

	<b>Name</b>	<b>Dr. Shilpa Prithviraj Gaikwad</b>		
	<b>Designation</b>	<b>Associate Professor</b>		
	<b>Department</b>	<b>Electronics &amp; Communication Engineering</b>		
	<b>Qualification</b>	<b>M.E. (Electronics-VLSI), Ph.D. (E &amp; TC)</b>		
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	<b>Email ID</b>	<a href="mailto:spgaikwad@bvucoep.edu.in">spgaikwad@bvucoep.edu.in</a>		
	<b>Experience</b>	<b>Teaching :</b>	17-Years	<b>Industry :</b>

<b>Area of Interest</b>	Computer Networking, WDM Optical Networks and Optical Network on chip			
<b>Publications</b>	<b>International Journal (s):</b>	42	<b>National Journals (s) :</b>	01
	<b>International Conference (s):</b>	07	<b>National Conference:</b>	01
	<b>Patents: 02</b>			
<b>Publication Details</b>	<p><b>Academic Year: 2020-21</b></p> <ol style="list-style-type: none"> <li>Shweta Salunkhe, S. P. Gaikwad, S. R. Gengaje "A Novel Approach for CBIR Using Four-Layered Learning", Lecture Notes in Electrical Engineering, Springer Singapore, 703, pp. 607-621, 2021.</li> <li>Shweta Salunkhe, S. P. Gaikwad, S. R. Gengaje "A hybrid approach based on nonlinear approximation and holistic descriptor for efficient image retrieval", International Journal of Engineering Research and Technology, Vol. 13, Issue 13, pp. 4336-4343, 2021.</li> <li>Ms. Mousami Vanjale, Shilpa Gaikwad, Dr. J. S. Chitode, "A Review of Hardware Platforms for Wireless Ad Hoc Mobile/Sensor Networks", International Journal of Systems, Control and Communications, Vol. 11, Issue 3, pp. 272 - 287, 13 Aug 2020, Inderscience Publishers.</li> <li>Yash Malik, Nishtha Agarwal, Anushree Chandra, Shilpa Gaikwad, "Waste Segregation and Management using Electrical Conductivity", International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 04 Issue 9   Sept. 2020, pp. 1-6.</li> <li>Shilpa Gaikwad, Ayushi Nigam, Aditi Gupta, Nimish Mathur, "Health Monitoring System", International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 04 Issue 07, July 2020.</li> </ol>			

**Academic Year: 2019-20**

6. Savita V. Patil, Shilpa P. Gaikwad, S. R. Gengaje, "A Case Study of WSN MAC Protocols to Achieve Lifetime Maximization", 5th International Conference on Computing, Communication, Control and Automation (ICCUBEA), 1 Sept. 2019.
7. Ms. Mousami Vanjale, Dr. Shilpa Gaikwad, Dr. J. S. Chitode, "Performance Evaluation of ZigBee/802.15.4 for Implementation of Wireless Ad-Hoc Network", International Journal of Engineering Research & Technology (IJITEE), Vol. 8, Issue 9, July 2019, pp. 491-497.
8. R. A. Chavan, S. R. Gengaje, S. P. Gaikwad, "Classification of Pedestrian Using Convolutional Neural Network", (Scopus Indexed) International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-9, July 2019.
9. Rishabh Anand, Vidit Rustagi, Ashutosh Sharma, Dr S.P. Gaikwad, Prof. S. P. Tondare "Finger Gesture Vocalizer" International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 03, Issue: 06, PP. 1-16. Dec. 2019.
10. Shilpa Patil, Bharat Chaudhari, "Wavelength Converter Based Optimized RWA for All Optical Networks", Asian Journal of Computer Science and Technology, ISSN: 2249-0701, Vol. 8, Issue 2, pp. 116-120, June 2019.
11. Harshlata S. Punase, Dr. S. P. Gaikwad, "Smart Waste Management with Bio-Gas Production", Journal of Emerging Technologies and Innovative Research, ISSN:2349-5162, Vol. 6, Issue 6, pp. 620-625, June-2019.
12. Akshay Srivastava, Rishav Kumar, Madhur Singh, Mrs. S P Gaikwad, "Implementation of FM Transmitter using Software Defined Radio based on RTL", International Journal of Innovative Research in Technology (IJIRT), Vol. 6 Issue 1, PP. 420-422, June 2019.

**Academic Year: 2018-19**

13. Bharat S. Chaudhari, S. S. Patil, "Optimized designs of low loss non-blocking optical router for ONoC applications", International Journal of Information Technology, Springer, Vol. 12, pp. 91-96, April 2019.
14. Harshlata Punase, Dr. S. P. Gaikwad, "Smart Waste Management", International Journal of Research in Electronics and Computer Engineering, ISSN: 2348-2281, Vol. 7, Issue 2, pp. 2956-2960, April-June 2019.
15. Salunkhe, S., Gaikwad, S.P., Gengaje, S.R., "Efficient four layer approach for content based image retrieval", Journal of Advanced Research in Dynamical and Control Systems, Vol. 11 Issue 5 (Special Issue), pp. 2106-2115, 2019.
16. R. A. Chavan, S. R. Gengaje, S. P. Gaikwad, "Multiple pedestrian tracking with occlusion handling in high-density crowds" (Scopus Indexed) Journal Of Advanced Research in Dynamic and Control System (JARDCS), Vol. 11, 06-Special Issue, pp.1522-1535, 2019.
17. R. Chavan, S. R. Gengaje, S. P. Gaikwad, "Multi-Object Detection Using Modified GMM-Based Background Subtraction Technique", Lecture Notes in Computational Vision and Biomechanics, Vol. 30, Jan. 2019.
18. Neha Bagale, Dr Shilpa Gaikwad, Dr Krishna Naik, "Survey and Study on High Rate Mimo Ofdm for Underwater Acoustics Communication", International Journal Of Research in Electronics and Computer Engineering, ISSN: 2393-9028 (PRINT) | ISSN: 2348-2281 (ONLINE), Vol. 6 Issue 4, pp. 1085-1092, Oct./Dec. 2018.
19. Neha Bagale, Dr Shilpa Gaikwad, Dr Krishna Naik, Mrs. S. P. Tondare, "MIMO-OFDM for high rate underwater communication", RESEARCH REVIEW International Journal of Multidisciplinary, ISSN 2455-3085 (Online), ISSN 2455-3085 (Online), Vol. 3 Issue 12, pp. 105-108, December 2018.
20. Abhinav Shukla, Amritanshu, Diksha Sharma, Prof. Dr. S.P. Gaikwad, Prof. S.P. Tondare "A 2-Dimensional Optical Router for Optical

Networks- on -Chip", International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056, Vol. 05 Issue 07, pp. 1942-44, July 2018.

21. Yash Dwivedi, Swati Kumari, Vikas Verma, Shilpa P. Gaikwad, K. Krishna Naik, "Telemetry Ranging System using OQPSK for Space", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653, Vol. 6, Issue 6, pp. 1416-1419, June 2018.

**Academic Year: 2017-18**

22. Mousami Vanjale, Dr. Shilpa Gaikwad, Dr. J. S. Chitode, "Residual Battery Capacity Based Routing Protocol for Extending Lifetime of Mobile Ad Hoc Network", 2018 International Conference on Advances in Communication and Computing Technology- ICACCT, 8-9 Feb. 2018 (IEEE Digital Explore - Scopus indexed)
23. R. A. Chavan, S. R. Gengaje, S. P. Gaikwad, "Multiple object detection using modified GMM based background subtraction technique", (Scopus Indexed) Springer International conference on ISMAC Computational vision and Bio-Engineering, pp. 945-954, 2018.
24. Ruchi Vyawahare, Prof. S. P. Tondare, Prof. Dr. S. P. Gaikwad, "Vital parameter monitoring for health through IOT using biosensors and medicines box", International Journal of Scientific & Engineering Research ISSN: 2320-9798, Vol. 06, Issue 04, pp. 3302 to 3307, April 2018.
25. Ruchi vyawahare, Prof.S. P. Tondare, Prof. S. P. Gaikwad, "Vital Parameter Monitoring For Health Through IoT using Biosensors and Medicine Box", International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), ISSN: 2320-9801, Vol 6, Issue 4, pp. 3302-3307, April 2018.
26. S. P. Gaikwad, S.P.Tondare, Meshram Priyadarshani Rajkumar, "Design and realization of automatic video-based docking structure for home surveillance robots by using raspberry pi", International Journal of

Scientific and Engineering Research (IJSER), ISSN: 2229-5518, Vol. 8, Issue 11, November 2017.

27. Mamta, Mohini Pandey, Prerna Bisen, Dr. S.P.Gaikwad, S.P.Tondare, "Data Acquisition from heart through wireless telemetry", International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), ISSN (Online): 2320-9801, Vol. 6 Issue 5, pp. 5539-5543, May 2018.
28. Srushti Chavan, Prathana Gadekar, Manjunath Patil, Dr. S.P.Gaikwad, S.P.Tondare, "Solar Powered Non Invasive Pulse oximeter and heart rate meter", International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), ISSN (Online): 2320-9801, Vol. 6 Issue 5, pp. 5279-5285, May 2018.
29. Ms. Mousami Vanjale, Dr. Shilpa Gaikwad, Dr. J. S. Chitode, "Residual Battery Capacity Based Routing Protocol for Extending Lifetime of Mobile Ad Hoc Network", International Conference on Advances in Communication and Computing Technology-ICACCT, 8-9 Feb. 2018.

**Academic Year: 2016-17**

30. Abhijeet Srivastava, Ruchik Gaikwad, Mohsin Khan, Shilpa Gaikwad and Sharda Tondare, "An Electronically Controlled Damper System to Reduce the Roll and Pitch in Automobiles", International Journal of Engineering and Technology (IRJET), p-ISSN: 2395-0072, Vol. 04, Issue 04, pp. 1 to 6, April 2017.
31. Divya Singh, Jyuthika Sen, Yashpriya Sharma, S. P. Tondare, and S. P. Gaikwad, "Pain Relief Through Electrical Simulation", International Journal of Engineering and Technology (IRJET), p-ISSN: 2395-0072, Vol. 04, Issue 04, pp. 2718 to 2722, April 2017.
32. Mujawar Ulafatjahan, Poornima, S. P. Tondare, and S. P. Gaikwad, "Sleep Inducer", International Journal of Engineering and Technology (IRJET), p-ISSN: 2395-0072, Vol. 04, Issue 04, pp. 2067 to 2070, April 2017.

33. Diksha Bolshette, Sonupriya Langote, Sonali Lokare, Prof. S. P. Tondare, Prof. S. P. Gaikwad, "HEARING AID", International Journal of Engineering and Technology (IRJET), p-ISSN: 2395-0072, Vol. 04, Issue 04, pp. 2690 to 2695, April 2017.
34. Anshika Mishra Ayushi Goel, Sanjoli Omar, Dr. S. P. Gaikwad Mrs. S. P. Tondare, "Air Pollution and Noise Pollution Detector Using ESP8266", International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 03 Issue: 06, PP. 1-7, June 2016.

**Academic Year: 2015-16**

35. Shilpa Patil and Bharat Chaudhari, "Placement of Sparse Partial Uniform and Non-uniform Wavelength Converters in Wavelength Routed Networks," in Proc. of IEEE International Conference on Electronics, Computing and Communication Technologies-CONECCT 2015, Bangalore, India, July 2015, pp. 1-6. (IEEE Xplore)
36. Shilpa S. Patil, Bharat S. Chaudhari and Baojun Li, "New weight dependent routing and wavelength assignment strategy for all optical networks in absence of wavelength converters," ICTACT Journal on Communication Technology, vol. 06, no. 3, pp. 1131-1135, Sept. 2015.
37. Shilpa S. Patil and Bharat S. Chaudhari, "Placement of Wavelength Converters in Dynamically Routed All Optical Networks in presence of Tunable Transceivers," Journal of Network Protocols and Algorithms, vol. 7, no. 4, pp. 26-36, Dec. 2015.
38. Shilpa S. Patil and Bharat S. Chaudhari, "Enhanced Adaptive Routing Technique for Benes ONoC," Intl. Journal of Networking and Communication Engineering, vol. 8, no. 2, pp. 31-34, Feb. 2016.

**Academic Year: 2014-15**

39. Prajakta Deshmukh, S.P. Gaikwad, K. Krishna Naik , "Multipath Propagation of Statistical Underwater Acoustic Channel", International

Journal of Electrical, Electronics and Data Communication ISSN(P) : 2320-2084, ISSN (O): 2321-2950 Special Issue 01, April 2015, pp: 47-50.

40. Prajakta Deshmukh, S.P. Gaikwad, K. Krishna Naik , "Multipath propagation of statistical underwater acoustic channel", ETECE-International Conference, 2<sup>nd</sup>& 3<sup>rd</sup> April 2015.
41. Prajakta Deshmukh, S.P. Gaikwad, K. Krishna Naik , "Multi signal Underwater Communication Using IDMA", IETE National Journal of Innovation and Research Volume 02, Issue 02, December 2014
42. Ms. Priyanka Uday Patil, Prof. S. P. Gaikwad , "Throughput and Packet Error Rate Analysis using Routing Algorithm", International Journal of Science and Research ISSN(O): 2319-7064 Volume 03, Issue 11, November 2014, pp:3113-3116.
43. Samudra Sampada, Prof. S.P. Gaikwad, "Quality of Service Parameters for Optical Burst Switched Network", International Journal of Research in Engineering and Technology ISSN(O): 2319-1163, ISSN(P): 2321-7308 Volume 03, Issue 11, November 2014, pp :1-5.
44. P. D Yadav, Shilpa Gaikwad, "Simulating Wavelength Converter to Reduce Call Blocking", International Journal of Electronics and Communication Engineering ISSN:2348-8549 Volume 01, Issue 09, November 2014, pp: 19-23.
45. Prajakta Deshmukh, S.P. Gaikwad, K. Krishna Naik , "Multipath Propagation of Statistical Underwater Acoustic Channel", 1<sup>st</sup> International Conference on Emerging Trends in Electronics and Communication Engineering 2<sup>nd</sup> April 2015.

**Academic Year: 2013-14**

46. Mrs. S. P. Gaikwad, Ms. Priyanka Patil, "Routing Mechanism for the Improvement of Network Throughput", International Journal of Advanced Research in Computer Science and Volume 04, Issue 05, May 2014.

	<p>47. Sampada Samudra, Mrs. S.P. Gaikwad, "Optical Burst Switching (OBS) for DWDM Transmission Medium: An Overview", International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) ISSN( Print): 2319-5940 ISSN( Online): 2278-1021 Volume 12 Issue 2 December 2013.</p> <p>48. S. P. Gaikwad, "Application of Heart Photoplethysmograph", National conference on Advanced Technologies for Secured communication using 4G &amp; LTE-14 5<sup>th</sup>&amp; 6<sup>th</sup> Feb14.</p> <p>49. S. D. Samudra; S. P. Gaikwad, "A Survey of HDLC Controllers", International Journal of Science and Research (IJSR) Vol.2, No. 4. 2013.</p> <p><b>Academic Year: 2010-11</b></p> <p>50. Mrs. S. P. Gaikwad, Mrs. S. P. Tondare, "Nanotechnology in Cochlear implants using Nanobiomaterials for Drug Delivery and Stimulation," International Conference on NanoTechnology Materials and Composite Frontier Applications (NANOCON 2010) 14,15 Oct 2010.</p> <p>51. Mrs. S. P. Gaikwad, Mrs. S. P. Tondare, "Nanotechnology and its Advent in Electronics and Communication Networks", International Conference on NanoTechnology Materials and Composite Frontier Applications (NANOCON 2010) 14,15 Oct 2010.</p>
<p><b>Patent Published</b></p>	<p>1. Shilpa S. Patil and Bharat S. Chaudhari, "Five Port Optical Router for Optical Network on Chip Applications," Filed and published in The Indian Patent Office Journal, No. 29/2016, Ref. 201621017235A, P50685, July 15, 2016.</p> <p>2. Mausami Vanjale and Shilpa Gaikwad, "A Method for Enhancing and Estimating Lifetime of Wireless Ad Hoc Network", Ref. no.-202021003501- Patent published.</p>
<p><b>Professional Memberships</b></p>	<p>1. ISTE (Life membership) 2. BOS member</p>



**WorkShop/  
Seminar/Conference  
attended**

- 1) AICTE Sponsored Six Days Online Short Term Training Program (STTP), Technical Writing & Research Methodology, Chaitanya Bharathi Institute of Technology, Proddatur, from December 14 2020 to December 19, 2020.
- 2) AICTE sponsored six days Short Term Training Program (STTP) , Terahertz Band: Next Frontier for Wireless Communication, IFET College of Engineering, Gangarampalayam, Villupuram, from 20<sup>th</sup> July 2020 to 25<sup>th</sup> July 2020.
- 3) Short Term Training Program on MATLAB based Teaching-Learning in Mathematics, Science & Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai in collaboration with DesignTech Systems Pvt. Ltd., Mumbai from 18<sup>th</sup> May 2020 to 22<sup>nd</sup> May 2020.
- 4) Faculty Development Programme on Innovative Approaches in Management, BV(DU), COE, Pune & SBPCOE, Indapur, from 13<sup>th</sup> July 2020 to 19<sup>th</sup> July 2020.
- 5) Short Term Training Programme on Internet of Things(IoT) & Applications in Industry, RAIT, Navi Mumbai & B & R Automation Pvt. Ltd., Pune from 8<sup>th</sup> June 2020 to 11<sup>th</sup> June 2020.
- 6) Faculty Development Programme on R Programming, Indira College of Engineering and Management, Pune in association with Spoken Tutorial, IIT Bombay from 11<sup>th</sup> May 2020 to 15<sup>th</sup> May 2020.
- 7) Faculty Development Programme on Artificial Intelligence & Machine Learning, 15-17 May 2018.
- 8) Continuing Education and Quality Improvement Programmes on Biology for Engineers, COEP, Pune, 2017.
- 9) Workshop on Patent Drafting and Filing in BVDUCOE, Pune, 2017.

	<p>10) Participation in Author Workshop, Springer Nature and BVUCOE, Pune, 2017.</p> <p>11) Participation in 1<sup>st</sup> National Teachers Congress, MIT, Pune, 2016.</p> <p>12) Workshop on LABVIEW, BVUCOE, Pune, 2015.</p> <p>13) Training on CCNA, Axiom Technology, Pune, 2013.</p> <p>14) Workshop on women Empowerment, BVUCOE, Pune, 2014.</p> <p>15) Workshop on Application on MATLAB, National Water Academy Pune, 2013.</p> <p>16) Workshop on Leadership Development, BVUCOE, Pune</p> <p>17) Workshop on VLSI DESIGN at I<sup>2</sup>IT, Hinjawadi, Pune.</p> <p>18) Workshop on Mission10X at VIT, Pune</p>
<b>Achievement</b>	Received grant of Rs. 3.00 Lakhs from AICTE for the conduction of STTP.
<b>WORKSHOPS / SEMINARS / CONFERENCES / STTP CONDUCTED</b>	<ul style="list-style-type: none"> <li>• Organized AICTE sponsored STTP under AQIS on “Computer Networking” from 24<sup>th</sup> August 2020 to 29<sup>th</sup> August 2020.</li> <li>• Organized AICTE sponsored STTP under AQIS on “Computer Networking- Network Security” from 21<sup>st</sup> September 2020 to 26<sup>th</sup> September 2020.</li> <li>• Organized AICTE sponsored STTP under AQIS on “Computer Networking with SDN” from 26<sup>th</sup> October 2020 to 31<sup>st</sup> October 2020.</li> <li>• Organized International Conference on Nanotechnology- NANOCON 012, NANOCON 014, NANOCON 016 and NANOCON 018.</li> <li>• Organized Workshop on Latex in 2019.</li> <li>• Organized seminar on Opportunities in Industries 2018.</li> <li>• Organized International Conference NAACICE 2014.</li> </ul>
<b>Extra Activities</b>	<ul style="list-style-type: none"> <li>• PG Institute coordinator</li> <li>• BOS Member</li> </ul>

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|  | <ul style="list-style-type: none"><li>• Senior Supervisor at Institute for Final Exams</li><li>• Senior Supervisor at Department for Unit Test</li><li>• Worked as a Seminar coordinator</li><li>• Worked as a Department Project coordinator</li><li>• Arranged Industrial visits to various Industries such as Reliance Jio, Mumbai, Asian Paints, Khandala, Idea, Pune etc.</li><li>• Worked as AMIE coordinator.</li><li>• R &amp; D cell member.</li><li>• Core committee member for organizing International Conferences Nanocon 012, Nanocon 014, Nanocon 018 and NACICE 2013.</li><li>• Active participation in Alumni association activities as Executive council member of Alumni Association.</li><li>• Contribution in admission process as a scrutiny committee member for UG and PG.</li><li>• Active participation in Swachha Bharat Abhiyan conducted at Vitthalwadi,2015</li><li>• Contribution in syllabus revision workshops as BOS member.</li><li>• Contribution in NBA and NAAC activities.</li><li>• Contribution in conduction various workshops under Women's Cell.</li></ul> |
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