BIO-DATA

Name : Sangita D. Bharkad

Designation: Assistant Professor

Experience: 11 Yrs

Educational Qualifications: Ph.D.

Ph.D. topic: Secure Biometric System using Fingerprint

Recognized Ph.D. guide at:--

Research Areas: Digital Signal and Image processing

Research Project Completed: -- Career Award for Young Teachers AICTE, New Delhi (in progress)

Book Chapter:

[1] S. Bharkad and M. Kokare, Fingerprint Identification: Ideas, Influences, and Trends of the New Age , Pattern recognition, Machine intelligence and Biometrics(PRMI), Chapter 17, pp. 417-455, Springer publication 2011.

Member of Professional Bodies: IETE, ISTE

Reviewer of Journals:

1. Computers and Electrical Engineering, Publisher, Elsevier.

2. Biometrics, Publisher, IET.

3. Intelligent Systems, Publisher, Willey.

4. Biomedical Signal Processing and Control, Publisher, Elsevier.

5. IEEE Access, Publisher, IEEE.

6. Pattern Recognition and Artificial Intelligence, Publisher, World Scientific.

7.Journal of Information Security, Publisher, Taylor *& Francis*

Reviewer of Conferences:

1.National Conference on Communication, Computing and Networking Technologies (NCCNT-2013) during 15-16 March 2013, organized by SGGS Institute of Engineering and Technology, Nanded.

2.IEEE International Conference on Information processing (ICIP-2015), 16 - 19 Dec 2015, organized by Vishwakarma Institute of Technology, Pune.

3.IEEE International Conference on International Conference on Signal and Information Processing (IConSIP-2016), 6/10/2016 to 8/10/2016, organized by SGGSV Institute of Engineering and Technology, Nanded.

4. IEEE International Conference on Computing, Analytics, and Security Trends (CAST-2016), 19-21/12/2016, Organized by COEP, Pune.

Countries Visited: Attended and presented paper in international conference at Bangkok, in Thailand (Received Best Paper Award) .

Publications:

- ➢ **International Journal Papers:**
  - ➢ S. Bharkad and M. Kokare , "Sine Transform Based fingerprint Matching," *Int. J.of Technology and Engineering System*, Vol. 01, pp-131-136,Sep. 2010.
  - ➢ S. Bharkad and M. Kokare , "Performance evaluation of distance metrics: application to fingerprint recognition," *Int. J. of Patt. Recogn. Artif. Intell (IJPRAI),* Vol. 25, No.6, Sept. 2011, pp-777-806.
  - ➢ S. Bharkad and M. Kokare, "Modified FFT Features for Fingerprint Matching," *Int. J. of Signal and Imaging Systems Engineering*, Vol. 6, No. 3, pp. 150 – 157, 2013.
  - ➢ S. Bharkad and M. Kokare, "Hartley Transform based Fingerprint Matching," *Int. J. of Information Processing,* pp. 85-100. March-2012.
  - ➢ S. Bharkad and M. Kokare, "Rotated Wavelet Filters-based Fingerprint Recognition," *Int. J. of Patt. Recogn. Artif. Intell (IJPRAI),* Vol. 26, No. 3, Sept. 2012.
  - ➢ A. Shirsath and S. Bharkad, "Survey of currency Recognition System using Image Processing," *Int. J. of Computational Engg. Research*, Vol. 03, pp. 36-40, July 2013.
  - ➢ Harsha Panchariya and Sangita Bharkad, "Comparative Analysis of Feature Extraction Methods for Optic Disc Detection," *IOSR Journal of Computer Engineering (IOSR-JCE),* Vol. 16, Issue 3, PP 49–54, May-June 2014.
  - ➢ Sagar Kapale and Sangita Bharkad, "Liquid Level Estimation in Dynamic Condition using Kalman Filter," *Journal of Engineering Research and Application,* Vol. 6, Issue 8, pp.12–16, August 2016.

- Nikhil Patil and Sangita Bharkad, "Embedded based Flow Control for Industrial Furnace Automation," *International Journal of Engineering Research and Technology (IJERT),* Vol. 5 Issue 08, pp. 298–301, August 2016.

- S. Bharkad, "Automatic segmentation of optic disk in retinal images," *Elsevier Biomedical Signal Processing and Control* 31 (Jan. 2017) 483–498.

- S. Bharkad and M. Kokare, "Fingerprint Matching Based on Dimension Reduced DCT Feature Vectors ," *Int. J. of Information Processing.*

> **International Conference:**

- S. Bharkad and M. Kokare , "Survey of Current Fingerprint Matching Methods," *Proc. of Conf. on Computer Networks and Security*, pp-352-355,Sept. 2008.

- S. Bharkad and M. Kokare , Comparison of Transform based Features for Fingerprint Matching*," Proc. in IEEE conf. on Electronic Design and Signal Processing, December 2009.*

- S. Bharkad and M. Kokare , "Sine Transform Based Fingerprint Matching," *Proc. of Conf. on Information Science and Applications*, pp-56-59, Feb. 2010.

- S. Bharkad and M. Kokare, "Fingerprint Matching using M Band Wavelet Transform," *Proc. of IEEE Conf. on Advances in Engineering, Science and Management (ICAESM),* pp. 26-32, March 2012.

- S. Bharkad and M. Kokare, "Fingerprint Matching using Discreet Wavelet Packet Transform," *Proc. of IEEE Conf. on Advance Computing (IACC),* pp. 1183-1188, Feb. 2013.

- Sangita Bharkad, "Automatic Segmentation of Optic Disk in Retinal Images using DWT," *IEEE International Conf. on Advanced Computing*, pp.386–391, Feb. 2016.

- Sailesh Kulkarni and Sangita Bharkad, "Classification of Human Age using Radon and Wavelet Transform," *IEEE Conf. on Electronics and Communication Systems*, Vol. 05 pp. 2359–2363, Feb. 2016.

- S. Bharkad and M. Kokare, "Walsh Transform based features for fingerprint matching," *IEEE Conf. on Electronics and Communication Systems*, Vol. 05 pp. 2400–2404, Feb. 2016.

> ➤ S. Bharkad, "Automatic segmentation of blood vessels in retinal image using morphological filters," *ACM International Conf. on* Software and Computer Applications, pp. 132–-136, Feb. 2017.

Conferences / Workshop Organized:

1. Two days workshop on Wavelet Theory

Short Term Training Programmes Participated:

1. Two week TEQIP sponsored S.T.T.P. on "Linear Algebra and its Applications", 21 May -2June 2012, at S.G.G.S Institute of Engg. And Technology, Nanded.

2. One week S.T.T.P. on "Teaching Methodology", 29 -10 Dec. 2011, at Government college of Engg., Aurangabad.

3. One week TEQIP sponsored S.T.T.P. on "Recent Trends in Embedded System and its Applications", 15 -19 April 2013, at Raisoni college of Engg., Nagpur.

4. One week TEQIP sponsored S.T.T.P. on "System Design using FPGA", 24 -28 June 2013, at Government college of Engg., Aurangabad.

5. One week TEQIP sponsored S.T.T.P. on "Network Security", 7 -11 Oct. 2013, at Government college of Engg., Aurangabad.

5. Two week AICTE sponsored S.T.T.P. on "Mobile Applications using Android: A New Age Technology", 2 -13 Dec. 2013, at PICT Collge of Engg., Pune.

6. One week TEQIP sponsored S.T.T.P. on "Research Methodology", 16 -20 Dec. 2013, at Government college of Engg., Aurangabad.

7. Two week S.T.T.P. on " RF & Microwave Communication Fundamentals,Design & Application", 4-5-2015 to 17-5-2015, R.C. Patel Institute of Technology.

8. Biomedical Signal Processing, 30-3-2015 - 3-4-2015, Shiri Guru Singhji Institute of Engineering and Technology

9. Signal and Image Processing(SIP 2017), 6/2/2017-10/2/2017, Government college of Engineering Aurangabad.

10. Soft computing Techniques in engineering application(SOCTEA-),15/2/2017-19/2/2017, Government college of Engineering Aurangabad.