Bio data

Name of the Teacher : Dr. Mrs. Anjali ShrikrishnaBhalchandra	
Date of Birth: 3rd January 1964	
Educational Qualifications: B. E. (E&T) , 1985, M. E. (Electronics),1992, Ph. D. (Electronics), 2004	

Professional Membership

Fellow, Institute of Engineers, India.

Life Member, ISTE, India.

Life Member, BMESI India.

Experience

- Professor,Department of E&TC Engineering, Govt. College of Engineering, Aurangabad (wef from 02/03/2008 till date).
- Associate Professor, Department of E&TC Engineering, Govt. College of Engineering, Aurangabad (27/6/2011 to till date).
- Associate Professor, Department of E&TC Engineering, Govt. College of Engineering, Awsari, Pune (5/10/2010 to 27/6/2011).
- Associate Professor, Department of E&TC Engineering, Govt. College of Engineering, Aurangabad (1/1/2006 to 4/10/2010).
- Assistant Professor, Department of E&TC Engineering, Govt. College of Engineering, Aurangabad (2/3/2000-31 Dec 2005).
- Lecturer , Department of Electronics & Computer Engineering, S.G.G.S.C.E. & Tech, Nanded(18/11/85 -02/03/2000).

Total Teaching Experience : 31 Years (U.G., P.G. and Ph. D)

Research Status

- Recognized Ph. D. guide in Dr. BAMU, Aurangabad: Guiding 4 students for research (Completed :6).
- Recognized P.G. Guide Guided 50+
- Worked as a reviewer of IEEE System Journal December 2011
- Worked as a reviewer of IEEE sponsored International Conference at Nanyang Technological University Singapore, Xian China.

- Member of Research Monitoring Committee in Govt. College of Engineering, Aurangabad.
- Industry Project: Image processing for observation of Bacterial growth.
- Temperature profile Chemicals:Project for Govt. College of Pharmacy, Aurangabad.

Administrative Experience
- Head of Dept of E&TC October 2016 till date
- Dean Students Welfare April 2015 to July 2017
- Head of Dept. of E & Tc since April 2000 –April 2015
- TEQIP Phase II Incharge 2010-2012
- Nodal Officer "Academic Excllence" in TEQIP -I since 2004.
- Warden for Ladies Hostel in S.G.G.S.C. E. & Tech,Nanded. (March 1991 to June1993).
- Admission In charge and (ARC Officer) for MBA Online Admission Process since 2004.
- Admission In charge for F.E. Admissions Online Admission ProcessJune-July 2007.
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Strengths
- Financial Grants from AICTE:
  - MODROB for Communication Engineering : Rs. 8 Lakhs 2000-2002.
  - MODROB for Microwave Engineering :Rs. 7Lakhs 2001-2003.
  - MODROB for DSP Lab: Rs.9 Lakhs 2008-2010.
- TEQIP Phase II: Seed Money Project Embedded System for Pattern Classification: Rs.30,000
- Analytical study and algorithm development for detecting buried object in sand using Ground Penetrating Radar (GPR) Data,: Rs. 7.5 Lacs, DRDO, Pune
- Department has e-Learning website: e-gecaect.com : Developed Learning Recourse in Digital Image Processing, Pattern Recognition, Communication System Theory, Optical Fiber Communication, Digital Communications *etc.*
- **"A Method of Digital Watermarking" on 25th May 2011 at IPO. Patent Application No-1563/MUM/2011.published.**

Academic Activities
- Training course on VLSI Design (7th to 17th March 2003 and 1st to 10th Feb 2004, with BIT Mapper , Pune.
- Workshop on MATLAB 6.5 and applications 21st, 22nd Feb 2004.
- Workshop on Electronics Engg. Curriculum Development- Vision 2005 23rd, 24th Mar 2005.
- National level Conference *Tsygeca06* 23rd, 24th Jan 2006.
- Two day workshop on LABVIEW and Test & Measurement
- 29th, 30th June 2006 Cyronics Ltd. , Pune.
- Three days workshop on "A Unitary Approach to Image Transforms " by Dr. Kekre Mumbai, IIT

Bombay 11.10.2007 to 13.10.2007.
- CCSIP, Certificate Courses in Signal and Image Processing, Aurangabad
  - .
  - .
  - .

- ' Signal And Image Processing', 06/02/2017-10/02/2017, GEC, Aurangabad

Training Attended
- Training program on Microprocessor 19-5-1986 to 31-5-1986 USIC Aurangabad (UGC).
- Induction training for Teachers 25-2-1993 to 28-2-1993 SGGSCE &T Nanded (ISTE).
- Enhancing T & P Skills of T & P officers 16-5-1994 30-5-1994 SGGSCE&T Nanded (AICTE).
- Microprocessor in Instrumentation 17-6-1996 to 28-6-1996 SGGSCE&T Nanded (AICTE).
- Biomedical Instrumentation 2-9-199613-9-1996 I.I.T. Kharagpur (AICTE).
- Matlab 6.5& Applications, Sept., 2005, Govt. College of Engineering Aurangabad.
- A Unitary Approach to Image Transforms, Oct 2007 Govt. College of Engineering Aurangabad.
- Signal, Image, Video processing S.G.G.S.C. E. & Tech, Nanded, 2010
- Recent Advances in Speech, Image & Video Processing', 12 to 23/12/2011, SGGSCE&T, Nanaded
- 'Genetic Algorithm & Neuro Fuzzy Applications in Engineering'17/12/2012 -24/12/2012, GEC, Aurangabad
- ' 'Emerging Trends In Microwave & Micro Strip Devices', 07/05/2012- 11/ 05/2012, MIT, Aurangabad
- 'Effective Academic Leadership Strategies a Global Perspective', 12/12/2013- 14/12/2013, SEGI University Kota Damansara ,Malaysia
- 'Outcome based Education & NBA', 31/1/2015 – 1/2/2015, GEC, Aurangabad
- 3rd world summit on Accreditation organized, 18/3/2016-20/3/2016, National Board of Accreditation, New Delhi
- 'Wavelet Theory', 12/4/2016-13/4/2016, GEC, Aurangabad
- 'Advances in Digital Signal Processing', 3/11/2015-4/11/2015, GEC, Aurangabad
- 'Management Capacity Building', 5/12/2016-110/12/2016 ,IIM, Kozikode
- ' Signal And Image Processing', 06/02/2017-10/02/2017, GEC, Aurangabad

Other Academic Activities

- Member of Board of studies in Dept of E&Tc for faculty of Electronics Engineering in Dr. BAMU, Aurangabad 2005
- Member of Research and Regulation Committee in SRTMU, Nanded 2005-2007
- Delivered Expert Talk
  - National Conference on Text to Speech in Marathi Language" in COE, Osmamnabad, February 2005,
  - Iris Recognition AIT, Pune, 2011
  - Image Enhancement COE, Waghli, Pune, 2012
  - Biometric Authentication , Hitec COE ,Aurangabad,2013
  - Statistical Pattern Recognition, GCOE, Aurangabad,2013
- Resource person in other institutes on subjects
  - Optical Communication Systems ,
  - Digital Image Processing
  - Pattern Recognition
  - Communication System Theory
  - Digital Communication Systems

Publications

1. Autolayout PCB" National Conference at SGSITS, Indore March 1991
2. "PC based Heart sound Signal Data Acquisition Systems", Journal of the Institute of Engineers(India), 1996.
3. "Computer Controlled Transistor Characteristics Plotter" Govt. Polytechnic, Nanded 12 Dec. 1999
4. " Segmentation By Edge Detection And Edge Linking" Symposium on Biomedical Engineering and Nuclear medicine , BARC, Mumbai, 24–29 January 2000
5. "Objective Evaluation of Image Thresholding Techniques for Wounds", 12th Portuguese Conference on Pattern Recognition, RECPAD 2002, Aveiro, Portugal.
6. Ms. A.G. Deshpande ,Dr.T.R.Sontakke "Wavelet Transform Based Wound Image Segmentation", National level Conference on Computer Communication and Security ,Aurangabad, January 2004.
7. "Human system and SCADA : A correlation", International conference ,SystemicsIinformatics and Cybernatics, Hyderabad January 2005
8. "Analysis of Image Compression using DWT with emphasis on the features Mean square Error, PSNR ", ICSCI, ,Hyderabad,January 2005
9. "Three Module Strategy of Edge Detection and its Application to Wounds", National Conference of sciences, Ludhiyana.
10. "Gradient based Non-Linear Edge Enhancing Prefilters",ICSCI- Hydrabad, 4-9 Jan 2005.
11. "Text to Speech Synthesis", National Conference at Shreenidhi Institute of Science and Technology",Hyderabad November 2005
12. "Role of Internet – based GIS in effective Natural Disaster Management" International Conference at Nepal November 2005
13. "Emerging Trends in Signal Processing and Communication ETSPC 2007" National Conference at Alandi , Pune.
14. "Review of Recent CBIR Techniques" , International Conference Aurangabad ,ACVIT 07 pp 984-991 , 28-30th Nov 07

15. "Separation for Digital Watermarking: Trends and Challenges- a Review" , SIVP-08, A National Conference at Shegaon, 2008

16. "CBIR System for Biomedical Images: Challenges and Open issues, " International Conference on Wireless Mobile and Multimedia Networks",11-12 January 2008, Mumbai, India

17. "Fifth International Conference on Machine Vision and Image Processing", MVIPPA-2008, Bangkok, Thailand during 17-19 December 2008.

18. "Compressed Domain Content Based Image Retrieval:State of Art, Challenges and Open Issues" Fifth International Conference on Machine Vision and Image Processing", MVIPPA-2008, Bangkok, Thailand 17-19 December 2008.

19. "Blind Source Separation: Trends of New Age - A Review" Proceedingsof International Conference on Wireless, Mobile and Multimedia Networks, IET, IEEE Explorer, ISBN: 9780 86341 8877,2008,pp.251-254.

20. "Digital Image Watermarking using Wavelet Transform", National Conference at MIT , Aurangabad, 5th ,6th March 2009.

21. "Effective Region Based Segmentation Technique for High Resolution Aerial Imagery", Proceedings of ICIG(Xi'an, China), Fifth International Conference on Image and Graphics, IEEE Explore, ISBN 978-0-7695-3883-9, Sept. 2009, pp. 272-275.

22. Digital Color Image –Adaptive Watermarking using Blind Source Separation" Proc. of International Conference on Advances in Computer Vision and InformationTechnology,(ACVIT-09), ISBN-10:9380026951,ISBN-13: 9789380026954, 2009, pp. 193-201.

23. "Digital Color Image Watermarking by Means of Blind Source Separation", Proceedings of International Conference on Control, Automation, Communication and Energy Conservation-2009(INCACEC-09),IEEE Explorer, ISBN 978-81-8424-439-7,2009,pp. 163-166.

24. "Blind Source Separation Based Digital Color Image –Adaptive Watermarking", Proc. of Fifth International Conference on Image and Graphics(ICIG), Xian, China, IEEE Explorer, ISBN : 978-0-7695-3883-9, 2009,pp. 13-17.

25. "Effective Segmentation Technique for 0.5meter high resolution World View 1 imagery", Proceedings of IEEE International Conference on Signal and Image Processing Application (ICSIPA09, Malaysia), IEEE Explore, ISBN 978-1-4244-5560-7 Nov. 2009, pp. 205-208.

26. Compressed domain content based image retrieval: state of the Art, challenges and open issues, World Congress for Science, Engineering and Technology, Bangkok,2008

27. "Devanagari Character Recognition using Kohonen Network" Proceedings of International Conference @ KITS 2009, December 2009, pp. 321 – 327.

28. "Performance evaluation of image retrieval using VQ for compressed and uncompressed images", IEEE, 2nd International Conference on Emerging Trends in Engineering and Technology (ICETET), 2009, Nagpur, India

29. "Stroke Pattern Identification in Devanagari Character Recognition" IJAEA: International Journal of Advanced Engineering & Applications, ISSN: 0975 – 7783 Online ISSN: 0975 – 7791 January 2010, pp.276-281

30. "Robust Digital Image-Adaptive Watermarking Using BSS Based Extraction Technique" International Journal of Image Processing(IJIP),ISSN1985-2304,Vol.4,Issue 1, March-2010,pp.77-88.

31. "Digital Color Image–Adaptive Watermarking using Blind Source Separation",International Journal of Computer Science and Information Technology(IJCSIT),ISSN-0974-8385,Vol.3,No.2, 2010, pp. 223-228.

32. "Robust Digital Image-Adaptive Watermarking using Wavelet Domain Embedding and BSS based

Extraction Technique", International Journal of Engineering Research and Industrial Applications(IJERIA),ISSN 0974-1518,Vol.3,No. II,May 2010,pp. 83-97.

33. "Devanagari Character Recognition using Neural Approach" International Journal of Engineering Research and Industrial Applications, ISSN-0973-9424 Vol-3, N0-II/III/IV 2010, ISSN 0974-1518, Vol.3, No. II May 2010, pp. 357-370.

34. " Efficient DIS Based Region Growing Segmentation Technique for VHR Images", International Congress for Global Science and Technology- Graphics ,Vision and Image Processing, GVIP, ISSN 1687-398x, Vol. 10, August 2010, Issue 3, pp. 21-26.

35. "Blind Source Separation Based Robust Digital Image Watermarking using Wavelet Domain Embedding" IEEE International conferences on Cybernetics, Intelligent Systems (CIS) and Robotics, Automation and Mechatronics (RAM),Singapore,2010.

36. "Devanagari Character Recognition using Self Organizing Maps" IEEE Explorer, Print ISBN: 978 - 1-4244-7769-2 INSPEC accessions Number: 11745410 Digital Object Identifier: 10.1109/ICCCCT.2010.5670752, 2010, pp. 687 – 691.

37. "Devanagari stroke pattern Identification" International Journal of Power, Control, Signal And Computation (IJPCSC), Print ISSN: 1990-7958 Online ISSN: 1993- 6001, 2010, pp. 230-238.

38. "VQ based Segmentation Technique for VHR satellite imagery", Journal of computer Science and Engineering, IJCSE (UK), ISSN,2043-9091, Dec 2010, Vol. 4, Issue 2, pp. 11-17

39. Fast image retrieval using vq for compressed and uncompressed images, Journal of Computer Vision and Information Technology: Advances and Applications, pp 149-156, 2010

40. Comparison of Similarity Metrics for Thumbnail based Image Retrieval,Journal of Computer Science and Engineering,, Vol 5, pp 15-20,2011

41. Insight on Using Non-Evolutionary Optimization Method to Estimate Mixing Matrix for BSS Based Digital Image Watermarking" ICGST International Journal on Graphics , Vision and Image Processing(GVIP) ,ISSN 1687-398X(print),Vol. 11,No.1,March- 2011,pp. 21-27.

42. R C Patil, Dr. A S Bhalchandra, Brain tumor extraction from MRI images using MATLAB, International Journal of Electronics, Communication and Soft Computing Science & Engineering (IJECSCSE), Vol 2,Issue 1, 2012

43. AjinkyaNilawar, Dr. A S BhalchandraImage Retrieval using Shape Measure and BTC, IJARCSEE, Vol 1, Issue 1, International research of Advanced Research in Computer Science and Electronics Engineering Oct 2012

44. SatishJangame, Dr. A S Bhalchandra, 'Low Cost Soil Moisture Sensing System for Smart Irrigation Scheduling' ,National Conference ,RTCPE,VIETW Tiruchengonde,Tamilnadu,27-28 March 2012

45. V M Kulkarni, Dr. A S Bhalchandra, 'An overview of various techniques to reduce the PAPR ratio in multi carrier transmission systems', IEEE Conference, Tamilnadu College of Engineering, Coinbtore, 18-20 December 2012, pp. 545-549

46. J JJavle, Dr. A S Bhalchandra, "Ear Based Attendance Monitoring system" IEEE International Conference of Emerging Trends in Electrical and Computer Technology, Pune, 2011, pp724-727

47. J JJavle, Dr. A S Bhalchandra, "Ear Biometrics Based Personal Identification System", IJAC, Volume 2, Issue 1 ,2011, pp1-5.

48. J JJavle, Dr. A S Bhalchandra" The Human Identification System Using Multiple Geometrical Feature Extraction of Ear: An Innovative Approach" IJETAE, Volume 2, Issue 4, April 2012, pp662-666.

49. S. S. Rautmare , A. S. Bhalchandra, "Fractals Based Clustering for CBIR", International Journal on

Computer Science and Engineering (IJCSE), Vol,. 4 No. 06 June 2012, pp. 1007-1016

50. KunalRahate, Dr. A S Bhalchandra, "Hardware Implementation of Digital Image Watermarking Using VLSI Platform" IEEE Conference on VLSI and Signal Processing (ICVSP) 2014,,January 10 - 12, 2014,Indian Institute of Technology (IIT), Kharagpur

51. S. S. Rautmare , A. S. Bhalchandra, "Bench Marking Higuchi Fractal for CBIR", GVIP Journal, ISSN 1687-398X volume 14 , Issue 1, August 2014, PP. 21-28

52. S. S. Rautmare, A. S. Bhalchandra, "Human Vision Perception Simulated CBIR using Fractals and Presence Score", ICGST International Journal on Graphics, Vision and Image Processing (GVIP)Volume (14), Issue (II) December 2014

53. Mandar Kale, Dr. A S Bhalchandra, Sensors For Landmine Detection And Techniques:A Review, International Journal of Engineering Research & Technology (IJERT) Vol. 2 Issue 1, January- 2013 ISSN: 2278-0181

54. Sony Reddy, Dr. A S Bhalchandra Adaptive Digital Beam Forming using LMS Algorithm, IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) Volume 9, Issue 2, 2015 PP 63-68

55. SunitaBadave, Dr. A S BhalchandraOptimized Look-up-table for minimizing Critical Path in Distributed Arithmetic based FIR Filters, ICGST International Journal on Automatic Control & System Engineering (ACSE), Volume (16), Issue (I), June 2016

56. Ms. SandhyaBhandaru , Dr. A.S. Bhalchandra , " Border Security System using Arm 11", IJ of Engineering, Education and Technology, P-ISSN 2320-8821, e-ISSN 2320-883x, 27 January 2015

57. S.M. Badave, Dr. A S BhalchandraMultiplierless FIR Filter Implementation on FPGA,International Journal of Information and Electronics Engineering , Vol2 , Issue 2,2012

58. Agrawal S.S. Dr. A.S. Bhalchandra, "Image processing approach for malaria parasite identification , IJCA, National Conference on Growth of Technologies in Electronics, Telecom and Computers-India's Perception, pp 5-7, 2013

59. P. P. Sadgir, V. R. Ratnaparkhe, A. S. Bhalchandra , 'GPR Data Processing for Landmines Detection :A Review', IEEE International Conference on Convergence of Technology 2014, 978-1-4799-3759-2/14/$31.00©2014

60. V R Khapli, Dr.A S Bhalchandra, 'Multistage VQ based Feature Vector for Effective CBI', GVIP Journal, ISSN: 1687-398X, Volume 15, Issue 1, ICGST, Delaware, USA, June 2015

61. V R Khapli, Dr. A S Bhalchandra, 'Fast Encoding Technique of Transformed VQ for Effective CBIR', ICGST-GVIP Journal Vol. 12, Issue 2, August 2012

62. Pankaj C. Bhope, Dr. A S Bhalchandra'Ground penetrating radar related problems and their possible solutions' ' May 2015, IEEE International Conference MULTICON'15, Volume 4 Issue 6 PP 771-775

63. Rahul Mahadik, AnandPandey ,Dr. A.S. Bhalchandra, 'Modelling and Simulation of Spectral Attenuation and Central DiP parameters in Optical Fiber' IEEE , International Conference on Communication and Signal Processing (ICCSP) 2016, 6-8 April 2016 , Melmaruvathur, India ,DOI: 10.1109/ICCSP.2016.7754397

64. Rupam Bhaisare1 , A.S.Bhalchandra, 'IOT Based Smart Home Using Arduino Nano International

65.   SaurabhPatil , Dr. A S Bhalchandra, 'Pattern Recognition using Genetic Algorithm',IEEE International Conference on IoT in Social, Mobile, Analytics and Cloud, SCAD Institute of Technology,10-11 February 2017 ,Palladam, Tamilnadu