

	<b>Name</b>	<b>Dr. Mrs. Mangal Vedant Patil</b>		
	Designation	Associate Professor		
	Department	Electronics and Communication Engineering		
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	Experience	Teaching:	19-Years	Industry: 0.5 Years

<b>Area of Interest</b>	<b>Signal processing, Communication</b>			
<b>Publications</b>	<b>International Journals:</b>	<b>42</b>	<b>Book Chapters</b>	<b>03</b>
	<b>International Conferences:</b>	<b>06</b>	<b>National Conference:</b>	<b>02</b>
<b>Publication Details</b>	<p><b>Academic Year 2022-23</b></p> <ol style="list-style-type: none"> <li>1. Mangal, P., Deolalikar R. (2023). Music Source Separation with Deep Convolution Neural Network. ICT Infrastructure and Computing. Lecture Notes in Networks and Systems, vol 520. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-19-5331-6_21">https://doi.org/10.1007/978-981-19-5331-6_21</a>.</li> <li>2. Mangal Patil, J S Morbale, A S Nigade, Saloni, Priya Padma , “ Implementation of real time face mask recognition technique using Keras, TensorFlow “, Seventh International Conference on Smart Trends in Computing and Communications, 24th – 25th January 2023, Jaipur, India.</li> <li>3. Mangal Patil, Saloni Aggarwal, Priya, Muskan “Performance evaluation of Deep learning based facemask detection systems”, 7<sup>th</sup> International Conference on Microelectronics, Computing &amp; Communication Systems (MCCS-2022), 9-10th July 2022, Ranchi.</li> </ol> <p><b>Academic Year 2021-22</b></p> <ol style="list-style-type: none"> <li>4. M. V. Patil, Subhawna, Priya Shree, Puneet Singh, “AI based healthcare chat bot system”, International Journal of Scientific &amp; Engineering Research Vol. 12, Issue 7, July-2021, pp:668-671.</li> <li>5. Anupriya Mandal, Divyansh Singh, Rachel Shukla, M V Patil, “IOT and Machine Learning based Automatic Toll Collection System “International Journal of Scientific &amp; Engineering Research Vol. 12, Issue 7, July-2021, pp:662-667.</li> <li>6. Mangal Patil, J S. Chitode, “SVD based Audio Watermarking Algorithm Using Dual Watermark for Copyright Protection” <b>Book Chapter in New Visions in Science and Technology, B P</b></li> </ol>			

	<p><b>International</b> Vol.5,pp.107-120,ISBN:978-93-5547-120-8) DOI: 10.9734/bpi/nvst/v5/4163F</p> <p>7. Patil Mangal, Bamane P., Hasarmani S., "Efficient Watermarking in Color Video Using DWT-DFT and SVD Technique". <b>Book Chapter</b> in Progress in Advanced Computing and Intelligent Engineering. Advances in Intelligent Systems and Computing, vol 1198. <b>Springer</b>, Singapore. <a href="https://doi.org/10.1007/978-981-15-6584-7_8">https://doi.org/10.1007/978-981-15-6584-7_8</a>.</p> <p><b>Academic Year 2020-21</b></p> <p>8. Preeti Bamne, Mangal Patil, "A comparative study of different LSTM neural networks in predicting air pollutant concentrations" Indian Journal of Science and Technology, Vol: 13, Issue: 35, pp: 3664-3674, October 2020 (<b>Web of Science</b>).</p> <p>9. Mangal Patil, Preeti Bamane, Supriya Hasarmani, "Efficient Watermarking in Color Video Using DWT-DFT and SVD Technique", Progress in Advanced Computing and Intelligent Engineering, Vol 1198, PP.978-981, Oct2020. (<a href="https://doi.org/10.1007/978-981-15-6584-7_8">https://doi.org/10.1007/978-981-15-6584-7_8</a>)</p> <p>10. Preeti Bamane, Mangal Patil, "Multiple Linear Regression using TensorFlow Predicting Fuel Consumption" International Research Journal of Engineering and Technology (IRJET) Volume: 07, Issue: 06, June 2020.</p> <p>11. Mrs. M V Patil, Shaurya Srivastava, Parag Fadnis, Rishabh Sharma, "Arduino based Short Circuit Protection System using various sensors", International Journal of Scientific Research in Engineering and Management, Volume: 04, Issue: 06, June -2020</p> <p>12. Mrs. M V Patil, Digvijay Singh, Diksha Singh, Lucy, "Microcontroller based open aqua-aero purifier", International Journal of Scientific Research in Engg. and Management, Vol: 04, Issue:06, June -2020</p> <p><b>Academic Year 2019-20</b></p> <p>13. M. V. Patil, Vishal, Anurag, Yashwant, "Music Identification based on fingerprinting" International Journal of Scientific research in Engg and Management" Vol.3, Issue 6, June 2019.</p> <p>14. Patil M V, Tanvi, J S Morbale, "Robotic Vehicle controlled by hand gesture using PIC" International Journal of Scientific research in</p>
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Engg and Management" Vol.3, Issue 6, June 2019.

**Academic Year 2018-19**

15. Keshav Kumar, Kumari Ritu, Mrigangna Singh, Mangal V. Patil, "Wireless Display using GSM and Arduino", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol.3, Issue.5, June 2018,ISSN : 2456-3307.
16. Antra Priya, Ankit Gupta, Jitendra Kumar, M.V. Patil, "Delta-3D Printer based on Cortex M3 Processor", International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Vol.3, Issue.5, June 2018, ISSN: 2456-3307.

**Academic Year 2017-18**

17. Mangal Patil, Vishakha Patil, "Curvelet Based ECG Steganography for Protection of Data" Springer Lecture Notes in Computational Vision and Biomechanics book series (LNCVB, Vol. 28), pp 238-248, DOI: [https://doi.org/10.1007/978-3-319-71767-8\\_20](https://doi.org/10.1007/978-3-319-71767-8_20) , P-ISBN: -978-3-319-71766-1, (Feb. 2018) **(Springer Book Chapter )**
18. Mangal Patil , J. S. Chitode, "Robustness Improvement of Digital Audio Watermarking by optimizing Singular values for Copyright Protection" WSEAS TRANSACTIONS on SYSTEMS and CONTROL, Vol. 12, PP.440-450,(Dec. 2017) **(SCOPUS)**
19. Maheshwari Kulmethe, M. V. Patil, "Techniques of Characteristics, Components of a Raga Identification System", Imperial Journal of Interdisciplinary Research (IJIR), Vol-3, Issue-9, 2017, ISSN: 2454-1362, pp.953-958

**Academic Year 2016-17**

20. M. V. Patil, Kalpana Shete, J. S. Chitode, "Least Significant bit & discrete wavelet Transform algorithm realization for Image steganography employing FPGA", International Journal of Image, Graphics and signal processing, Vol.6, PP.48-56, June 2016, DOI:10.5815/ijigsp.2016.06.06. (IF-0.722) **(web of science)**
21. Mrs. M. V. Patil, Dr. J. S. Chitode , "A Novel Digital Audio Watermarking Algorithm by Optimizing Singular Values",. International Journal of Computer Science and Information Security, Vol.14, No.12, December 2016, pp.880-885.
22. Mrs. M. V. Patil, Aditya, "Solar based Cell phone signal strength amplifier on GSM 900 frequency band," International Journal of Scientific and Engineering Research, Vol. 8, issue 3, March 2017.
23. Mrs. M. V. Patil, Nitish Oza, "Obstacle sensing walking stick for

visually impaired: International Research Journal of Engineering and Technology(IRJET), vol. 4, issue 4, Apr 2017.

24. Sheetal Shelke, Mrs. M V Patil, J.S. Chitode "Implementation of Audio Watermarking algorithm based on embedding strategy in high frequency sub-band with binary sequence using DWT-FFT", International Journal of Advanced Research, Vol.4(9), Sept. 2016
  25. Mangal Patil, Janardan Chitode, "Performance Evaluation of Digital Audio Watermarking based on Discrete Wavelet Transform for Ownership Protection", International Journal on Electrical Engineering and Informatics, Vol. 9, No. 1, March 2017.
- (SCOPUS)**
26. Gaurav Singh Bisht, Vivek Kumar Verma, Anish Kumar Singh, M. V. Patil , "A Study on Vehicle Accident Alert System", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering(IJAREEIE)ISSN (Online): 2278 – 8875, Vol. 6, Issue 4, April 2017 . pp.2383-2389.

#### **Academic Year 2015-16**

27. Bharat Avasthi, Sabya, Ashish Kumar, Mrs. M V Patil, "Robotic Arm Wirelessly Controlled by Android Application", International Journal of Engineering and Technical Research (IJETR) ISSN: 2321-0869, Volume-3, Issue-6, PP.193-196, June 2015. (IF.2.19)
28. Utkarsha Singh, Teesta Moitra, Neha Dubey, Mrs. M V Patil, "Automated fabric defect detection using MATLAB", International Journal of Advanced Technology in Engg. and Science, Vol. 3, Issue No. 06, PP.294-299, June 2015, ISSN (online): 2348 – 7550, IF-2.87
29. Sheetal Shelke, Mrs. M V Patil, J.S. Chitode, "DWT-DFT based Audio watermarking algorithm for copyright protection", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-5, Issue-2, Dec.2015 (IF-3.84)
30. Shete Kalpana, Mrs. M V Patil, J.S. Morbale, "FPGA implementation of Image Stegnography using LSB and DWT", International Journal of Computer Science & Network (IJCSN) ISSN: 2277-5420, Vol.4, Issue 6, PP. 847-853, Dec.2015. (IF.1.02)
31. Supriya Hasarmani, Mrs. M V Patil, P.R. Naregalkar, "Digital Video Watermarking using DWT-DFT Transforms and SVD Technique", International Journal of Computer Science & Network (IJCSN) ISSN: 2277-5420, Vol.4, Issue 6, PP. 854-859, Dec.2015. (IF-1.02)
32. M. V. Patil, Dheeraj Patil, "A Fast FPGA based Architecture Implementation for Reversible Image Watermarking", International

	<p>Journal of Engineering and Advanced Technology Vol.5, Issue 4, April 2016. PP. 228-232. (IF- 3.84)</p> <p>33. M. V. Patil, Disha Kapoor, Rohit Pandey, Rishav Vaid, "Electronics Dice using Dot matrix display", International Journal of Engineering Sciences &amp; Research Technology, Vol.5, May 2016.(IF- 3.785),PP. 315-321.</p> <p>34. Sonam Singh, Mrs. M.V. Patil, "Multi Focus Image Fusion Based on Spatial Frequency and Contrast Based Analysis under Stationary Wavelet Transform Domain", International Journal of Scientific &amp; Engineering Research, Vol.7, No. 5, May 2016,PP. 225-230.(IF- 3.8)</p> <p><b>Academic Year 2014-15</b></p> <p>35. Mrs. M V Patil, Prashant Chauhan, Prem Prakash, "Wireless Agriculture System Using Zigbee, International Journal of Electronics &amp; Communication Technology, Vol. 5, Issue 2, April - June 2014, PP- 233-236, ISSN: 2230-7109. IF-0.675</p> <p>36. Mrs. M V Patil, Ashish, Ashwin Kumar, "Zigbee based voice recognition wireless home automation system", Indian streams Research Journal, Vol. 4 Issue. 6, PP: ISSN- -2230-7850. July 2014. DOI: 10.9780/22307850, (IF-4.1625)</p> <p><b>Academic Year 2013-14</b></p> <p>37. Mrs. M. V. Patil, Dr. J. S. Chitode, "Improved Technique for Audio Watermarking Based on Discrete Wavelet Transform", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-2, Issue-5, June 2013, pp.511-516. (1.097)</p> <p>38. Komal Shedge, Mrs. M V Patil, "A New Facet in Robust Audio Watermarking in DWT-SVD Domain", International Journal of Engineering Research &amp; Technology (IJERT), volume 3, Issue 5, May 2014 (IF-1.76)</p> <p>39. Jyoti Mishra, Mrs. M. V. Patil, "An Effective Audio Watermarking using DWT-SVD, International Journal of Computer Application, PP. 6-11, ISSN- 0975 – 8887, May. 2013. (IF-0.791)</p> <p>40. Komal Shedge, Mrs. M V Patil, "Dual Transform Based Audio Watermarking", International Journal of Scientific &amp; Engineering Research ( IJSER), volume 5, Issue 5, May 2014. ISSN: 2229-5518 (IF- 3.8)</p> <p><b>National Conference</b></p> <p>41. Sahil Jain, Mudit Agarwal, M.V.Patil, "Biometric Voting machine",</p>
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	<p>NACICE-2013,Pune.</p> <p><b>International Conference</b></p> <p>42. Mrs. M V Patil, KomalShedge, "Adaptive Audio Watermarking techniques: A literature Review", Conference on Recent Trends in Engineering &amp; Technology (ICRTET'2014), K. B. Jain College of Engineering, Chandwad. 978-93-5107-221-8, March 2014.</p> <p><b>Academic Year 2012-13</b></p> <p>43. Mrs. Mangal V. Patil , Dr. J. S. Chitode, " A Concise Review of Digital Audio Watermarking Techniques ", Ciit International Journal of Digital Signal Processing,Vol 4, No 5, May 2012,pp.205-211 ( IF-0.126)</p> <p>44. Mrs. Mangal V. Patil, Dr. J. S. Chitode, "Audio Watermarking: A way to Copyright Protection", International Journal of Engineering &amp; Research &amp; Technology, Vol. 1 Issue 6, August – 2012, pp.1-5. ISSN: 2278-0181(1.76)</p> <p>45. Mrs. M. V Patil, Yatin Baluja, "Frequency domain based data hiding technique for audio" Vol. 2, Issue 5, May 2013 PP. 1564-1569, (IF-1.23)</p> <p>46. Mrs. M. V Patil, "Audio and Speech Compression Using DCT and DWT Techniques", International Journal of Innovative Research in Science, Engineering and Technology, pp. 1712-1719, May 2013, Vol. 2, Issue 5, ISSN: 2319-8753, (IF-6.209)</p>
	<p><b>Book Chapters/ Lecture Notes</b></p> <p>1. Mangal Patil, Vishakha Patil, "Curvelet Based ECG Steganography for Protection of Data" <b>Springer Lecture Notes</b> in Computational Vision and Biomechanics book series (LNCVB, Vol. 28), pp 238-248, DOI: <a href="https://doi.org/10.1007/978-3-319-71767-8_20">https://doi.org/10.1007/978-3-319-71767-8_20</a> , P-ISBN: -978-3-319-71766-1, (Feb. 2018) (Springer Book Chapter )</p> <p>2. Mangal Patil, Preeti Bamane, Supriya Hasarmani, "Efficient Watermarking in Color Video Using DWT-DFT and SVD Technique", Progress in Advanced Computing and Intelligent Engineering (<b>Springer Book Chapter</b> ),vol 1198, PP. 978-981, Oct 2020 . (<a href="https://doi.org/10.1007/978-981-15-6584-7_8">https://doi.org/10.1007/978-981-15-6584-7_8</a>)</p> <p>3. Mangal Patil, J S. Chitode, "SVD based Audio Watermarking Algorithm Using Dual Watermark for Copyright Protection" Book Chapter in New Visions in Science and Technology, B P International Vol.5,pp.107-120,ISBN:978-93-5547-120-8) DOI: 10.9734/bpi/nvst/v5/4163F</p>

<b>Professional Membership</b>	<ol style="list-style-type: none"> <li>1. ISTE (Life membership)</li> <li>2. Member, BOS, Electronics &amp; Communication Engineering</li> <li>3. Member, Faculty of Science, BVDU</li> </ol>
<b>Research Projects</b>	<p><b>Title of the Project: Dual Transform based Digital Audio Watermarking Technique</b></p> <p>Funded by : <b>TEQIP-II- 2.83 Lakh</b> <b>BVUCOE - 17 Lakhs</b></p> <ul style="list-style-type: none"> <li>• <b>Research Grant of 19.83 Lakh</b> received under TEQIP for the development of ' <b>Speech and Sound Processing Laboratory</b>' in the department of Electronics.</li> </ul>
<b>Achievements</b>	<ul style="list-style-type: none"> <li>• Completed <b>Cambridge University Teachers Training Certification</b></li> <li>• Contributed as a Reviewer for <b>Asian Journal of Medicine and Health, December 2021.</b></li> <li>• As a Reviewer contributed for <b>Informatics in Medicine Unblocked Journal (Elsevier) 2019.</b></li> <li>• As a Reviewer contributed for "<b>Journal of Engineering Science &amp; Technology</b>", 2019).</li> <li>• Contributed as a Reviewer for " <b>IEEE Symposium on Industrial Electronics &amp; Applications (ISIEA2021)</b>"</li> <li>• As a Reviewer contributed for "<b>Journal of Engineering Science &amp; Technology</b>", 2019 .</li> </ul> <p>As a Reviewer contributed for "<b>Journal of Engineering Science &amp; Technology</b>", 2018.</p>
<b>Responsibilities</b>	<ul style="list-style-type: none"> <li>• <b>Innovation Coordinator, Institute's Innovation Council (IIC), BVDUCOEP.</b></li> <li>• <b>Virtual Labs Nodal Coordinator at Institute level (2015-2021)</b></li> <li>• <b>Speech and Sound Processing Lab Coordinator.</b></li> <li>• <b>Executive Council member of Alumni Association.</b></li> <li>• <b>Member of Board of Studies, Electronics &amp; Communication Engg.</b></li> <li>• <b>Member of Faculty of Science, BVDU, Pune</b></li> <li>• <b>Admission Committee member</b></li> <li>• <b>Department NBA Coordinator from 2006 to 2017</b></li> <li>• <b>Worked as ESA coordinator</b></li> <li>• <b>Worked as Department Library In-charge</b></li> <li>• <b>Worked as Unit Test coordinator</b></li> </ul>