon, Maharashtra.
41. Ramchandra S. Mangrulkar and Dr. Ashok Kumar Turuk, "*Hybrid Approach for on Demand & Table-Driven Routing Protocol for Adhoc Network*", Int. Conference at Anuradha Engineering College, Chikhlidist: Buldana, Maharashtra.
42. Ramchandra S. Mangrulkar and Dr. Ashok Kumar Turuk, "*An Efficient Route Discovery & Maintenance in Ad hoc Network*", National Conference, Synergy Institute of Tech.,Orissa, during 19 to 20 Jan. 2008.
43. Ramchandra S. Mangrulkar and P.V.Chavan , "*Attacks in Distributed System and Solutions to deal with them*", Proceeding of International Conference held at Haldia Institute of Technology, Haldia, West Bengal during 19 to 21 March 2007. ISBN-81-89766-74-0, pp.134-137.
44. Ramchandra S. Mangrulkar and P.V.Chavan, "*Secret Sharing in Information Security*" Proceeding of International Conference held at Haldia Institute of Technology, Haldia, West Bengal during 19 to 21 March 2007. ISBN-81-89766-74-0, pp.51-55.
45. Ramchandra S. Mangrulkar and P.V.Chavan, "*Authentication for Remote Voting using Visual Cryptography*" Proceeding of International Conference held at Erode Sengunthar College of Engineering, Erode, Tamilnadu during 29 to 31 Jan. 2007, ISBN10:0230- 63055-3, ISBN13:978-0230-63055-0, pp.110-116.
46. Ramchandra S. Mangrulkar and P.V.Chavan, "*Logical Clocks & Clock Synch. in Distributed system*" Proceeding of International Conference held at Priydarshini College of Engineering. & Arch., Nagpur during 11 to 13 July 2006, pp.94.
47. Ramchandra S. Mangrulkar and P.V.Chavan, "*Image Encryption Using Visual Cryptography*" Proceeding of National Conference held at S.R.E.S. College of Engineering., Kopargaon, Ahmednagar during 28 to 29 July 2007.

#### **Papers presented in National Conferences: 06**

1. Ms.Mayuri Bamnote, Prof.A.D.Gotmare and Ramchandra S. Mangrulkar, "*Sustainable Computing and Communication for Development*", published in 3rd National Conference, NCSC2D in association with IETE and IEI held at Prof. Ram Meghe Institute of Technology and Research Badnera on 12th and 13th Feb. 2016.
2. Ms.Vishakha Fursule and Ramchandra S. Mangrulkar, "*An artery vein classification of*

*retinal images to identify diabetes using graph-based approach*", published in 3rd national conference on NCSC2D in association with IETE and IEI held at Prof. Ram Meghe Institute of Technology and Research Badnera on 12th and 13th Feb. 2016.

3. Ramchandra S. Mangrulkar and S. N. Dagadkar, "*Linux Virtual Server: A Survey and comparison*" published in 5th National Conference on Emerging Trends and Technology (eITBM 2010) during 9 to 10 Oct. 2010, organized by Vidya Pratishthan's Institute of Information Technology, Baramati, Maharashtra.
4. Ramchandra S. Mangrulkar and P.V.Chavan, "*Use of secret sharing scheme in remote voting*" proceeding of National Conference held at M.P.C.C.E.T Bhilai , Chattisgarh., during 02 to 03 March 2007.
5. Ramchandra S. Mangrulkar and P.V.Chavan, "*Effective method for securing images using visual cryptography in communication*" proceeding of National Conference held at D. J. Sanghavi College of Engineering, Vile Parle , Mumbai during 24-26 Feb 2006.pp. A- 58.
6. Ramchandra S. Mangrulkar, "*Multimedia Technology*" National Level Paper presentation 2004 held at Bapurao Deshmukh College of Engineering Sevagram, Wardha.

#### **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 / Edited [Total =5]**

1. Editing a book, "**Intelligent Applications with Data Science,**" to be published by Taylor and Francis, CRC Press. [Scopus Indexed]
2. Editing a book, "**Cyber Security Threats and Challenges in Human Life: A Comprehensive Survey**" to be published by Taylor and Francis, CRC Press. [Scopus Indexed]
3. Editing a book, "**Design of Intelligent Applications using Machine Learning and Deep Learning**" to be published by Taylor and Francis, CRC Press. [Scopus Indexed: [Design of Intelligent Applications using Machine Learning and Deep Lea \(routledge.com\)](#)]
4. Editing a book, "**Cyber Security and Digital Forensics**" to be published by Wiley, Scrivener.
5. Editing a book, "**Future Trends in 5G and 6G: Challenges, Architecture, and Applications**", to be published by Taylor and Francis, CRC Press. [Scopus Indexed: [Future Trends in 5G and 6G: Challenges, Architecture, and Applications \(routledge.com\)](#)]

#### **Book Chapter [ Total = 24]**

1. The chapter entitled, “Software Defined Network: A brief overview and survey of services,” has been accepted for publication in Springer Book, “Software Defined Networks for Adhoc Networks”. [[Software Defined Networking for Ad Hoc Networks - Online Publication System eScripts \(eai.eu\)](#)]
2. 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 \(benthambooks.com\)](#)]
3. 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”. [[Cloud Computing Technologies for Smart Agriculture and Healthcare - 1s \(routledge.com\)](#)]
4. 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 [[Enabling Blockchain Technology for Secure Networking and Communications: 9781799858393: Security & Forensics Books | IGI Global \(igi-global.com\)](#)].
5. The chapter entitled, “*Application of Steganography for Secure Data Transmission Using Lossless Compression*”, authored by Klynn Fernandes, Ankit Rishi Gupta, Pratik Panchal and Ramchandra Mangrulkar, published in: Multidisciplinary Approach to Modern Digital Steganography, IGI Global [[Application of Steganography for Secure Data Transmission Using Lossless Compression: Security & Forensics Book Chapter | IGI Global \(igi-global.com\)](#)].
6. 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. [[Recent Challenges in IoT | SpringerLink](#)].
7. 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 \(routledge.com\)](#)]
8. 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 \(routledge.com\)](#)]
9. 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 \(routledge.com\)](#)]
  10. 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 \(routledge.com\)](#)]
  11. 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 \(routledge.com\)](#)]
  12. 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 \(routledge.com\)](#)]
  13. 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 \(routledge.com\)](#)]
  14. 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 \(routledge.com\)](#)]
  15. 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 \(routledge.com\)](#)]
  16. 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”.
17. 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. [ [Internet of things based intelligent accident avoidance system for adverse weather and road conditions | SpringerLink](#)]
  18. The chapter entitled, “*The Invisible Eye - A Security Mechanism to Protect Motorways: Architecture and Design Principles*” authored by Neel Patel (TE) and Dr. Ramchandra S. Mangrulkar has been accepted for publication in Springer book entitled, "Internet of Things, Smart Computing and Technology: A Roadmap Ahead". [ [https://link.springer.com/chapter/10.1007/978-3-030-39047-1\\_17](https://link.springer.com/chapter/10.1007/978-3-030-39047-1_17)]
  19. 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](https://link.springer.com/chapter/10.1007/978-981-15-5163-5_5)]
  20. 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](https://link.springer.com/chapter/10.1007/978-981-15-5097-3_7)]
  21. The chapter entitled, “*Application of Firefly Algorithm for Face Recognition,*” authored by Mr. Jai Kotia, Ms. Rishika Bharti, Mr. Adit Kotwal and Dr. Ramchandra S. Mangrulkar has been published in Springer book titled “Applied Firefly Algorithm and its Variants: Case Studies and New Developments” from Springer book series Springer Tracts in Nature-Inspired Computing, pp.147-171[<https://link.springer.com/book/10.1007/978-981-15-0306-1>]
  22. 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#:~:text=Chaos%20theory%20is%20the%20study,their%20sensitivity%20to%20initial%20conditions.>]
  23. 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. [

<https://www.taylorfrancis.com/books/e/9780429438639/chapters/10.1201/9780429438639-3>]

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>]

#### **Reviewer of International Journal**

- Reviver of International Journal of Computer Applications (IJCA)  
<http://www.ijcaonline.org/review-board>
- Reviver of Journal of Network and Computer Applications  
[http://www.elsevier.com/wps/\\_nd/reviewershome.reviewers](http://www.elsevier.com/wps/_nd/reviewershome.reviewers)
- Reviver of International Journal of Computational Science and Applications (IJCSA)  
<http://airccse.org/journal/ijcsa/editorialBoard.html>

#### **Reviewer of Book / Book Chapter**

- Reviewed book proposal, “Automata Theory and Formal Languages” received from Chris Katsaropoulos, Senior Acquisitions Editor, Biomedical Engineering, Elsevier

#### **Ph.D / M.E / M.Tech Dissertation Examiner**

- Working as **PhD Thesis Advisory Committee Member** (Internal) at MPSTE Mumbai, affiliated to NMIMS (Deemed to be Univerity), Mumbai.
- Worked as Examiner for evaluation of M.E. / M.Tech Examiner at RTMNU Nagpur, SRTMNU Nanded, Gondwana University Gadchiroli, Savitribai Phule Pune University.
- Worked as Examiner for evaluation of M.E. / M.Tech Examiner at Government Engineering College, Aurangabad.

#### **Awards and Achievements**

- Short listed for award for “Distinguished HOD” 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.