Prof. Prashant Bansod

1. Personal Information							
(i)	Name	Prashant Bansod	Photo				
(ii)	Qualification	Ph.D (Engineering)					
(iii)	Designation	Professor	60				
(iv)	Email-id	<pre>pbansod@sgsits.ac.in, ppbansod43@gmail.com</pre>					
(v)	Employee No.	3300221	1				
(Vi)	Department	Electronics & Instrumentation					
(vii)	Experience	27 Years					

2. Educational Qualification						
S. No.	Degree	Specialization	Year	University/Board		
1	Ph. D.	Biomedical Engineering	2010	Indian Institute of Technology, Bombay		
2	Master of Technology	Electronics	1992	Visvesvariya Regional College of Engg, Nagpur Nagpur University		
3	Bachelor of Engineering	Electronics & Instrumentation	1989	Shri Govindram Sakseria Institute of Tech. & Science, Indore DAVV, Indore		
4	HSSC (11 th)	Maths & Science	1983	M.P. Board of Secondary Education, Bhopal		

3. Research Interests

- 1. Microprocessors and embedded systems
- 2. VLSI Design & Testability
- 3. Medical Image and Signal Processing
- 4. Medical Instrumentation

5. Research Paper Publications

(I) International/National Journal Publications

- 1.Prashant Bansod and M.C.Shrivastava, "Development of a Fiber Optic Sensor for non-invasive Analysis" Journal of Instrument Society of India, Banglore.1997.[IF=1.8]
- 2. Prashant Bansod and M.C.Shrivastava, "Comparative Study of Current Approaches for Minimally Invasive and Non-invasive Blood Glucose Monitoring", IETE Technical Review, Volume 21, Number 1, January-February 2004, pp: 45-54.[IF=0.9]https://doi.org/10.1080/02564602.2004.11417126
- 3. Prashant Bansod, U. B. Desai, S. N. Merchant and Nitin Burkule, "Spatio-temporal Guided Local Search for Semiautomatic Endocardial Contour Estimation in Echocardiography Sequences", Journal on Bioinformatics and Medical Engineering, volume 10, issue 1, pp:35-46, December 2010.
- 4. Prashant Bansod, U. B. Desai, S. N. Merchant and Nitin Burkule, "Segmentation of Left Ventricle in Short Axis Echocardiographic Sequences by Weighted Radial Edge Filtering and Adaptive Recovery of Dropout Regions", Taylor & Francis Journal on Computer Methods in Biomechanics and Biomedical Engineering, Volume 14, Issue 7, 2011, pp:603-613.[IF=1.793]https://doi.org/10.1080/10255842.2010.493507
- 5.GovindMaheshwari, Ankit Jain, ApurvaGaiwak and P.P.Bansod, "Indian Perspective Architecture for Advancement of Biomedical Telemedicine and mHealth System", Journal of Medical and Bioengineering, Volume 2, No. 1, 2013.(JOMB SSN: 2301-3796).
- 6.Rajni Gupta and Prashant Bansod, "Quality Measure of the Compressed ECHO, X-ray and CT images", Computer Vision and Image Understanding, WSPC, Vol. 13, No.1 (2013).[1.83]
- **7.**VaishaliNaik, R. S. Gamad and Prashant Bansod," Carotid Artery Segmentation in Ultrasound Images and Measurement of Intima-Media Thickness", Biomed Research International, Hindawi Publishing Corporation, Volume 2013, Article ID 801962.[2.706]https://doi.org/10.1155/2013/801962
- **8.**Anju Lata Yadav, P. D. Vyavahare and P. P. Bansod. "End to end QoS Provisioning For Triple Play Services in Integrated WiMAX and MPLS Network", IETE National Journal of Innovation and Research, Volume 1, Issue 1, June-2013, ISSN 2320-8961, pp: 46-53.[0.9]
- **9.**Vibha Tiwari, P.P. Bansod and Abhay Kumar "Performance Evaluation of Various Compression Techniques on Medical Images", International Journal of Advanced Electronics and Communication Systems, Approved by CSIR-NISCAIR, ISSN No. 2277- 7318, Issue 2, Volume 1, May 2012, Paper Id 10284.
- 10. VaishaliNaik, R. S. Gamad and Prashant Bansod,"Implementation of Three Different Segmentation Techniques for Quantitative Evaluation of IMT in B-mode Ultrasound Common Carotid Artery Images", Taylor & Francis Journal onComputer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, Volume 14, Issue 7, 2014, pp:603-613.**DOI:** 10.1080/21681163.2014.930674[IF=1.793]
- 11. Rajni Gupta, R. S. Gamad and Prashant Bansod, "Telemedicine: A Brief Analysis", Cogent Engineering Journal, Biomedical Engineering Research Article, Cogent Engineering (2014), 1: 966459, http://dx.doi.org/10.1080/23311916.2014.966459
- 12. Vibha Tiwari, P.P. Bansod and Abhay Kumar "Designing sparse sensing matrix for compressive sensing to reconstruct high resolution medical images", Cogent Engineering Journal, Biomedical Engineering Research Article, Cogent Engineering (2015),2: 1017244, http://dx.doi.org/10.1080/23311916.2015.1017244.
- 13. Sandhya Singh Tripaliya and P. P. Bansod "FPGA Based Digital IC Tester", International Journal of Electrical, Electronics and Data Communication, ISSN: 2320-2084 Volume-3, Issue-5, May-2015, pp:87-90.
- 14. Maruti Raikar and P.P. Bansod "FPGA Based ECG Noise Suppression", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 4,

- Issue 6, June 2015, ISSN (Print): 2320 3765, pp:5062-5068.
- 15. AnjuLata Yadav, P. D. Vyavahare and P. P. Bansod. "Review of WiMAX Scheduling Algorithms and Their Classification", Journal of the Institution of Engineers (India) Springer: Series B, Electrical, Electronics and Computer Engineering, Volume 96, Number 2, April-June 2015, ISSN 2250-2106, pp. 197-208.[IF=0.9].https://doi.org/10.1007/s40031-014-0145-5
- 16. Raut, Y., Gamad, R. S., & Bansod, P. P. (2016, January). Objective analysis of HEVC (h.265) compressed FMRI Images.Int J Control Theory Appl, 9(41), 199-206. SJR 0.16
- 17. Vibha Tiwari, P.P. Bansod, Abhay Kumar, "Achieving compression with high-quality reconstructed US colour and grey images at reduced sampling rate", Int. J. Signal and Imaging Systems Engineering, Vol. 10, No. 4, 2017.pp: 185-194https://doi.org/10.1504/ijsise.2017.086387
- 18. S. kansal, P.P.Bansod, A. Kumar, "Multivariate Autoregressive Model for ECG Forecasting", Int. J. Multivariate Data Analysis (Inderscience), vol. 1, no. 2, 2017. Pp: 124-139
- 19. Anju LataYadav, P. D. Vyavahare, P. P. Bansod, "Proposed WiMAX Hybrid Scheduler with Split FTP Traffic and its Performance Evaluation", I.J. Wireless and Microwave Technologies, 2018, 6, page 1-14.
- 20. Vaishali Naik, R. S. Gamad and Prashant Bansod, "Efficient initialisation of distance-regularised level set without re-initialisation scheme and quantitative evaluation of IMT in B mode ultrasound common carotid artery images", Taylor & Francis journal on Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization, 2018, https://doi.org/10.1080/21681163.2018.1490206.
- 21. Anurag Shrivastava, Prashant Bansod, Kamlesh Gupta & Shabbir N Merchant, "An improved multicast based energy efficient opportunistic data scheduling algorithm for VANET", <u>AEU International Journal of Electronics and Communications, Volume 83</u>, January 2018, pp:407-415.https://doi.org/10.1016/j.aeue.2017.10.011
- 22. Anju LataYadava, P. D. Vyavahare, P. P. Bansod,"Proposed WiMAX Hybrid Scheduler with Split FTP Traffic and its Performance Evaluation", I.J. Wireless and Microwave Technologies, 2018, 6, 1-14 Published Online November 2018 in MECS(http://www.mecspress.net) DOI: 10.5815/ijwmt.2018.06.01
- 23. Raut, Y., Gamad, R. S., & Bansod, P. P. (2019, March). Objective analysis and bit rate analysis of HEVC compressed 4D-fMRI images. International Journal of Imaging Systems and Technology, Wiley, 29(3), 283-296. DOI: 10.1002/ima.22315. Impact factor 1.254
- 24. Sarita Kansal, Prashant .P.Bansod, AbhayKumar" Prediction of instantaneous heart rate using adaptive algorithms", Int. J. Adaptive and Innovative Systems, Vol. 2, No. 4, 2019, pp: 267-281
- 25. Anjulata Yadav, P.D.Vyavahare, Prashant Bansod,"QoS in WiMAX hybrid schedulers for heterogeneous traffic and their performance comparison", International Journal of Electronics, Taylor & Francis 107 (4), 561-575 2 2019. https://doi.org/10.1080/00207217.2019.1672213

(II) International/National Conference Publications

- D.K.Mishra and P.P.Bansod, "A Microcontroller Based Intelligent Instrumentation System for automatic scanning of CCD camera Vision system' Proceedings of TENCON-93, International conference on Computer communication and Automation held at Beiging, China, Oct.19-21, 1993.
- 2. Prashant Bansod, U.B. Desai and Nitin Burkule, "Automatic Detection of Left Ventricle in Echocardiographic Sequences Using Radial Search and Temporal Smoothing", Proceedings of 15th IEEE Conference on Digital Signal Processing (DSP2007), 1-4 July 2007, Cardiff University, Wales, UK, pp: 139-142.https://doi.org/10.1109/icdsp.2007.4288538
- 8. Prashant Bansod, U.B. Desai and Nitin Burkule, "Semiautomatic Endocardial Contour Estimation in Contrast Echocardiography Sequences Using Guided Local Search", Proceedings of the 4th International Conference on Cybernetics and Information Technologies, Systems and

- Applications: CITSA 2007 July 12-15, 2007-Orlando, Florida, USA.
- Prashant Bansod, U.B. Desai and Nitin Burkule, "Multi Frame Guided Local Search for Semiautomatic Endocardial Contour Estimation in Echocardigraphy Sequences", Proceedings of the 6th IEEE International Conference on Information, Communications and Signal Processing: ICICS 2007 held during December 10-13, 2007—Singapore.https://doi.org/10.1109/icics.2007.4449552
- Prashant Bansod, U.B. Desai and Nitin Burkule, "Endocardial Segmentation in Contrast Echocardiography Video with Density Based Spatio-temporal Clustering", Proceedings of Biosignals 2008, IEEE-EMB International Conference on Bio-inspired Signal and Systems held during 28-31 January 2008 at Funchal, Maderia, Portugal.
- Manisha Raghuwanshi and Prashant Bansod, "An Instrumentation Amplifier for Biomedical Applications", IETE Sponsored National Conference on Electronics, Communication and Instrumentation "Emanthan-2010", Organized jointly by College of Science & Engineering Jhansi and Institution of Electronic & Telecommunication Engineers, Jhansi, 2-3 April 2010. Pp. 200-203.ISBN:978-93-80043-95-1
- Manisha Raghuwanshi and Prashant Bansod, "Design of Micropower Electrocardiogram Amplifier in 0.18 Micron CMOS Technology", National Conference on Emerging Technologies in Electronics, Mechanical and Computer engineering (ETEMC-2010), Organized by Indore Institute of Science & Technology, Indore in April 2010.
- Manisha Raghuwanshi and Prashant Bansod, "Design of Micropower Electrocardiogram Amplifier in 0.18 Micron CMOS Technology, in National conference on Emerging Trends in Electrical Technology (ETET-2010), Organized by MIT Ujjain on 24th April 2010.
- Manish Raghuwanshi, RichaMagraiya, VarshaAmarjee Gupta and Dr. P.P.Bansod, "Design of ECG Data Acquisition System for Biomedical Application in 0.18 micron CMOS Technology", International Conference on Advances in Information, Communication Technology and VLSI Design (ICAICV 2010) organized by PSG College of Technology during 6-7 August 2010 Coimbatore, India.
- Manisha Raghuwanshi and Prashant Bansod, "An Ultra Low Power High CMRR Electrocardiogram Amplifier for Biomedical Applications with 0.18 Micron Technology", International Conference on Electrical Power & Energy Systems (ICEPES 2010) at MANIT – Bhopalduring 26-28 August, 2010.
- Tripti Jain, Prashant Bansod, C.B. Singh Kushwah, MayankMewara, "Reconfigurable Hardware for Median Filtering for Image Processing Applications," ICETET, pp.172-175, 2010 3rd International Conference on Emerging Trends in Engineering and Technology, 2010 Goa, India November 19- 21 organized by IEEE Computer Society. ISBN: 978-0-7695-4246-1. https://doi.org/10.1109/icetet.2010.172
- 2. Rashmi Singh and Prashant Bansod, "Design and implementation of Universal Filters using Voltage –Mode DVCC" International Conference on Electronics, Information and Communication Systems Engineering ICEICE-2010, 28-30 March 2011M. B. M. Engg. College, J N V University, Jodhpur
- 3. Apoorv Dixit and P. P. Bansod, "An Approach to Implement Programmable General Purpose Digital Multiplier Architecture", National Conference on Advances in Electrical and Electronics Engineering (AEEE-2011), Organized by Swami Vivekanand College of Engineering, Indore, during 24-25 February 2011.
- 4. Apoorv Dixit and P. P. Bansod, "High Speed CMOS Signed Multiplier", National Conference on Recent Trends in Electronics & Communication Technology (ECOMM-11), Organized by Bansal Group of Institutes, Indore, during 8-9 April 2011.
- 5. Apoorv Dixit and P. P. Bansod, "High Speed Reduced Area CMOS Array Multiplier", National Conference on Recent Trends in Electronics & Electrical Engineering (NCRTEEE-2011), Organized by Medicaps Institute of Technology, Indore, on 14th May 2011.
- 6. DeepikaSawle and P. P. Bansod, "Universal Biquadratic Filter Implementation using DDCC in 0.8 μm Technology", National Conference on Recent Trends in Electronics & Electrical

- Engineering (NCRTEEE-2011), Organized by Medicaps Institute of Technology, Indore, on 14th May 2011.
- Rashmi Singh and P. P. Bansod, "Implementation of DVCC based Current Mode All-Pass Filter and Quadrature Oscillator", National Conference on Recent Trends in Electronics & Electrical Engineering (NCRTEEE-2011), Organized by Medicaps Institute of Technology, Indore, on 14th May 2011.
- 8. ShubhankarMajumdar, DeeptiMalviya, Mayank Mishra, P.P. Bansod, "Designing of Control Logic Circuit for SRAM Memory Cell", International Conference on Information, Communication and Embedded System vol-1, pp. 375-381 (2012), Organized by S A Engineering College, Poonnamallee on February 24 & 25, 2012.
- 9. Mayank Mishra, ShubhankarMajumdar, DeeptiMalviya and P.P. Bansod, "Design Of SRAM Cell In 0.18 μm Technology", International Conference on Information, Communication and Embedded System vol-1, pp. 457-463 (2012), Organized by S A Engineering College, Poonnamallee on February 24 & 25, 2012.
- O. DeeptiMalviya, ShubhankarMajumdar, Mayank Mishra and P.P. Bansod, "Comparative Study on Implementation of Various Decoder Architecture", International Conference on Information, Communication and Embedded System vol. 2, pp. 68-74 (2012), Organized by S A Engineering College, Poonnamallee on February 24 & 25, 2012.
- 1. Anju Lata Yadav, P. D. Vyavahare and P. P. Bansod "Performance Evaluation Of Various WiMAX Schedulers Under Triple Play Services", Proceedings of IEEE Third Asian Himalayas International Conference on Internet, AH-ICI2012, (Session 4, No. 4), 23-25 November 2012, Kathmandu, Nepal.https://doi.org/10.1109/ahici.2012.6408450
- 2. Mukul Bhargava and Prashant P Bansod, "Front-end Realization of ASIC for Traffic Light Control with Real Time Clock Synchronization", IJCA Proceedings on 4th International IT Summit Confluence 2013 The Next Generation Information Technology Summit Confluence 2013(2):26-34, January 2014. Published by Foundation of Computer Science, New York, USA.
- 3. AshwinShrivastava and Prashant Bansod, "Heart Rate Variable Monitor IC", Confluence 2013: The Next Generation Information Technology Summit (4th International Conference) Published By IET UK 2013.https://doi.org/10.1049/cp.2013.2355
- 4. Abhishek Goyal and Prashant Bansod, "An Integrated Circuit for EEG Acquisition System in 0.18μm Technology", 5th SARC- IRF International Conference (ICEECE) held on 25th May, 2014 at New Delhi.
- 25. Abhishek Goyal and Prashant Bansod, "An Integrated Circuit for EEG Acquisition System with Programmable Gain Amplifier in 0.18μm Technology", International Conference in Computer Science, Electronics and Communication Engineering ICCECE, 2014 held on 27th July, 2014 at Bangalore.
- 6. Raut, Y., Gamad, R. S., & Bansod, P. P. (2014, March). Taxonomy of Brain Imaging Techniques. In 2014 International Conference on Advances in Engineering, Pharmaceutical & Applied Sciences (ICIREMPS 2K14) pp. 1098-1101
- 7. Majumdar, S.Bansod, P.P. "Hardwired BIST architecture of SRAM",11th IEEE India Conference: Emerging Trends and Innovation in Technology, INDICON 2014. DOI: 10.1109/INDICON.2014.7030466
- Anju lata Yadav, Prakash D Vyavahare, Prashant P Bansod,"An Improved Hybrid Scheduler for WiMAX and its Performance Evaluation", International Conference on Networking and Service (ICNS 2014), Chamonix, France 2014. pp:84-89
- YudhishthirRaut, R. S. Gamad and P.P. Bansod, "Quality Evaluation of HEVC Compressed CT Images" in 2015 IEEE UP Section Conference on Electrical Computer and Electronics (UPCON).https://doi.org/10.1109/upcon.2015.7456697
- 0. V. Tiwari, P.P. Bansod and A. Kumar, "Medical Imaging in Heterogeneous Telemedicine Network", *IEEE 10th International Conference on Information, Communications and Signal Processing (ICICS)*, pp. 1-5, Singapore, 2015.https://doi.org/10.1109/icics.2015.7459982
- 1. S. kansal, P.P.Bansod, A. Kumar, "Statistical Approach for Determination of ECG Markers", IEEE

- International Conference on Computational Intelligence and Communication Networks, pp. 446-451, 2015. https://doi.org/10.1109/cicn.2015.93
- 2. RohitAgnihotri, Abhishek Tiwari and Prashant Bansod, "Interest Flooding Attack in Content Centric Networking & Its Effects in Mixed topology", Novateur Publications International Conference on Innovative trends in Engineering Research, (ICITER-2016), 26th June 2016.
- 3. V. Tiwari, P.P. Bansod and A. Kumar, "Achievable Compression Ratio in Medical Images at Reduced Sampling Rate with Statistical Analysis", *IET International Conference on Signal Processing*", pp. 1-5, Vidisha, November 2016.
- 4. S. kansal, P.P.Bansod, A. Kumar, "Markers for Various Cardiac Diseases", *IET International Conference on Signal Processing*", pp. 1-5, Vidisha, November 2016.
- 5. V. Tiwari, P.P. Bansod and A. Kumar, "Analysis of US multi-frame video streaming over LTE Network", *IEEE International Conference on Computing, Analytics and Security Trends*, pp. 78-83, Pune, December 2016.https://doi.org/10.1109/cast.2016.7914944
- 6. Neha Gupta, Dr. P.P. Bansod, "Programmable Voltage Mode Multifunctional Filter using Modified CMOS Current Controlled Current Conveyor Transconductance Amplifier" in 2016 IEEE 2nd International Conference on Communication, Control and Intelligent Systems (CCIS).https://doi.org/10.1109/ccintels.2016.7878227
- 7. Singh, N.,Bansod, P.P."Switched-capacitor filter design for ECG application using 180nm CMOS technology", International Conference on Recent Innovations in Signal Processing and Embedded Systems, RISE 2017, pp:439-443.DOI: 10.1109/RISE.2017.8378195
- 8. Barsaiyan, M.&Bansod, P.P.,"Protection circuit design for Electrocardiograph (ECG) with input filtering", 8th International Conference on Computing, Communications and Networking Technologies, ICCCNT 2017. DOI: 10.1109/ICCCNT.2017.8204168
- 9. Anjulata Yadav, Prakash D. Vyavahare, Prashant P. Bansod,"A Hybrid Scheduler for QoS Provisioning in WiMAX and its Performance Evaluation" in 2018 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS).
- O. V. Tiwari, P.P. Bansod and A. Kumar, "Compressed Medical Image Transmission in Telemedicine Architecture", Proceedings of International Conference on Recent Advancement on Computer and Communication. Lecture Notes in Networks and Systems, vol 34, pp. 205-212, Springer, Singapore, 2018.
- 1. Saksha Shinde, Neeraj Sharma, Prashant Bansod, Munendra Singh & Chandrakant Tekam, "Automated Nucleus Segmentation of Leukemia Blast Cells: Color Spaces Study", 2nd International Conference on Data, Engineering and Applications (IDEA), 2020

6. List of Conferences/Workshops/Seminars Organized

- 1. Organising secretary for one day workshop on Decision System & forecasting jointly organised by IEEE Student Chapter and Computer Engineering Department of Shri G S Institute of Technology & Science, Indore on 6th April 2002.
- 2. Programme coordinator of Seminar on Power sector Reforms organised jointly by Shri G S Institute of Technology & Science and GSIMR, Indore on 30th August 2010.
- 3. Organised a five day TEQIP-II sponsored Short Term Course on Analog & Mixed signal system Design during 23-27 March 2015 by Electronics & Instrumentation Department of Shri G S Institute of Technology & Science, Indore
- 4. Acted as organising committee member of five day AICTE sponsored Short Term Course on Design and development of System on Chip using Low Power VLSI during 25-30 November 2019, organised by Electronics & Instrumentation Department of Shri G S Institute of Technology & Science, Indore.

- 5. Coordinator of a five day TEQIP-III sponsored Short Term Course on Advancements in Microelectronics & VLSI Design during 11-15 March 2019 by Electronics & Instrumentation Department of Shri G S Institute of Technology & Science, Indore
- 6. Acted as panellist in 23rd International symposium on VLSI Design & Test (VDAT- 2019), Organised by Indian Institute of Technology, Indore during 4-6 July 2019.

7. Invited Lectures/Expert Talks/Chairmanships at Conferences

- 1. Expert Lecture on Medical Signal & Image processing in AICTE Sponsored seminar on Recent Trends in Modeling & Image Processing in Medical Sciences, organized by Sagar Institute of Research & Technology-Excellence, Bhopal during 29-30 November 2013.
- 2. Session Chair & Key note speaker in International Conference on Instrumentation, Communication, Electrical & Electronics Engineering, Organised by Shri Vaishnav Institute of Technology & Science, Indore during 23-25 January 2014.
- 3. Expert Lecture in TEQIP-II sponsored workshop on Biomedical Engineering & Health services, Organised by Shri G S Institute of Technology & Science, Indore during 20-22 February 2014.
- 4. Expert Lecture on LaTeX: Introduction and Applications on 3rd May 2014 in workshop organized by Sushila Devi Bansal College of Technology, Indore.
- 5. Expert Lecture on MATLAB & its applications in computer Society of India workshop at Mahakal Institute of Technology & Management, Ujjain on 2014.
- 6. Plenary Lecture on Medical signal and image processing, sensors & Instrumentation in SVKM's NMIMS, MPTP, Shirpur, International conference on "Artificial Intelligence in Healthcare" December 27-28,2016
- 7. Expert Lecture in National Seminar on CURRENT TRENDS IN DIGITAT IMAGE PROCESSING Sponsored By MPCST Bhopal & organized by Acropolis, 18-19 August 2017
- 8. Fundamentals of Medical Signal & Image Processing in TEQIP-III Sponsored Short Term Course on "Current Trends in Biomedical Signal and Image Processing" during 20-22 October, 2020 organized by the Discipline of Electrical Engineering, IIT Indore.
- Fundamentals of Medical Signal Processing in AICTE Sponsored Online STTP on Recent Trends in Biomedical signal Processing Organised by SIPNA College of Engineering & Technology, Amrawati on 23/11/2020
- 10. Challenges in Ultrasound Image Processing: A Case Study in AICTE Sponsored Online STTP on Recent Trends in Biomedical signal Processing Organised by SIPNA College of Engineering & Technology, Amrawati on 23/11/2020
- 11. Fundamentals of Medical Signal & Image Processing in AICTE Sponsored Online STTP on Recent Trends in Biomedical signal Processing Organised by SIPNA College of Engineering & Technology, Amrawati on 08/12/2020
- 12. Challenges in Ultrasound Image Processing: A Case Study in AICTE Sponsored Online STTP on Recent Trends in Biomedical signal Processing Organised by SIPNA College of Engineering & Technology, Amrawati on 08/12/2020
- 13. Fundamentals of Medical Signal & Image Processing in AICTE Sponsored Online STTP on

- Recent Trends in Biomedical signal Processing Organised by SIPNA College of Engineering & Technology, Amrawati on 22/12/2020
- 14. Challenges in Ultrasound Image Processing: A Case Study in AICTE Sponsored Online STTP on Recent Trends in Biomedical signal Processing Organised by SIPNA College of Engineering & Technology, Amrawati on 23/12/2020