

Papers Presented in
Conferences

Journal of Microwave and Optical Technology, Vol. 16, no.4, pp. 397-406, July 2021

- [5] Aarti G. Ambekar and Amit A. Deshmukh, "Wideband DP compact design of Pi-shape microstrip antenna for GSM, ISM, and Satellite Applications," *Progress In Electromagnetics Research C*, Vol. 111, pp. 241-256, April 2021. DOI:10.2528/PIERC21022302
- [6] Aarti G. Ambekar, Amit A. Deshmukh, "E-shape microstrip antenna for dual frequency WLAN application," *Progress In Electromagnetics Research C*, Vol. 104, pp. 13–24, July 2020, DOI:10.2528/PIERC20060204
- [7] Aarti G. Ambekar, Amit A. Deshmukh, "Multiple slots loaded rectangular microstrip antenna for DP multiband response," *International Journal of Microwave and Optical Technology*, Vol. 15, no.3, pp. 279-288, May 2020.
- [8] Umang Patel, Aarti G. Ambekar "Indian Sign Language Recognition Based on Gray Level Co-occurrence Matrix & 7Hu Moment" *Communications on Applied Electronics*, New York, USA, Volume 7, No 4, pp 44-49, July 2017, ISSN: 2394-4714
- [9] Anamika Sen, Malabika Sen, Aarti G. Ambekar, ' Improved Electronic Voting Machine with Real Time Data Analysis', *CAE*, Vol-6, No. 1, pp 47-49, October 2016
- [10] Dhanshree S. Shedge, Aarti G. Ambekar," Digital Video Watermarking based on Different Wavelet Transform', *CAE*, Vol-5, No. 10, pp 37-41, September 2016
- [11] Aarti G. Ambekar, Chhaya Hinge, Samidha Kulkarni "Bilingual OCR for printed English and Devnagri Scripts" in *international Journal PARIPEX*, Indian Journal of Research, Gujarat in Jan,2013, Vol-2, Issue-1

International: 29

- [1] Aarti G. Ambekar, Amit A. Deshmukh, et.al," Sectoral Microstrip Antenna for Dual Polarized Broadband Response," Presented in *International Conference on Wireless Communication- 2021 (ICWiCOM-2021)*, Oct 8 – 9, 2021, Mumbai, India, to be published in Springer Digital Library.
- [2] Aarti G. Ambekar, Amit A. Deshmukh, et.al," Resonant length formulations and redesigned methodology for wideband DP Y-shape microstrip antenna," Presented in *International Conference on Wireless Communication- 2021 (ICWiCOM-2021)*, Oct 8 – 9, 2021, Mumbai, India, to be published in Springer Digital Library.
- [3] Aarti G. Ambekar, Amit A. Deshmukh, et.al," Stub loaded A-shape microstrip antenna for DP multiband response" Presented in *International Conference on Wireless Communication- 2021 (ICWiCOM-2021)*, Oct 8 – 9,

2021, Mumbai, India, to be published in Springer Digital Library.

[4] A. G. Ambekar, A. A. Deshmukh, et.al, "Investigation Into Circular Polarized Response of Square Microstrip Antenna using Defected Ground Structure," *2021 International Conference on Communication information and Computing Technology (ICCICT)*, 2021, pp. 1-5, DOI: 10.1109/ICCICT50803.2021.9510042,

[5] Aarti G. Ambekar, Amit A. Deshmukh, et.al, "Polarization Agile Circular Microstrip Antenna," *International Conference on Advances in Science & Technology (ICAST-2021)*, May 7 – 8, 2021, Mumbai, India, DOI.ORG/10.2139/SSRN.3868009

[6] A. G. Ambekar, and A. A. Deshmukh, et, al, "Dual-band Circular Polarized Microstrip Antenna Using Defected Ground Structure," *2021 4th Biennial International Conference on Nascent Technologies in Engineering (ICNTE)*, 2021, pp. 1-6, DOI: 10.1109/ICNTE51185.2021.9487711.

[7] Aarti G. Ambekar, Amit. A. Deshmukh et. Al., "Modified Square Microstrip Antenna for DP Wideband Response," *2020 IEEE Pune Section International Conference (PuneCon)*, Pune, India, 2020, pp. 157-162, DOI: 10.1109/PUNECON50868.2020.9362398.

[8] Aarti G. Ambekar, Amit A. Deshmukh, et. al., "Om-Shape Microstrip Antennas for DP Wideband and Multiband Response" *2020. 3rd International Conference on Advances in Science & Technology (ICAST)*, Mumbai, India, 2020, pp. 1-6, DOI.ORG/10.2139/SSRN.3567247

[9] Amit A. Deshmukh, Aarti G. Ambekar, et.al, "Slot Loaded Triple-band Microstrip Antenna for GSM Application," *2020 3rd International Conference on Communication System, Computing and IT Applications (CSCITA)*, Mumbai, India, 2020, pp. 94-99, DOI: 10.1109/CSCITA47329.2020.9137814.

[10] Aarti G. Ambekar, Amit A. Deshmukh, et. al., "Formulation and Analysis of Shorted U-Shaped Microstrip Antenna for Broadband Dual Frequency Response," *2019 International Conference on Advances in Computing, Communication and Control (ICAC3)*, Mumbai, India, 2019, pp. 1-6, DOI: 10.1109/ICAC347590.2019.9036828

[11] Aarti G. Ambekar, Amit A. Deshmukh, et.al, "DP Variations of P-Shape Microstrip Antenna Loaded with Stub," *Proceedings of International*

Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies (ICWiCOM), Mumbai, India, Vol 36, pp. 257-266, 2020 Springer, Singapore. DOI.ORG/10.1007/978-981-15-1002-1_27

[12] Aarti G. Ambekar, Amit A. Deshmukh, et.al.,” Stub Loaded Semi-Annular Ring Microstrip Antenna for Multiband Dual-Polarized Response.,” *Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies (ICWiCOM)*, Mumbai, India, Vol 36, pp. 85-93, 2020 Springer, Singapore. DOI.ORG/10.1007/978-981-15-1002-1_10

[13] Aarti G. Ambekar, Amit A. Deshmukh, et.al.,” Analysis of Dual-band Response of Slot Loaded Rectangular Microstrip Antenna Using Defected Ground Structure.,” *Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies (ICWiCOM)*, Mumbai, India, Vol 36, pp. 215-224, 2020 Springer, Singapore. DOI.ORG/10.1007/978-981-15-1002-1_23

[14] Aarti G. Ambekar, Amit A. Deshmukh, et.al.,”Modified S-Shape Microstrip Antennas for DP Multiband and Wideband Response,” *2019 9th International Conference on Advances in Computing and Communication (ICACC)*, Kochi, India, 2019, pp. 193-198, DOI: 10.1109/ICACC48162.2019.8986180.

[15] Aarti G. Ambekar, Amit A. Deshmukh, et.al., “DP Multiband Stub and Slot Loaded Semicircular Microstrip Antenna,” *Proceedings of 2nd International Conference on Advances in Science & Technology (ICAST-2019)* K. J. Somaiya Institute of Engineering & Information Technology, University of Mumbai, Maharashtra, India, SSRN 3368184, pp. 1-6, 2019.

[16] Aarti G. Ambekar, Amit A. Deshmukh, et. al., "Investigation Into The Multiband Response of Shorted M-shape Patch Antenna," *2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT)*, Coimbatore, India, 2019, pp. 1-6, DOI: 10.1109/ICECCT.2019.8869159.

[17] Aarti G. Ambekar, Amit A. Deshmukh, et. al.“Slit Cut Circular Microstrip Antenna for Multiband Response.,” In: Kumar A., Mozar S. (eds) ICCCE 2019. *Lecture Notes in Electrical Engineering*, Vol 570. Springer, Singapore.

DOI.ORG/10.1007/978-981-13-8715-9_15

[18] Aarti G. Ambekar, Amit A. Deshmukh, et. al., (2020),” Multiband Response Investigation for Stub-Loaded Right-Angled Isosceles Triangle Microstrip Antenna,”. In: Janyani V., Singh G., Tiwari M., Ismail T. (eds) Optical and Wireless Technologies. *Lecture Notes in Electrical Engineering*, Vol 648, pp. 207-213, Springer, Singapore. DOI.ORG/10.1007/978-981-15-2926-9_23

[19] Aarti G. Ambekar, Amit A. Deshmukh, et. al., "Circular Microstrip Antenna Loaded with Pair of Arc Shape Slots for DP Wideband Response," *2018 15th IEEE India Council International Conference (INDICON)*, Coimbatore, India, 2018, pp. 1-6, DOI: 10.1109/INDICON45594.2018.8987132.

[20] Aarti G. Ambekar, Amit A. Deshmukh, et.al.,”60° Sectoral Microstrip Antenna For DP Multiband and Wideband Response,” *IEEE Proceedings of ICCUBEA, 16th and 17th August, 2018, Pune, India*, DOI 10.1109/ICCUBEA.2018.8697436.

[21] Amit A. Deshmukh, Aarti G. Ambekar, et. al, "Compact Y-shape antenna for DP wideband response," *2017 IEEE Applied Electromagnetics Conference (AEMC)*, Aurangabad, India, 2017, pp. 1-2, DOI: 10.1109/AEMC.2017.8325714.

[22] U. Patel and A. G. Ambekar, "Moment Based Sign Language Recognition for Indian Languages," *2017 International Conference on Computing, Communication, Control and Automation (ICCUBEA)*, 2017, pp. 1-6, doi: 10.1109/ICCUBEA.2017.8463901

[23] Ashish S. Nikam and Aarti G. Ambekar, “Sign Language Recognition using Image Based Hand Gesture Recognition Techniques”, *IEEE 3rd International Conference on Innovations in Information, Embedded and Communication System (ICIIECS’16)*, March 2016

[24] Ashish S. Nikam and Aarti G. Ambekar “Bilingual Sign Recognition Using Image Based Hand Gesture Technique for Hearing and Speech Impaired People”, *IEEE 2nd International Conference on Computing, Communication, Control And Automation*, August- 2016. Paper ID:779

	<p>[25] Priti Hargunani , Sulkashana Borsune Aarti G. Ambekar," Mobile Agents system with Multiple Layers of Security ", IJCA Proceedings on International Conference on Computer Technology 2015(7):17-21, September 2015</p> <p>[26] Sumit Wagh , Aarti G. Ambekar," Shoulder Surfing Resistant Text – Based Graphical Password Scheme’ IJCA Proceedings on International Conference on Computer Technology 2015(3):17-19, September 2015</p> <p>[27] Shilpa A. Talele, Aarti G. Ambekar,Deepshikha Hinger," Novel PTS Technique to PAPR Reduction for STBC MIMO-OFDM using Four Transmitting Antennas", IJCA Proceedings on International Conference on Computer Technology 2015(1):25-30, September 2015.</p> <p>[28] Aarti G. Ambekar, Chhaya Hinge , Samidha Kulkarni “Bilingual OCR for handwritten English & Marathi Text” in International Conference on Emerging Trends in Technology & Its Application(ICETTA-2013) on 06th, 07th March, 2013 at YTIET, Karjat</p> <p>[29] Chhaya Hinge, Aarti G. Ambekar, , Samidha Kulkarni, “Computerized Blood cell count using KNN classifier” in International Conference on Advance in Communication and computing Technology on 10th, 11h August, 2013 at PVPPCOE, Sion, Mumbai.</p>	
Area of Specialization	Antennas, Image Processing	
Professional Memberships	: Life Member of Indian Society of Technical Education (ISTE)	LM 64788
Awards	: “SAP Award of Excellence” in the AICTE Approved FDP on “Use of ICT in Education for Online and Blended Learning’	Organized by IIT Bombay in 2016.

Subjects Taught	UG Level:			
	Sr. No.	Name	Sem	Total Experience (in Years)
	1.	Basic Electrical and Electronics Engineering	I (old)	3
	2.	Electronic Devices and Circuits-I	III (old)	2
	3.	Electronic Devices and Circuits-II	IV (old)	2
	4.	Signals and Systems	III (CBGS) (old)	1 1
	5.	Linear Integrated Circuits	IV(old) (CBGS) (old)	3 1
	6.	Image Processing and Machine Vision	V (CBGS) (old)	1
	7.	Microcontroller and Applications	VI(CBGS) (old)	2
	8.	Antenna and Wave Propagation	VI (old)	2
	9.	Image and Video Processing	VII (CBGS) (old)	4
	10	Microwave Engineering	VII (CBGS) (old)	2 1
	11.	Telecommunication Network Management	VIII (CBGS) (old)	4

Projects Guided	<p><u>UG Level:</u></p> <p>AY 2020-21</p> <ol style="list-style-type: none"> 1. Broadband Antenna Design Using Neural Networks 2. Circular Microstrip Antenna Array <p>AY 2019-20</p> <ol style="list-style-type: none"> 1. Real Time Patient Monitoring Health System 2. Automatic Waste Segregation using Robotic Arm and Image Processing 3. Weather Forecasting , Disaster Prediction and Recommendations <p>AY 2018-19</p> <ol style="list-style-type: none"> 1. Student Coin 2. Deep image prior using Python 3. Application which converts camera feed to caption <p>AY. 2017-18</p> <ol style="list-style-type: none"> 1. Limnological Raft 2. Self-Balancing Robot using Arduino Bluetooth Module 3. Solving Rubtics cube using Image Processing <p>AY. 2016-17</p> <ol style="list-style-type: none"> 1. Agro-bot using solar energy 2. Cheque and coin detection for bank applications 3. Wearable Tech for concussion detection and player health monitoring <p>AY. 2015-16</p> <ol style="list-style-type: none"> 1. Implementation of Multitalented Spy robot using Microcontroller. 2. Implementation of Smart Ambulance using DTMF Trans receiver <p><u>PG Level:</u></p> <p>AY. 2016-17</p> <ol style="list-style-type: none"> 1. Indian sign language Recognition and Translation using Image Based Hand Gesture Technique Based on KNN and PNN classifier 2. Comparative Analysis of Video Watermarking Based on Different Wavelate Transform <p>AY. 2015-16</p> <ol style="list-style-type: none"> 1. Bilingual Sign Recognition using Image Based Hand Gesture Technique for Hearing and Speech Impaired People
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Recommended Students for Higher Education	Name of the Student	University/Industry
	<ol style="list-style-type: none"> 1. Rohan Jhaveri 2. Rahil Patel 3. Anamika Sen 4. Ashish Malpani 5. Yash Shah 6. Mihir Kulkarni 7. Stuti Patel 8. Tanvo Gogri 9. Anushka Gupta 10. Saurabh Labade 11. Kunjan Mehta 12. Ekta Trivedi 13. Antara Gupta 14. Urvi Gada 15. Soumya Mahuvakar 16. Raj Dasadia 17. Harshil Malavia 18. Hardik Modi 19. Anish Mishra 20. Atharv Desai 21. Mansi Shetty 22. Sagar Shah 23. Sanket Jain 24. Nirmayee Vilekar 25. Ashwin Shetty 26. Milind Jani 27. Gauri Gosavi 28. Drishti Parekh 29. Nigam shah 30. Harshit Modi 31. Somil Jain 32. Rohan Deo 33. Mihir shah 34. Harsh Raval 35. Pooja Jha 36. Binal shah 37. Rishil Patel 	<ol style="list-style-type: none"> 1. Colorado State University 2. University of Michigan 3. Verginia Tech 4. Verginia Tech 5. University of California. 6. Verginia Tech 7. University of Michigan 8. University of Illinois at Chicago 9. North Carolina State 10. North Carolina State 11. University of Texas at Austin 12. University of Southern California 13. University of Illinois at Chicago 14. North Carolina State 15. Northeastern University 16. University of Houston 17. University of Texas at Dallas 18. University of Texas at Dallas 19. Chalmers University 20. University of Colorado Boulder 21. University of Buffallo 22. Northeastern University 23. Stevens Institute of Technology 24. University of Buffalo 25. University of Southern California 26. Technische Universitat Berlin 27. University of Buffalo 28. University of Maryland 29. University of Maryland 30. New Jersey Institute of Technology 31. San Jose State University 32. Purdue University 33. Rutgers University 34. University of Bath 35. University of Washington 36. University of Texas at Dallas 37. University of Buffalo
<p>Institute/Department Responsibility handled:</p>	<ul style="list-style-type: none"> ➤ Member of National Institute Ranking Framework (NIRF) Committee ➤ Member of Placement Committee ➤ Member of Brand Management Committee ➤ Lab In-charge- RF Lab ➤ NBA Criteria 4 Departmental Level Coordinator ➤ Member of Organizing Committee of: - <ul style="list-style-type: none"> ○ International Conference on Wireless and Communication (ICWiCOM) 2017 ○ International Conference on Wireless and Communication (ICWiCOM) 2019 ○ International Conference on Wireless and Communication (ICWiCOM) 2021 	

Pedagogy Development	<ol style="list-style-type: none"><li data-bbox="587 190 1225 235">1. https://www.youtube.com/watch?v=XrPiFxe9_78<li data-bbox="587 235 1225 264">2. https://www.youtube.com/watch?v=SMk7oS1c-zI
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