

Dr. Deepak Vishnu Bhoir

Professor & Dean Students' Affair

PhD in Technology (Biomedical Instrumentation), M.E. (Electronics)

Work Experience: Teaching - 27 Yrs Industrial - 02 Yrs

Area of Specialization: VLSI Design, Biomedical/ Virtual Instrumentation, Industrial Automation

Subjects Taught: Basics of VLSI,, VLSI Design, ,Advanced VLSI Design,, Mechatronics, Industrial Automation, Design with Linear Integrated Circuits & Applications, Embedded Systems, Electrical Networks, Digital Design, Modeling of Microelectronics Devices, Virtual Instrumentation, Electronics in Medicine, VLSI Design, Process Instrumentation and Controller Design at **UG** and **PG** level

Project Carried Out: PLC based chemical processing and packing, PCB Printing and Drilling, DAS for Diesel Engine,, Digital Phase Meter, Annunciator , Lab-VIEW based patient Monitoring, Lab. view base ECG Monitoring, Finger Print Recognition, Biological Desorptor, Model for Respiratory Recognition and Wearable Biomedical Devices

Research Publication

In Conference:

1. Prabhu N. A., Bhoir D.V., Rao U.,“ Performance Analysis of Convolutional Neural Networks for Exudate Detection in Fundus Images” 3rdInternational Conference on Intelligent Computing and Communication(ICICC-2019),DayanandaSagar University, Bangalore, India , 07-08 June 2019 and publication in **Springer** Advances in Intelligent Systems and Computing (AISC) series.(**Scopus**)
2. Prabhu N. A., Bhoir D.V., Rao U. “Template matching technique for Optic Disc localization in Fundus Image” IEEE fifth International Conference on Computing for Sustainable Global Development, INDIACOM, March, 2018 <http://www.bvicam.ac.in>
3. Prabhu N. A., Bhoir D.V., Rao U., “Performance Evaluation of Different Preprocessing Techniques for Blood Vessel Extraction in Fundus Images” 3rd IEEE International Conference in computer ,Communication and Control, IEEE Explore ICAC3'2017 DOI: 10.1109/ICAC3.2017.8318765
4. Prabhu N. A., Bhoir D.V., Rao U., “Automatic Detection of Diabetic Retinopathy: A Review”, Proceedings of 4th IEEE. International Conference on “Computing for Sustainable Global Development”, 1st – 03rd March, 2017 , Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi (INDIA)

5. N M Desai, D V Bhoir " Comparative study of Signal Processing in Cochlea Implant" at International Conference and Workshop on recent trends in technology, 2012 TCET page 531-536
6. Rameshwari Mulay, D V Bhoir "Fuzzy controlled based improvement in green house performance", National conference at WIEE& CT, Mumbai. SEPT.2011
7. D V Bhoir, Dr M S Panse "Micromechanical Cochlear Processor", ISEABB-2009 International Symposium on Emerging Areas in Bioscience and Bioengineering at IIT,Bombay, Powai, Mumbai, India on 26th-28th February,2009, 70-71
8. S Mahadik ,D V Bhoir, K Narayanan "Fingerprint Recognition" ICAC3'09 International Conference on Advances in Computing Communication and Control at Fr. CRCE, Bandra, Mumbai-40050 ,[MS] INDIA on 23rd -24th Jan. 2009 PROCEEDING 71-74.
9. D V Bhoir, Dr M S Panse Virtual Instrumentation based Development of a speech processor for Cochlear implant, Proceeding of SPIT-IEEE Colloquium and International Conference at Sardar Patel Institute of Technology, Mumbai on 4th-5th February 2008.
10. D V Bhoir, Umesh Mhapanker, "A wearable medical Multi-parameter storage Device and Alert System", Proceeding of NCNTE-2008, National Conference on Nascent Technology in Engineering, CRIT, Vashi, Newmumbai on 29th Feb- March 1st, 2008, 74-76
11. D V Bhoir, S Mahadik, "Fingerprint Recognition for better security" NCSPA-07 National Conference on Signal Processing Algorithm at DYPIECT, Pimpri, Pune-411018,[MS] INDIA on 06-07 September 2007 PROCEEDING 71-74.
12. D V Bhoir, Dr M S Panse "Lab VIEW based sound localization system for Cochlear implant" CITICOMS-2007 International conference on Modeling and Simulation at CIT (Coimbatore Institute of Technology),Coimbatore, on 27-29 August 2007 , VOL II 1157-1161
13. D V Bhoir, Dr S Joshi, "Cutting forces in machining using self-propelled round inserts face milling cutter", INCRAF-2003 International Conference on CAD, CAM, Robotics and Autonomous Factories at IIT, Delhi on 11-13 August 2003

In Journal:

1. Prabhu N., Bhoir D., Shanbhag, N., "Diabetic Retinopathy Screening using Machine Learning for Hierarchical Classification", International Journal of Innovative Technology and Exploring Engineering,Volume8,Issue 10,Aug 2019 (**Scopus**)

2. Prabhu N. A., Bhoir D.V., Rao U., "Effectiveness of Machine Learning Techniques for Macula Edema Detection", International Journal of Computer Applications volume 182, number49, April 2019
3. Prabhu N. A., Bhoir D.V., Rao U., "Evaluation of Blood Vessel Extraction Techniques in Retinal Images"International Journal of Pure and Applied Mathematics Volume 118, No. 7, 2018, (Scopus, H-index 21, Special issue)
4. D. V. Bhoir, P.V Kasambe, K. S. Bhole, " Performance Evaluation of Embedded Strain Sensing Varying Thickness Polymer Micro-cantilever as Biosensor Platform" ,International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS) Volume VI, Issue VII, July 2017 , ISSN 2278-2540
5. D. V. Bhoir, Anish Bhurke ' Review paper for sample separation and preparation for Gas Chromatography' International journal of Science Engineering and Research(IJSER), Volume 4, Issue 10, October 2016, ISSN 2437-3878
6. D V Bhoir, Aishwarya Mhatre ' Real time arrhythmic detector and analysis using Lab-VIEW' International Journal of Science and Research(IJSR) Volume 4 Issue 10, October 2015 ISSN 2319-7064
7. D. V. Bhoir, Anish Bhurke 'Volatile Sample Separation Device (Prototype-1)' International Journal of Scientific Engineering and Research (IJSER) ISSN (Online): 2347-3878, Volume 4 Issue 9, September 2016 Impact Factor (2015): 3.791 www.ijser.in
8. Dattaprasad Madur ,Dr. Deepak Bhoir , Swapnali Makdey, 'Three dimensional integration of cmos inverter ' INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATION ENGINEERING & TECHNOLOGY (IJECET) , ISSN 0976 – 6464(Print) Volume 5, Issue 11,2015
9. Najib Ghatte , Shilpa Patil , Deepak Bhoir."Floating Point Engine using VHDL", International Journal of Engineering Trends and Technology (IJETT), V8(4),198-203 February 2014. ISSN:2231-5381
10. Najib Ghatte , Shilpa Patil , Deepak Bhoir. ' High Speed ALU Design using Vedic Sutras' at ICRJCEE, Jan 11, 2014
11. Sangeeta Parshionkar, Dr. Deepak V. Bhoir ,' Standby leakage power reduction techniques in Deep Sub micron CMOS circuits' International Journal of Computer Applications (0975 – 8887) International Conference on Communication Technology,17-19,2014

12. Ramesh Kamath, Siddesh Nadkarni, Kundan Srivastav, Dr. Deepak V. Bhoir , ' Data acquisition system and telemetry system for unmanned aerial vehicles for SAE AERO design series' International Journal of Electronics and communication Engineering, 2013
13. D. V. Bhoir, Dr. M. S. Panse, "LabVIEW based clinical test of the Cochlear Implant" IJSER , International Journal of Scientific and Engineering Research [ISSN 2229-5518] Volume 3, Issue 7, July 2012.
14. D V Bhoir, Dr M S Panse, "Advances in cochlear Implant Implementation", International Journal of Recent Trends in Engineering [ISSN: 1797-9617] by the Academy Publishers, Finland. Nov 2009 issue, Vol. 2, No. 1-6, Contents , IP 57-59

Responsibilities and Awards:

- Member, Board of Studies, Electronics Engineering, University of Mumbai since May 2016
- Co-opted Member, Syllabus Committee, Electronics Engineering PG section, in revision 2012
- Nodal Coordinator, NIRF 2017-19
- Reviewer in many International journals, Conferences as well as National conferences
- Reviewer of various books on Linear Circuits and Biomedical Instrumentation for various publication houses such as Pearson, Penram etc.
- Various Projects got national, state, institute level awards
- Secretary, Fr. Agnel ISTE Chapter (Duration : - Feb 1998 to March 2007)
- Controller of Examination (Duration : - 2004 - 2006)
- Treasurer, Alumni Committee, Fr. CRCE Since January 2008
- Resource Faculty at ISTE-STTP Programmes at various Institutes such as Fr. CRCE (22nd June 2006), Vidyavardhini COE, Vasai (May 2006), Thakur COE and Technology, Kandivali (21st Nov, 2006), Terna Engineering College, Nerul (7th August, 2008) on the topic "Mixed VLSI Circuit Design" and at K J Somaiya College of Engineering and Information Technology, Sion on the topics of "Clock Distribution" and "Mixed VLSI Circuit Design"(13th Jan. 2011).
- Invited Speaker Seminar on "Recent Developments in Biomedical Instrumentation" , "LabVIEW in Biomedical Instrumentation" and advances in VLSI Design