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I) Academic Qualification :

*** PhD:** E&TC (Feb.2014), SGGGS IET, SRTMUN.

***ME:** E&TC (May 2007) from Govt. College of Engineering (COEP), Pune.

***BE:** E&TC (May 1999) from Jawaharlal Nehru Engineerin College (JNEC), Aurangabad.

Research Areas: Image processing, Biomedical signal processing, Communication.

II) Experience: (20+4 years)

***Teaching Experience : 20+years.**

***Industrial Experience: 4 years.**

- **HoD- Electronics and Computer Engineering (ECE department of MCOE)**
- **Professor** in ENTC dept {UGC Approval no. CCO/343}
- **PhD Guide:** Recognition of Savitribai Phule Pune University (Recog.No.-BOD/ Sci&Tech/11/66)
- **P.G. Teacher:** Recognition of Savitribai Phule Pune University 2011 onwards (Recog. No.-BUTR/ Engg./1801-301)
- **PhD- Central Research center Coordinator** (4 departments) of MCOE.

***Teaching Experience : 20+years.**

- **Asst.Professor** :Date of joining at MCOE, since from July 2002.
- **Professor** in ENTC dept. from 2013 onwards.
- **Lecturer-** GS Moze COE, 1998 Balewadi, Pune.

***Industrial Experience: 4 years.**

1. Concept Integrations Pvt. Ltd.(2yrs.)

2. Beta Engineers, Pvt. Ltd. (2yrs.)

Experience Type	College/Org.Name	Designation	From	To
Industrial	Concept Integration Pvt. Ltd.	Project Engineer	01/07/1998	05/07/2000
Industrial	BETA Engineers	R&D Engineer	10/07/2000	30/06/2002
Teaching	P. E. S. Modern College of Engineering	Lecturer	01/07/2002	30/07/2004
Teaching	P. E. S. Modern College of Engineering	Asst.Professor	01/08/2004	28/02/2013
Teaching	P.E.S. Modern COE	Professor	01/03/2013	28/03/2014
Teaching	P. E. S. Modern College of Engineering	Professor	01/03/2014	02/08/2016
Teaching	P.E.S. Modern COE	Professor	01/07/2016	21/04/2017
Teaching	P.E.S. Modern College of Engineering	Professor	22/04/2017	Permanent

III) Academic Contribution:

1. **Two Patents:** Filed /Published :

1. 'Novel method for early Diagnosis Of Alzheimer Disease Using Electroencephalogram -EEG Signals'. Publication Date. 19/01/2016 (App. No. 201621001854)

Filing/Field of Invention: Biomedical Engineering.

2. 'Automatic volume control for unwanted increase of sound with Innovative technique'. Publication Date: 15/01/2019. (App. No. 201921022399)

Filing/Field of Invention: Communication Engineering

3. **Three Copyrights:** Registered.

i) Still image and moving picture compression standards.(L-84755/2019)

ii) Automatic Ration distribution system using Barcode and GSM.(L-95588/2020)

iii) Automatic Ration distribution system using Cloud computing.(L-9589/2020)

4. Working as Central **Research center coordinator- PhD cell** of Modern college of engineering and coordinating- 4 research centers of MCOE from 2014.

5. **Principal Investigator** of BCUD-RPS funded (Rs.1.2 Lacs) Research Project.

6. **'Innovation Ambassador'** of MoE'S Innovation cell AICTE , New Delhi.

7. Innovation Ambassador- Training course (**Advanced level, Total 16 sessions of 30 contact hours**) conducted by MoE'S Innovation cell AICTE , New Delhi(from 30th June-30th July 2021)

7. **Paper Publication** more than **53** papers in National/ International Journals/conferences.

8. NAAC Criterion 3 central level- Incharge.

9. **Experience as:**

- **LIC- MEMBER Research committee**, at AIT, Dighi, Pune.
- **CONVENER** of the National seminar under QIP (2 Lacs) MCOE
- **TECHNICAL PAPER REVIEWER** of IEEE, Springer sponsored International / National Journal/conferences.,during the conferences held atvarious colleges e.g. COEP, VIIT, AISSMS etc.
- **SESSION CHAIR** , in International Conference at VIIT,COE Pune
- **SESSION JUDGE**, in Youth Parliament, conference held at **Dr. BATU, Lonere.**
- **PhD admission interview panel, subject expert.**
- **PhD presentation- external subject expert.**
- **External expert in PG , UG Project examinations.**
- **SPPU theory paper external, internal senior supervisor, coordinator of Examination**
- Paper setting, checking, Project examiner, Practical, oral examiner for: BE, ME SPPU Examinations.

- Subject HoD, Communication, Digital Electronics.

➤ **Responsibilities Handled at University / College / Department level:**

- **University level:** Paper setting, checking, Practical –external/internal Examiner, external senior supervisor, participation in syllabus discussion, election etc.
- **College level:** Handling responsibility as- Ph.D. and Research Coordinator MCOE, NAAC Criterion –III in charge . 3 years as Training and Placement Officer-Modern college of Engg.(, A.R.C.- Inward section Incharge, F.E.Admission, S.E.Direct Admission procedure member, AICTE, N.B.A. work, Invigilation duty, participation in-Vidyarthini Munch committee, House keeping Incharge, Furniture DSR, M-Pulse, Gathering activity.

- **Department level:** Handling responsibility as- Ph.D. Coordinator (ENTC), Guardian Faculty Member (GFM), TEESA Activity incharge, Furniture incharge, Placement ENTC co-ordinator, Final year and second year student- Industrial visits incharge, Organising and participation in National/State level seminars/workshops, Expert ship duties in university practical exams, Internal practical & project examiner, ext. seminar, project examiner.
- **Active participation in student's activities:** As Training and Placement Officer/ counsior TEESA Activities, Arranging Industrial visits, Guidance in seminars, project guidance for BE, ME students, Inter-college paper presentation competition etc.

10. Professional Societies Memberships-

LIFE MEMBER of following Professional societies with membership details:

- i) IETE (M 500447)
- ii) ISTE (F3 140900359)
- iii) ISRD (LM 52267)

11. **Best Research Paper** - Award in IEEE sponsored International Conference.

12. **SENIOR SUPERVISOR** of SPPU examinations (5 Times)

13. Worked as, TPO- 'TRAINING AND PLACEMENT OFFICER 'of Modern college of engineering for 3 years (Duration 2009-2012) and successfully placements of more than 218 students during campus placement drives.

14. Arranging and coordinating different seminars and presentations required for PhD curriculum heads. Also finalizing different formats required for 'Course Work' curriculum of PhD.

15. **Consultancy services** provided to companies:

1. Electromedics Meditek Pvt. Ltd.,
2. Jeevancare, Healthcare solutions.
3. Seal India, Training sessions on Biomedical signal processing field.

16. **Workshops/seminars attended:** 54 Nos.

17. **Certification Refresher courses:** 12 Nos.

18. **Online Courses:** 18 Nos.

19. **FDP attended:** 22 Nos.

20. NPTEL online course, AICTE Approved FDP: Completed courses with 95 % marks in IIT Bombay, Pedagogy in Teaching learning 101X, 201X -8 weeks teacher training Program.

21. Participated in SPPU Syllabus discussion workshops: 08 Nos.

IV) Subjects Taught:

*PhD Students: Research Methodology-RM.

* PG Students: ME: Biomedical signal processing, BSP, SIMPCS, SIVC, MSP.

*UG Students: BE,SE,FE: AVE, CNS, BEE, DE etc.

Details of Teaching Experience: - (PhD, F.E. to BE/ ME-UG & PG)_

(The results for the mentioned subjects range between 85%- 100%)

Year	Branch	Subjects (Theory/ Practical)
Ph.D.	E&TC	Research Methodology-RM
M.E.	E&TC	Linear Algebra And Random Processes,Multimedia Techniques, MSP, Biomedical Signal Processing. SIMPCS, SIVC, MSP.
B.E.	E&TC	Audio-Video Engineering ,Telematics, Microprocessor and applications, Computer Networks and security, Communication network.
T.E.	E&TC	Microprocessor and Microcontrollers, Advanced Microprocessor Application.
S.E.	MECHANICAL	Industrial Electronics
S.E.	COMPUTER	Digital Electronics and Logic Design
S.E	E&TC	Computational Techniques, Digital Electronics, Digital El. Lab, Digital Systems , Control Systems, Software workshop.

F.E.	-----	Elements of Electronic Engineering, Basic Electronic Engineering.
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♦ **Specialization / Elective Subjects:-**

PhD.- Image Processing-Segmentation

ME.- Image Processing, VLSI, Integrated Optics,

BE.- Microwave Engineering

♦ **Computer languages known:** - C, C++, MATLAB, VHDL, Different Software Simulations e.g. PSpice,

Circuit maker etc.

♦ **Professional Societies Membership Details : -**

SR. No.	Name of Society	Membership type	Membership No.
1	IETE	Life Member	M500447
2	ISTE	Life Member	LM 52267
3	ISRD	FELLOW	F3140900359
4	IEEE	Member	-
5	Concern India Foundation	Member	-
6	'Sankalp' Rural Mahila Vikas Sanstha-Development program	Secretary	NGO

♦ **Research/ Projects completed: -**

Year.	Topic	Sponsored by
2021-22	'Panchagavya'-shortlisted project under Rural development scheme- UBA.(60k)	MHRDA, Unnat Bharat Abhiyan -UBA
2014-2016 (2 -Years)	BCUD Funded project ' Cotton crop disease detection and diagnosis using Image Processing Technique'(1.2 Lacs)	BCUD- Savitribai Phule Pune University.
2007	Development and design of rectangular patch antenna in satellite communication application (60k)	'ISRO' (Space communication Research Project)
2000	ECG Patient data file structure management	Concept Integrations Pvt. Ltd.
1999	Multichannel Radio Remote Control	JNEC

***UG Project guided:** 18+ Nos.

***ME Project guided:** 12 Nos.

Guided-UG Projects

Title of the project	Year
Detection of Blood Cancel Cells using Adaptive Contrast Enhancement and segmentation Technique	2011-12
Perforamce Evaluation of AIVHE on Adaptive Edge Detection by Different Operators	
Simulator Design for PSO500 Genset Controller	2012-13
Vision Based Hand Gesture Controlled Robot	
Localization and Segmaentation of optic disk in retinal images	2013-14
Segmentation of WBC and its nucleus in Study of Lukaemia	
2D to 3D converter	2014-15
Edge Detection Analysis	
Rescue Bot	2015-16
Hydroponic cultivation	2016-17
Fruit Sorting using Image Processing	2017-18
Automated Attendance System	2018-19
Trolligent	2020-21

Guided-PG Projects

Title of the project	Year of Completion
Automated Skin Lesion Diagnosis	2013
Segmentation of Medical Images using Region Growing Algorithm Based on Connected Components	2014
Canny Operator Based Distance Regularization Level Set Evolution Algorithm for Medical Image Segmentation	2014
GPS Based Ship Borne Automatic Identification System	2015
Transmits Beamforming and receiver design for MIMO Radar	2015
Implementation of Hybrid SLM-PTS Technique to reduce PAPR in OFDM systems	2015
OCR for Handwritten Devanagari Script	2016
Muli region Image Segmentation using Zero Level Set Method & Energy Minimization of Active Contour	2016
Energy Minimization Based on Image Segmentation	2016
Cotton Crop Disease Detection and diagnosis using image processing Technique	2016
Nuclear Segmentation foe Tumor cells using Multirefrence level sets	2017
GLCM Feature Extraction with Naive Bayes classification in Dietary Nutrition Application	2018

❖ Journal Paper Publications: During Post and Pre PhD Course

A) Post PhD Publications: with ISSN (Year: 2014-2018): 30+ nos.

B) Pre-PhD Publications: (Year: 2011-2013): 09 nos.

C) Conference Proceedings:16 nos.

D) ME Sponsored project Publications: 05 nos.

E) UG/PG Project based paper publications:12 nos.

Details as mentioned below:-

A) Journals :Post PhD Publications: with ISSN (Year: 2014-2018): 30 nos.

1. Dr. Mrs. A. J. Vyavahare, Image Segmentation using Computationally Improved Active Contours Level Set Method, 2015, IETE National Journal of Innovation and Research (NJIR), vol. 3, issue 2, IETE Journal.
2. Dr. Mrs. A. J. Vyavahare, High Resolution Synthetic Aperture Radar Image Segmentation Using Level Set Method, 2015, International Research Journal Of Engineering And Technology (IRJET), vol. 4, issue 1, IRJET, ISSN: 2395-0072.
3. Dr. Mrs. A. J. Vyavahare, Connected component based medical image segmentation, August 2014, IJIREICE , vol. 2 issue 8, ISSN:2321-5526.

4. Dr. Mrs. A. J. Vyavahare, Canny based DRLSE Algorithm for segmentation, **IJCA**, 0975-8887, Sept.14.
5. Real Time Fruit Sorting System using Computer Vision and Machine Learning, **2018**, International Journal of creative research thoughts, vol. 6, issue 2, **IJCRT**, **ISSN**: 2320-2882.
6. Feature Extraction Using GLCM for Dietary Assesement Application,**2018**,International Journal Multimedia and Image Processing,vol. 6, issue 3,**IJMIP**, **ISSN**: 2155-9577.
7. Review of Nuclei Detection Segementation in Microscopic Images, 2017, Journal of Bioengineering and Biomedical science, vol. 7, issue 3, **IBEBS**, **ISSN**: 2155-9538.
8. Nuclear Segmentation of Glioblastoma Multiforme Cells by Multireference Level Set,2017,Journal of Bioengineering and Biomedical science, vol. 7, issue 6, **IJSER**, **ISSN**: 2155-9577.
9. Hydroponics Cultivation using PH level Control, 2017, International Journal of Advanced Research in Electronics and Communication Engineering, vol. 6, issue 6, **IJESEER**, **ISSN**: 2278-9091.
10. Dietary Assessment Methods Based on Image Processing: A Review, 2017, International Journal of Innovative Research in Science Engineering and Technology, vol. 6, issue 8, **IJRSTE**, **ISSN**: 2347-6710.
11. Multi-Region Image segmentation with zero level set function of active contour on energy minimization, 2016, International journal of electronics, electrical and computational systems, vol. 5, issue 6, **IJECS**, **ISSN**: 2348-1171.
12. Devanagari OCR using projection profile segmentation method, 2016, International Research Journal of Engineering and technology, vol. 3, issue 6, **IRJETE**, **ISSN**: (e)2395-0056 (P)2395-0072.
13. Design and Analysis of Image segmentation with efficient energy minimization function, 2016, International Journal of Scientific and Engineering Research,vol. 7, issue 5,International Journal of Scientific and Engineering Research, **ISSN**:2229-5518.
14. Performance analysis of efficient framework of image segmentation using energy minimization function, 2016, International journal of engineering and advanced technology, vol. 5, issue 5, International journal of engineering and advanced technology, **ISSN**: 2249-8958.
15. Devanagari OCR using projection profile segmentation method,2016,International Research Journal of Engineering and technology, vol. 3, issue 6, International Research Journal of Engineering and technology, **ISSN**:2395-0072.
16. Multi-Region Image Segmentation with zero level set functional and evolution of active contour on energy minimization,2016,International Journal of Electronics, Electrical and Computational System, vol. 5, issue 6,International Journal of Electronics, Electrical and Computational System, **ISSN**: 2348-1170.
17. OCR for hand written Devnagari script,2016,International Journal of information and futuristic research, vol. 3, issue 10,International Journal of information and futuristic research, **ISSN**: 2647-1697.
18. Cotton Crop Disease Detection and Diagnosis using image processing Technique,2016,International Journal of information and futuristic research,vol. 4, issue 4, International Journal of information and futuristic research, **ISSN**: 2347-1697.
19. OCR For Handwritten Devnagari Script, 2016, International Journal Of Informative And Futuristic Research, vol. 3, issue 10, **IJIFR**, **ISSN**:2347-1697.
20. A Review on: Image Segmentation Based on Level Set Method,2016,International Journal of Research In Engineering Science and Technologies,vol. 1, issue 6, Science and Technologies, **ISSN**: 2454-664
21. Literature Review Of Energy Minimization Based Image Segmentation Method,2015, International Journal Of Science And Research, vol. 4, issue 11,**IJSR**, **ISSN**: 2319-7064.
22. Review on Competent PAPR reduction scheme in OFDM system,2015,International Journal of innovative research and advanced studies, vol. 2, issue 3, International Journal of innovative research and advanced studies, **ISSN**: 2394-4404.
23. Performance analysis of hybrid SLM-PTS system under Rayleigh fading channel,2015,International journal of engineering trends and technology, vol. 1, issue 4, International journal of engineering trends and technology, **ISSN**: 2231-5381.
24. Disease Detection of Cotton crop using image processing technique: A survey,2015,International Journal for research in applied science and engineering technology, vol. 3, issue 4, International Journal for research in applied science and engineering technology, **ISSN**: 2321-9653.
25. Literature Review Energy minimization based image segmentation methods, 2015, International Journal of Science and research, vol. 4, issue 11, International Journal of Science and research, **ISSN**: 2319-7064.

26. Traffic Estimation using image processing,2015,International journal of Engineering technology management and applied sciences, vol. 3, issue 4,International journal of Engineering technology management and applied sciences, **ISSN:** 2349-4476.
27. Transmit Beam Forming and Receiver Design For MIMO RADAR, 2015, International Research Journal of Engineering and technology, vol. 2, issue 3, International Research Journal of Engineering and Technology, **ISSN:** 2395-0072.
28. Cotton Crop disease detection & diagnostic-‘Innovation’, July 2015.
29. Emergency trends in advance communication tech. NCETACT- Jan 2015.
30. GPS based shipborn automatic identification System, ICAET- Sept 2014.
31. Dual slot H shape Antenna for SAR Estimation, IJRTE, ISSN 2277-3878, Vol 8, Issue-5, January 2020.
32. Adaptive array design using Least Mean square algorithm, IJRTE, ISSN 2277-3878, Vol 8, Issue-5, January 2020.

B) Journals: Pre-PhD Publications: (Year: 2011-2013): 09 nos.

1. **Arati J. Vyavahare**, Dr. R.C. Thool, Automatic Detection Of Acute Lymphoblastic Leukaemia based on HIS colour space., **Springer**, Advances in recent technology in communication and computing, ARTCOM-2012 , by the association of computer electronics and electrical engineers.October 2012 Bangalore, ACEEE a division of Institute of Doctors, Engineers and Scientists (IDES)-(D.L.) **Springer**, page no. 446-449.
2. **Arati J. Vyavahare**, Dr. R.C. Thool, Segmentation using Region Growing Algorithm based on CLAHE for Medical Images., **Springer**, Advances in recent technology in communication and computing, ARTCOM-2012 , by the association of computer electronics and electrical engineers. October 2012 Bangalore, ACEEE a division of Institute of Doctors, Engineers and Scientists (IDES)- (D.L.) Springer, page no. 310-315.
3. **Arati J. Vyavahare**, Dr. R.C. Thool, Edge Detection Algorithm based on AIVHE for Retinal Images., **Springer**, Advances in recent technology in communication and computing, ARTCOM-2012 , by the association of computer electronics and electrical engineers.19-20 October 2012 Bangalore, ACEEE a division of Institute of Doctors, Engineers and Scientists (IDES)- (D.L.) Springer, page no. 296-301.
4. **Arati J. Vyavahare**, Dr. R.C. Thool, Canny operator based Distance Regularization level set evolution algorithm for medical image segmentation, IJGIP,International Journal of graphics and image processing, Vol.3,Issue-4 Nov.2013.
5. **Arati J. Vyavahare**, Dr. R.C. Thool, Segmentation of medical images using image processing with region growing algorithm, Vol.3, Issue-4 Nov.2013.
6. **Arati J. Vyavahare**, Dr. R.C. Thool, Transmitter beam forming design model for MIMO Radar, IJAREEIE, Vol.2, pp. 4615-4679, ISSN (print)2320-3765, online-2278-8875,Issue-10, Oct 2013.
7. **Arati J. Vyavahare**, Dr. R.C. Thool, Canny operator based distance regularization level set evolution algorithm for medical image segmentation international journal of graphics & image processing vol.3 issue 4Nov.13
8. Comparison of different segmentation techniques for color image processing, International Journal of graphics and image processing, page no.321-324, IJGIP, vol.2, September 2011.
9. Region Growing : A Cutting Edge Approach for Color Image Segmentation, International Journal of Computing, page no. 541-545, IFRSA, vol.1,issue 3, July 2011.

C) Conference Proceedings: 16 nos.

1. Comparison of segmentation techniques for different type of images: Review, National conference on signal and image processing applications 19-20 September 2009, The IET (UK) Mumbai, COE Pune.
2. Application for noise immunity and operational complexity using region growing and edge based methods, National conference on Futuristic Applications in electronics engineering (NCFAEE-2011), 10-11 March, 2011, AISSMS IOIT, Pune.
3. Comparison of region growing and ACC for efficient and fast execution of algorithms, National conference on Futuristic Applications in electronics engineering (NCFAEE-2011),10-11 March,2011,AISSMS IOIT, Pune.
4. Comparison of Segmentation Techniques for Acute Leukemia Detection, An International conference on precision, meso, micro and nano engineering, 10-11 December 2011, COE, Pune.
5. E04: Color image segmentation methods: Overview National conference on Advances in engineering and management, (A.E.M. 2011) 13-15 January 2011, UOP,Indira college of Engineering and management, Pune.
6. E05: Comparison of image segmentation methods A review on region growing and ACC, National conference on Advances in engineering and management, (A.E.M. 2011) 13-15 January 2011, UOP, Indira college of Engineering and management, Pune.
7. Canny operator based level set segmentation, Bhaba Automic Research Centre- National conference on Machine vision and image processing,(MVIP-2011) 7-9 December 2011, IEEE, IET Pune , COE Pune.
8. Effect of filtering on sobel edge detection operator for noise images Bhaba Automic Research Centre- National conference on Machine vision and image processing,(MVIP-2011) 7-9 December 2011, IEEE, IET Pune, COE Pune.
9. A novel region growing segmentation algorithm based on CLAHE for medical images BhabaAutomic Research Centre- National conference on Machine vision and image processing,(MVIP-2011) 7-9 December 2011, IEEE, IET Pune , COE Pune.
10. Region growing ant Ant colony clustering : A review of image segmentation methods, National conference on Advances in signal processing and communications sponsored by University of Pune 18-19 February 2011, G.S Moze COE, Pune.
11. Beamlet Transform: New approach in image segmentation, National conference on Advances in signal processing and communications sponsored by University of Pune 18-19 February 2011, G.S.Moze COE, Pune.
12. CLAHE based R.G. algorithm for medical images, International conference on Electronics and communication engineering IRNet,(ICECE) 15 July 2012,Pune.
13. 2D to3D Image Conversion & Disparity Map Estimation using PSO Algorithms
14. The effect of Butterworth filter on sobel edge detection operator International conference on Advances in computing and management 2012(ACM- 2012) 6-8 January 2012, Dr.D.Y.Patil ,Pune.
15. Segmentation technique for Brain Tumar Images, International conference on Electronics and communication engineering IRNet,(ICECE) 15 July 2012,Pune.
16. Transmits Beam forming Design Model for MIMO RadarVol.2 Issue 10 Oct.2013 IIAREEIE ISSN(Print): 2320-3765 ISSAN(Online) 2278-8875.

D) Publications: 05 nos.:M.E.(E&TC)Course: COEP, ISRO Sponsored project

M.E.(E&TC)- Microwave: Design and Development of an Array of Microstrip Patch Antenna using Different Dielectric Substrates.

IEEE Sponsored Papers published on M.E.(E&TC) Microwave dissertation ,which is tested and completed at Defence Institute of Armament Technology (DIAT), Khadakwasla, Girinagar ,Pune.

1. Microstrip Rectangular Patch Array Antenna Using Different Substrates For Satellite Communication Application.
The Fifth **International Association of Science and Technology for Development (IASTED)**
International Conference on Antennas, Radar, and Wave Propagation
Baltimore, Maryland, USA (April 16-18, 2008).
2. Design of Two Elements Array with and without Delay Line for Beam Steering
The Asia-Pacific Microwave Conference, APMC-2007,the most prestigious microwave conference in the Asia Pacific at The Grand Hyatt Erawan, **Bangkok**, Thailand, (December 11-14, 2007).
3. Multiple Element Rectangular Microstrip Patch Antenna with and without Delay Line using Different Substrates
Sensors, Signal Processing, Communication, Control and Instrumentation (SSPCCIN)
Vishwakarma Institute of Technology (VIT),
Bibwewadi, Pune- 411037, Maharashtra, India (January 3-5, 2008).
4. Satellite communication for beam steering application using antenna
D. Y. Patil COE, Pimpri Pune (NCWT-08, 29-31, 2008).
5. Design of Rectangular Patch Antennas using Different Dielectric Materials as Substrates and their Comparative Study
Recent Trends in Material Science (RTMS-2006)
by University Grants Commission, New Delhi, North Maharashtra University,
Jalgaon, INDIA (March 24-25, 2006).

E) UG/PG Project based paper publications: 12+ nos.

some of them are mentioned below:-

- Adaptive Array Design using Least, Mean Square Algorithm
International Journal of Recent
Technology and Engineering
- Review of Nuclei Detection Segmentation in Microscopic Images, Journal of Bioengineering and Biomedical science
- Trolligent:Smart E-Trolley, GIS Science journal Volum 8, Issue 7, July 2021.
- Literature review on wireless transmission of RS 232.GIS Science journal Volum 8, Issue 7, July 2021.
- Intelligent Trolley, IRJET, Volume 8 Issue 2, Feb 2021.
- Trolligent, simply Intelligent E trolley. IJCRT, Google scholar, Volume 9, Issue 5, May 2021.

- OCR for hand written devnagri script International Journal of information and futuristic research
- Performance analysis of efficient framework of image segmentation using energy minimization function,
- International Journal of Engineering and Advanced technology

♦ **Organized QIP/FDP/Seminars/Workshops:**

1. Convener-QIP-Funded by SPPU (2 Lacs) ‘Enrichment of faculty skills in higher education’(17-18 Feb.2017).

2.IEEE Pune section Funded Seminar- Research Methodology its real time applications.

3. FDP Workshop-‘Make office easier’- Latex, computer fundamentals-2 days Workshop (22-23 Dec.2014)

- **FDP/Workshops/seminars attended: Some of them by latest, mentioned below:-**

FDP/ Seminar /workshop Attended- (2020-21):

Sr.no.	Title	Duration	Organized by
1.	Institutions Innovation Council	28 th April to 22 nd May	IIC of MHRD’s Innovation cell ,New Delhi
2.	MOODLE LEARNING MANAGEMENT SYSTEM	26 th May 30 th May 2020	PICTE, Pune.
3.	FDP on E- Content Development and Delivery, Research Methodology & Autonomy	27 th July to 1 st August	Kamala Nehru Mahavidyala Nagpur
4.	Webinar on “Evolve: A shift thinking “	25 th to 26 th June	In association with BrahmaKumaris/ Modern College of Engineering MBA Department
5.	“E- Content development and Effective use of ICT”	11 th to 17 th June	PES’sModern College of Engineering
6.	Online Webinar on “IEEXplore Digital Library: Orientation Workshop”	9 th June	MIT WORLD PEACE UNIVERSITY
7.	“ MOODLE LEARNING MANAGEMENT SYSTEM”	26 th to 30 th May	Department of Electronics and Telecommunication Engineering PICT Pune
8.	Webinar on IoT and Enabling Technologies	26 th May	Dept. Of E&TC,PVG’s College of Engineering
9.	Online FDP on Learning ,Pedagogy & effective Use of Case Methodology	17 th to 21 st May	ASM Group of Institutes
10.	Training Program on how to balance	25 th May	Skillslate and Powered by Zovy Studios,Pune

	Academics and Administrative work		
11.	Webinar on “Roles of IOT ON INDUSTRIAL APPLICATION”	21 st May	SETHU Institute of Technology
12.	Webinar on “ ML FOR HEALTH CARE APPLICATION”	21 st May	SREYAS Institute of Technology
13.	Webinar on “FUTURE OF AI”	20 th May	IETE –Mumbai in Association with PANTECH
14.	Programme on ‘IAM CHANGE’	14 th May	Skillslate and Powered by Zovy Studios,Pune
15.	Webinar on “Machine Learning	12 May	
16.	Webinar on” How the AGRI &IOT Get Connected”	19 th May	Mohamad Sathak College of Engineering
17.	National Level FDP on Decoding	8 th May	Skill slate and Powered by Zovy Studios,Pune
18.	One Week online FDP “ Effective Proposal writing for Research Funding	13 th to 18 th	Sandip Institute of Technology & Research Center Nashik
19.	Programme on ‘IAM Change ‘	14 th May	Skillslate and Powered by ZovyStudios,Pune
20.	Webinar on” IMAGE PROCESSING USING PATHON”	12 th	Mount Zion College of Engineering & Technology Pudukkottai
21.	National Level Webinar Identifying Weaker Students & Remedial Actions	2 nd May	Inpods
22.	“ COVID -19Awareness Campaign- Quiz”	May	Modern College of Engineering
23.	“How to Overcome Challenges &Boost Admission During COVID19”	5 th May	Skillslate and Powered by Zovy Studios,Pune
24.	Innovative and Inventive problem solving	13-18 July 2021	AICTE, by AISSMS
25.	Webinar on”New Higher Education &Digitization of Education	17 th May 2021	Dr. Babasaheb Ambedkar Technolgical University, BATU- Lonere & R.C. Patel Institute of Technology ,Shirpur Under TEQIP-III
26.	Innovative and Inventive Problem Solving	13-18 July 2021	AICTE QIS sponsored AISSMSCOE.
