


Postal address:

Dept. of Electronics and Telecommunication
S.G.G.S. Institute of Engg. & Technology,
Vishnupuri, Nanded- 431 606

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Dr. BONDE SANJIV VEDU

1. **Date of Birth: 07/07/1965**
2. **Designation: Professor**
3. **Educational Qualifications Obtained:**

Institute/University	Degree	Year	Field of Specialization
W.K.Patil Vidyalaya, Maskawad. S.S.C. Board, Pune	S.S.C.	1980	High school education
Government Polytechnic Amravati. Board of Technical Education Mumbai	Diploma in Electrical Engineering	1984	Electrical
S.G.G.S. College of Engg. and Tech. Nanded Marathwada Uni., A'bad	B.E. (Electronics)	1988	Electronics
S.G.G.S. College of Engg. and Tech. Nanded Dr. B.A.M.U. A'bad	M.E. (Electronics)	1994	Electronics
Indian Institute of Technology Bombay, Mumbai	Ph.D.	11.08.2004	Biomedical Engineering

4. M. Tech Dissertation and Ph. D. Thesis Title:

	Title	Field/Area	Guide
ME	Software Implementation of Image Enhancement Techniques in Time and Frequency Domain	Digital Image Processing	Prof. T. R. Sontakke
Ph. D	Single Trial Estimation of Visual Evoked Potentials in Time-Frequency Domains	Signal Estimation	Prof. V. M. Gadre Prof. S. R. Devasahayam

5. Employment Record:

University/College	Designation	Period	
		From	To
S.G.G.S. College of Engineering and Technology, Vishnupuri, NANDED	Lecturer in Electronics and Telecommunication Engineering Department	03.12.1988	03.12.1994
S.G.G.S. College of Engineering and Technology, Vishnupuri, NANDED	Senior Lecturer in Electronics and Telecommunication Engineering Department	03.12.1994	03.12.1998
S.G.G.S. Institute of Engineering and Technology, Vishnupuri, NANDED	Assistant Professor in Electronics and Telecommunication Engineering Department	03.12.1998	31.12.2006
S.G.G.S. Institute of Engineering and Technology, Vishnupuri, NANDED	Associate Professor in Electronics and Telecommunication Engineering Department	01.01.2006	31.07.2017
S.G.G.S. Institute of Engineering and Technology, Vishnupuri, NANDED	Professor in Electronics and Telecommunication Engineering Department	01.08.2017	Till Date

6. Membership of Scientific and Professional Societies:

SN	Organization	Membership Details		
		Type	Date	Number
1	Indian Society for Technical Education	Life Member	1994	LM 16469
2	The Institution of Engineering and Technology	Member	2014	

7. Honors and Awards:

Sushrutha Award for best paper in Doctoral category of International Conference on Biomedical Engineering (BIOVISION 2001) at Indian Institute of Science, Bangalore and Biomedical Society of India.

8. Subjects Taught

a. At undergraduate level:

- i. System Software
- ii. Numerical Methods
- iii. Data Structure
- iv. Digital Signal Processing
- v. Power Electronics
- vi. Digital Signal Processing
- vii. Multimedia System

- viii. Wavelets and Time Frequency Decompositions

b. At postgraduate level:

- i. Advance Digital Signal Processing
- ii. Adaptive Digital Signal Processing
- iii. Statistical Signal processing
- iv. Wavelets and TFD

Annexure-A

Research Publications

Journal Publications

1. Sanjiv Vedu Bonde, "Single Trial Estimation of Visual Evoked Potentials in Time-Frequency Domain," *Int. Journal of BioEngineering and Technology*, vol. 23, no 1, pp. 12-31, January 2006.
2. Sanjiv Vedu Bonde, "Subband Latency Corrected Average (SLCA) Waveform Estimation for Visual Evoked Potentials," *International Journal of Biomedical Engineering*, vol. 4, no.7, pp. 29-45, 2006.
3. Sanjiv Vedu Bonde, and Deepak Kumar, "Single Trial Estimation of VEPs: Time-Frequency Domain Approach," *International Journal of Biomedical Engineering*, vol. 5, no.3, pp. 54-66, 2007.
4. Bonde S. V., Nandedkar A. V., "Recognition of Visual Evoked Potential Responses Containing Cognitive Component (P300) using Reflex Fuzzy MinMax Neural Network," *Journal of Intelligent Systems*, Vol. 18(3), pp. 247- 264. England, U.K, 2009.
5. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Distributed Energy Aware Routing Protocol for WSN," *International Journal of Computer Application (IJCA)*, vol. 34, no. 3, pp. 6-11, November 2011.
6. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Analysis of AODV, DSR and DYMO Protocols for WSN," *Journal of Computing*, vol. 4, no. 1, pp. 50-55, January 2012.
7. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Performance Analysis of IEEE 802.15.4," *International Journal of Computer Applications*, vol. 40, no. 5, pp. 23-29, February 2012.
8. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Energy Optimization in Wireless sensor networks," *Springer-Verlag Berlin Heidelberg 2012*, Journal: Mobile Communication and Power Engineering, Volume 296 of the series Communications in Computer and Information Science pp. 33-40, April 2012.
9. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Distributed Link Quality Aware Routing in Wireless Sensor Network," *CSA CSAE 2012, IEEE Xplore and indexed by Ei Compendex, Zhangjiajie, China*, pp. 528-532, May 25-27, 2012.
10. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Performance Evaluation of Ad-hoc Routing Protocols," *International Journal of Scientific & Engineering Research*, Volume 4, Issue 5, May 2013.

11. Rajesh Pandurang Borole, Sanjiv Vedu Bonde, "Patch-Based Inpainting for Object Removal and Region Filling in Images," *Journal of Intelligent Systems*. Volume 22, Issue 3, pp 335-350, July 2013.
12. Borole, R. P. & Bonde, S. V., "Image Restoration and Object Removal using Prioritised Adaptive Patch based inpainting in Wavelet Domain.," *Journal of Information Processing Systems*, Koria Information processing Society. ISSN 1976-913X (Print), ISSN 2092-805X (Electronic), 2013, pp. 1 - 20
13. Borole, R. P. & Bonde, S. V., "Image Restoration using Prioritized Exemplar Inpainting with Automatic Patch Optimization," *Journal of The Institution of Engineers (India): Series B Electrical, Electronics & Telecommunication and Computer Engineering*, ISSN 2250-2106, Volume 98, Number 3, June 2017, pp. 311-319.
14. S. B. Borkar, and S. V. Bonde, "Oceanic Image Dehazing based on Red Color Priority using Segmentation Approach," *International Journal of Oceans and Oceanography* Vol. 11, No. 1, pp. 105-119, 2017.
15. S. B. Borkar, and S. V. Bonde, "Contrast Enhancement and Visibility Restoration of Underwater Optical Images Using Fusion," *International Journal of Intelligent Engineering and Systems*, Vol.10, No.4, pp. 217-225, 2017.
16. Samarth Borkar, and Sanjiv V. Bonde, "A Fusion Based Visibility Enhancement of Single Underwater Hazy Image," *International Journal of Advances in Applied Sciences (IJAAS)* Vol. 7, No. 1, pp. 38-45, March 2018.
17. Pradeep N. Narwade, Rajendra R Sawant, and S. V. Bonde "Offline Handwritten Signature Verification using Shape Context," *3D Research*, Vo. 9, No. 4, pp. 1-12, 2018.
18. P. N. Narwade, R. R. Sawant, and S. V. Bonde, "Offline signature verification using shape correspondence," *International Journal of Biometrics*, vol. 10, no. 3, pp. 272-289, 2018.
19. Sushma Pilewan, Milind Bhalerao, Abhijeet Nandedkar, Sanjiv Bonde, "Conversion and Recognition of Handwritten Devanagari Character String into Printed Character String Using K-Nearest Neighborhood (KNN)", *International Journal of Engineering Research & Technology* (ISSN: 2278-0181), Vol. 6, Issue 08, August 2017, pp. 21 – 27.
20. Milind Bhalerao, Sanjiv Bonde, Madhav Vaidya, "Recognition of Isolated Pali Language Characters using Decision Tree Classifier," *Journal of Pattern Recognition Research x (200x)Lecture Notes in Computational Vision and Biomechanics*, Springer Internatio 9999-xxxx

21. Milind Bhalerao, Sanjiv Bonde, Madhav Vaidya, "Frequently Used Devanagari words in Marathi and Pali Language Documents" in Springer book series on Advances in computer communication and computational sciences, pp. 97 – 110.
22. Milind Bhalerao, Abhijeet Nandedkar, Sanjiv Bonde, Sushma Pillewan“, Combined Classifier Approach For Offline Handwritten Devanagari Character Recognition Using Multiple Features,” Lecture Notes in Computational Vision and Bio Inspired Computing, Springer International Publishing. (ISSN: 2212-9391), 20 February 2018, pp. 45 – 54.
23. Chetan Sultane, Milind Bhalerao, Sanjiv Bonde,”Character Recognition Based On Skeletonization: A Survey”, International Journal of Advanced Research. (ISSN: 2320-5407) (Published)
24. Bhalerao, P.B., Bonde, S.V. Cuckoo search based multi-objective algorithm with decomposition for detection of masses in mammogram images. Int. j. inf. tecnol. (2021). <https://doi.org/10.1007/s41870-021-00805-9> - Springer Scopus journal.

Conference Publications:

1. S. V. Bonde, Deepak Kumar, S. R. Devasahayam, V. M. Gadre, “Nonparametric Waveform Estimation in the Time and Time-Frequency Domain: An Application to Visual Evoked Potentials,” Proceedings of the International Conference on Biomedical Engineering, BIOVISION 2001, I. I. Sc. Bangalore, pp. 12-18, Dec. 21-24, 2001.
2. S. V. Bonde, A. V. Nandedkar, “Classification of VEP Responses Containing Cognitive Component (P300) Using Reflex Fuzzy Min-Max Neural Network,” in 4th Indian International Conference on Artificial Intelligence (IICAI 09), Tumkur, Bangalore, INDIA, Dec- 2009, December 16-18, 2009.
3. Sandeep Arun Marode, Abhijeet V. Nandedkar, Sanjiv V. Bonde, “Computer Vision Based Offset Error Computation For Web Printing Machines Using FPGA,” in Proceedings IEEE INDICON, Kolkata, 17-19 December 8, 2010.
4. Sandeep Arun Marode, Abhijeet V. Nandedkar, Sanjiv V. Bonde, “Computer Vision Based Offset Error Computation With A New Registration Mark,” Indian Conference on Computer Vision, Graphics, and Image Processing (ICVGIP), showcase, Chennai, pp.12-15, December 7, 2010.
5. M. M. Chandane, Nirmala Shinde, S. G. Bhirud, and S. V. Bonde, “Impact of Multi-channel, Multi-interface on AODV Protocol,” Proceedings of the International Conference on “On Demand Computing”, ICODC 2010, The Oxford College of Engineering, Bangalore, Nov. 3-4, pp. 89-95, 2010.
6. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, “Wireless Sensor Network: An Emerging Technology,” in Interface 2011, VJTI Mumbai India, pp. 84-89, December 16-17, 2011.

7. M. M. Chandane, S. G. Bhirud, and S. V. Bonde, "Cross Layer Protocol Architecture for Wireless Sensor Network," ICECT 2012, IEEE Explore, indexed by Ei Compendex and ISI, Kanyakumari, India, pp. 40-44, April 6-8, 2012.
8. Borole R. P. and S. V. Bonde, "Patch Based Image In-painting for Region Filling and Object Removal in Images," International Conference on Communication, VLSI, and Signal Processing, (ICCVSP 2013) 20-22/02/2013, SIT, Tumkur, Bangalore, February 2013.
9. Borole R. P., and S. V. Bonde, "Image Analysis and Restoration using Priority Based Exemplar In-painting," National Conference on Communication Computing and Networking Technologies (NCCNT-13), , SGGSIE&T, Nanded, p. 32-38, March 15-16, 2013.
10. Samarth Borkar and S. V. Bonde, "Underwater Image Restoration using Single Color Channel Prior", *National Conf. on Communication, Computing & Networking Tech.* (NCCNT-2013), at SGGSJET, Nanded.
11. P. N. Narwade, S. V. Bonde, and D. D. Doye, "Offline signature verification using shape dissimilarities," in *International Conference on Communication, Information & Computing Technology (ICCICT)*, IEEE, 2015, pp. 1-6.
12. Milind Bhalerao, Sanjiv Bonde, Abhijeet Nandedkar, "Combined Classifier Approach For Offline Handwritten Devanagari Character Recognition Using Multiple Features" in ICCVBIC 2017 International Conference On Computational Vision and Bio Inspired Computing, 21-22 September 2017 (Accepted)
13. Milind Bhalerao, Sanjiv Bonde, "Handwritten Devanagari Numeral String Segmentation and Recognition Using Artificial Neural Network", 5th International Conference on Advances in Science, Engineering, Technology and Natural Resources (ICASETNR-17) scheduled on August 4-5, 2017 at Bangkok (Thailand) (Published)
14. Milind Bhalerao, Sanjiv Bonde, Madhav Vaidya, "Frequently Used Devanagari words in Marathi and Pali Language Documents" International Conference on Computer, Communication and Computational Sciences (IC4S- 2017), held at Swissôtel Resort Phuket Patong Beach, Thailand during 11th-12th October 2017.(Communicated)
15. Rajesh Borole & Sanjiv Bonde, "Object removal and Image restoration within subspaces by prioritized patch optimization", 2020, 6th International Conference on Signal Processing and Communication (ICSC-2020), March 5th – 7th, 2020, Jaypee Institute of Information Technology, NOIDA (INDIA), 978-1-7281-5493-0/20/\$31.00 ©2020 IEEE.

16. S. V. Bonde, Pradeep Narwade, Rajendra Sawant, "Offline Signature Verification Using Convolutional Neural Network," 2020, 6th International Conference on Signal Processing and Communication (ICSC-2020), March 5th – 7th, 2020, Jaypee Institute of Information Technology, NOIDA (INDIA), 978-1-7281-5493-0/20/\$31.00 ©2020 IEEE.
17. Nishikant Surwade, Dr. Sanjiv Bonde. (2020, June). "A Review on Image Retrieval for High Level Semantics". Proceedings of the 9th World Conference on Applied Sciences, Engineering and Management. Paris, France. Date: 4-5 June 2020
18. Pramod Bhalerao , Sanjiv Bonde & "Multiobjective based Chan-Vese method for segmentation of mass in a mammogram image & Proceedings in Adaptation, Learning and Optimization' International Conference On Intelligent Vision And Computing (Icivc 2021)

Annexure – B

List of Short Term Courses Participated

SN	Course name and Institute	Duration
1.	Induction Training for Teachers S.G.G.S. College of Engineering and Technology, NANDED	25-28.02.1993 (½ week)
2.	Strategic Planning and Institutional Development S.G.G.S. College of Engineering and Technology, NANDED	30.11.1994 to 02.12.1994 (½ week)
3.	Parallel Computing in Science and Engineering Centre for Development of Advance Computing (C-DAC), Pune	19-21.06.1996 (½ week)
4.	Industry Institute Partnership S.G.G.S. College of Engineering and Technology, NANDED	3-8.03.1997 (01 week)
5.	Digital Signal Processing S.G.G.S. College of Engineering and Technology, NANDED	16-27.03 1998 (02 weeks)
6.	Symposium on Biomedical Engineering and Nuclear Medicine BARC, Anushaktinagar, MUMBAI	27-29.01.2000 (½ week)
7.	Digital Signal and Image Processing S.G.G.S. College of Engineering and Technology, NANDED	05-17.06.2000 (02 weeks)
8.	Programming with C and C++ S.G.G.S. College of Engineering and Technology, NANDED	29.06.2000-19.07.2000 (03 weeks)
9.	VLSI: Technology of the Future Dr. Babasaheb Ambedekar Technological University, LONERE	12-25-02-2003 (02 Weeks)
10	Biomedical Signal and Image Processing Dr. Babasaheb Ambedekar Technological University, LONERE	10-21.03-2003 (02 weeks)

11.	Programming Paradigms: Verification Perspective. ISTE Programme arranged by S.G.G.S. Institute of Engineering and Technology, NANDED.	08-20.12.2004 (02 weeks)
12.	Institutional Capacity Building for Future Administrative Staff College of India, Hyderabad Sponsored by: S.G.G.S. Institute of Engineering and Technology, NANDED	26-30.12.2005 (01 week)
13.	Production Lifecycle Management. STTP under TEQIP arranged by: S.G.G.S. Institute of Engineering and Technology, NANDED	10-12.03.2006 (½ week)
14.	Real Time Signal Processing ISTE Programme arranged by Y. C. College of Engineering, Nagpur.	26-30.11.2007 (01 week)
15.	Effective Role Execution for Institutional Development S.G.G.S. Institute of Engineering and Technology, NANDED and Directorate of Technical Education (M.S)	27-28, February 2009 (02 Days)
16.	Advances in Signal Processing and Soft Computing ISTE Programme arranged by S. G. G. S. Institute of Engineering and Technology, Vishnupuri, Nanded	18-22.05.2009 (01 week)
17	National Level Workshop on “Wavelets and Applications” Organized by S. G. G. S. Institute of Engineering and Technology, Vishnupuri, Nanded and IEEE Signal Processing Chapter, Bmoba, Mumbai	08-10.06.2009 (½ week)
18	AICTE sponsored Staff Development programme on “Recent Advances in speech, Image and Video Processing”, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED.	12-23 December 2011 (02 weeks)
19	TEQIP sponsored course on “Linear Algebra and its Application”, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED.	21 st May to 02 nd June 2012 (02 weeks)
20	TEQIP sponsored FDP on “Wireless Sensors and their Applications”, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED.	18-22 March 2013 (One Week)
21	TEQIP Sponsored: Winter School on Biometrics for Secured Authentication: Fundamentals and Advances, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED.	23-27 December 2013 (01 Week)
22	TEQIP Sponsored “Workshop on Computer Vision”, Organized by “On-Line Solutions (Imaging), Chennai”	16-17 September 2014 (02 Days)
23	TEQIP Sponsored Workshop on “Thermal Imaging,” Conducted by I Tech Solutions Pune	10-12 November 2014 (03 Days)
24	TEQIP Sponsored “National Workshop on “Corporate Social Responsibility in the Indian Context”	20-21 February 2015 (02 Days)
25	TEQIP sponsored Training Program on “Mathematical and Statistical Foundation to Signal and Image Processing,” Organized at S.G.G.S. Institute of Engineering and Technology, NANDED.	28 May – 6 June 2015 (02 Weeks)
26	STTP on “Computer Vision and Pattern Recognition”, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED.	22 June – 10 July 2015 (03 Weeks)
27	Training Program on “Advance Imaging,” Conducted by ADCIS, FRANCE and “On-Line Solutions (Imaging), Chennai”	06-08 January 2016 (03 Days)

28.	QIP Short Term Interdisciplinary Course on “Probability and Statistic”, Sponsored by AICTE & jointly organized by Dept. of Mathematics & Dept. of CSE at S. G. G. S. Institute of Engg. And Tech., Nanded	15 th to 20 th March 2019 (One Week)
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List of Conferences Attended:

SN	Conference / Institute	Duration
1.	Symposium on Biomedical Engineering and Nuclear Medicine BARC, Anushaktinagar, MUMBAI	27-29.01.2000
2.	International Conference on Biomedical Engineering, BIOVISION 2001, I. I. Sc. Bangalore.	21-24.12 2001
3.	State Level Conference on Opportunities in Information Technology with special reference to Information Technology Policy of Government of Maharashtra, held at S.G.G.S. Institute of Engineering and Technology, NANDED	05-07.11.2004
4.	4 th Indian International Conference on Artificial Intelligence (IICAI- 09), Siddaganga Institute of Technology (SIT), Tumkur, Bangalore, Dec 14-16, 2009.	14-16. 12. 2009
5.	National Conference on Communication Computing and Networking Technologies (NCCNT-13), SGGSI&T, Nanded, p. 32-38, March 15-16, 2013.	15-16, 03. 2013
6.	Second International conference on “Recent Trends in Engineering & Technology” (ICRTET 2013), SNJB’s Late Sau. Kantibai Bhavarlalji Jain College of Engineering, Chandwad, Dist-Nashik, (MS), INDIA. Participated and Session Chair	22-24 February 2013
7.	Second International Conference Communication, Information and Computing Technology (ICCICT 2015), Organised by SPIT, Andheri, Mumbai	16-18 Jan 2015
8.	International Conference on Industrial Instrumentation and Control Organized by Dept. of Instrumentation & Control, College of Engineering, Pune, (MS), India	28-30 May 2015
9	6 th International Conference on Signal Processing and Communication (ICSC-2020), March 5 th – 7 th , 2020, Jaypee Institute of Information Technology, NOIDA (INDIA), 978-1- 7281-5493-0/20/\$31.00 ©2020 IEEE.	5 th – 7 th March, 2020

Short Term Course Conducted and Coordinated

IEEE National Level Workshop on Wavelets and Applications, at Shri Guru Gobind Singhji
Institute of Engineering and Technology, Vishnupuri, Nanded, during 8th -10th June 2009

Self-financed ISTE STTP on “Advances in Signal Processing and Soft Computing”, at Shri Guru Gobind Singhji Institute of Engineering and Technology, Vishnupuri, Nanded, 18th -22nd May 2009.

Organized a Workshop on Computer Vision”, Organized by “On-Line Solutions (Imaging), Chennai” 16-17 September 2014

Organized a Workshop on “Thermal Imaging,” Conducted by I Tech Solutions Pune, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED. 10-12 November 2014.

Conducted a STTP on “Computer Vision and Pattern Recognition”, Organized at S.G.G.S. Institute of Engineering and Technology, NANDED, 22 June – 10 July 2015

Annexure-C

No. of M. Tech students guided: More than 40

No. of Ph.D. students guided (Ph.D. Degree awarded): 02

No. of Ph.D. students in progress: 08.

Research Projects (completed/ongoing):

- One research projects, each costing Rs. 5,00,000 completed.
- Currently having a research projects on image inpainting costing Rs. 5,50,000 ongoing.

Designed institute Elective “Wavelets and Time-Frequency Decomposition” for UG, PG, and Research scholars (Ph. D. students).

Developed Digital Signal Processing and Computer Vision and Pattern Recognition laboratory with Prof. A. V. Nandedkar (<http://cvprlab-sggs.co.in/>).

Databases Developed for Research Work:

1. Thermal Image Database for Face Recognition
2. Signature database
3. Iris database

(http://cvprlab-sggs.co.in/index_files/Page2141.htm)

Started summer internship programme for UG students:

http://cvprlab-sggs.co.in/index_files/Page576.htm

Developed the course material for:

1. Digital Signal Processing
2. Power Electronics

3. Wavelets and Time Frequency Decompositions

Annexure – D

Research Consultancy/ Training Offered

SN	Conference / Institute	Duration	Revenue Generated
1.	Self-financed ISTE STTP on “Advances in Signal Processing and Soft Computing”	18-22.05.2009	Rs. 85,550/-
2.	National Level Workshop on “Wavelets and Applications”	08-10.06.2009	Rs. 83,750/-
3.	Training offered to Bharat Forge	2020	Rs. 30,000/-

Professional and Other Activity:

SN	Brief Description
1.	Obtained the grant of Rs. 5,00,000 for the development of power electronics laboratory under DCA scheme of AICTE in the year 1999.
2.	Obtained the Research grant of Rs. 5,50,000 for Archeaological Image Inpainting under RPS scheme of AICTE in the year 2012.
3.	Laboratory In charge of Power Electronics Laboratory.
4.	Member of M.E. admission committee for two years.
5.	Worked as a class teacher / coordinator.
6.	Member of syllabus setting committee S.R.T.M. University, NANDED.
7.	Worked as a member of F.E. admission committee for four years.
8.	Worked as U.S. for Dr. B.A.M. University examination for one semester.
9.	TEQIP in charge for Electronics and Telecommunication Engineering Department
10.	M. Tech. Coordinator for two years.
11.	Centre coordinator for MBA-MMS CET-2008-09 Examination.
12.	Worked as a member of Research Laboratory Recognition committee of Solapur University.
13.	Worked as a Deputy Registrar in S. G. G. S. I. E. & T. , Nanded for the period of six months
14.	Worked as a Registrar in S. G. G. S. I. E. & T. , Nanded for the period of 9.5 months.

Annexure – E

Databases Developed for Research Work:

1. Thermal Image Database for Face Recognition
2. Signature database
3. Iris database
(http://cvprlab-sggs.co.in/index_files/Page2141.htm)

Started summer internship programme for UG students:

Developed the course material for:

Course material and presentations are prepared for:

1. **Digital Signal Processing**
2. **Power Electronics**
3. **Wavelets and Time Frequency Decompositions**
4. **Computer Oriented Numerical Methods**

Annexure - F **Lectures Delivered at National level:**

1.	Delivered lecture on “Wavelet Transform and its Extensions” as a resource person in ISTE Short Term Training Programme (ISTE-STTP) on “Multimedia Systems” at V. J. T. I., Mumbai
2.	Delivered lecture on “Wavelet Transform and Filter Banks” as a resource person in the training programme arranged for technical teachers of engineering colleges at J. T. M. Engineering College, Faizpur.
3.	Invited Talk on “Visual Evoked Potentials in Healthy Human Subjects.” At Lokmanya Tilak Hospital, Sion (Sion Hospital), Bombay.
4.	Delivered lecture on “Single Trial Estimation of Visual Evoked Potentials in Time-Frequency Domains” in the STTP programme on “Recent Trends in Signal and Image Processing” arranged by the Dept. of Electronics and Telecommunication Engineering at S. G. G. S. Institute of Engineering and Technology, Nanded.
5.	Delivered lecture on “Biomedical Signal Estimation in Time-Frequency Domains” in the STTP programme on “Biomedical Engineering” arranged by the Dept. of Instrumentation Engineering at S. G. G. S. Institute of Engineering and Technology, Nanded.
6.	Delivered lecture on “Digital Signal Processing: PR FIR Filter Bank Design” in ISTE sponsored “Staff Development Programme on “Advanced Digital Signal Processing” at Sinhgad College of Engineering, Pune.
7.	Delivered lecture on “Wavelet Transform and its Applications” as a resource person in ISTE Short Term Training Programme (ISTE-STTP) on “Recent Trends in Digital Image Processing” at Don Basco Institute of Technology, Kurla (W), Mumbai.
8.	Delivered lecture on “Application of Digital Signal Processing with Matlab” as a resource person in the ISTE training programme arranged for technical teachers of engineering colleges at J. T. M. Engineering College, Faizpur.
9.	Invited Expert Talk on “Advanced Digital Signal Processing” in AICTE Sponsored Staff Development Programme arranged by Sinhgad College of Engineering, Pune.
10.	Delivered expert talk on “Wavelet Transform” during ISTE sponsored National Workshop on Recent Trends in Communication” arranged by Rural Engineering College, Bhalki, Karnataka.
11.	Delivered Key note address in National level conference on “Recent Trends in Technology”, arranged by J. T. M. Engineering College, Faizpur.
12.	Invited Expert Talk on “Research Topics in Signal and Image Processing” in ISTE Course Pimpri Chinchwad College of Engineering, Pune.
13.	Resource person in AICTE sponsored Staff Development programme on “Recent Advances in speech, Image and Video Processing”, Organized at S.G.G.S. Institute of Engineering and

	Technology, NANDED, 12-23 December 2011
14	Delivered a complete session on “Design of two Channel Perfect Filter Reconstruction Bank” in AICTE sponsored FDP organized by Dept. of Electronics and Telecommunication Engg. At D. K. T. E’s Textile & Engineering Institute, Ichalkaranji on 6 th December 2019.
15	Expert talk on “Estimation of Evoked Potentials in Time-Frequency-Wavelet Domain” in FDP organized by the Dept. of Electronics and Telecommunication Engg. at Sipna College of Engineering and Technology, Amravati on 9 th December 2019.
16	Delivered a complete session in FDP on “Applied Biomedical Signal Processing: Initiative towards eHealth at the Dept. of Electronics and Telecommunication Engg., Pimpri Chinchwad College of Engineering, Akurdi, Pune, held from 4 th to 15 th November 2019

Course Work Completed at IIT Bombay, Mumbai

S.N.	Course No	GRADE	Course Credit	Course Name
1	BM 603	BB	6.00	Physiology for Engineers
2	BM 607	BB	10.00	Physiological Measurements and Quantitative Physiology
3	BM 651	DD	3.00	Cell Physiology and Biopotentials
4	BM 661	AB	3.00	Signals and Systems for Biomedical Engineers
5	BM 695	AB	4.00	Credit Seminar
6	BM 602	BB	6.00	Biostatistics
7	BM 604	AB	6.00	Clinical Physiology

Annexure – G

Sushrutha Award for best paper in Doctoral category of International Conference on Biomedical Engineering (BIOVISION 2001) at Indian Institute of Science, Bangalore and Biomedical Society of India.

SN	Brief Description
1.	Obtained the grant of Rs. 5,00,000 for the development of power electronics laboratory under DCA scheme of AICTE in the year 1999.
2.	Obtained the Research grant of Rs. 5,50,000 for Archeaological Image Inpainting under RPS scheme of AICTE in the year 2012.
3.	Laboratory In charge of Power Electronics Laboratory.
4.	Laboratory In charge of Digital Signal Processing Laboratory.
5.	Worked as a class teacher / coordinator.
6.	Member of syllabus setting committee S.R.T.M. University, NANDED.
7.	Worked as RRC committee member for North Maharashtra University, Jalgaon
8.	Worked as a scrutiny committee members for AICTE, New Delhi
9.	MODROB Project (Rs. 20.5 Lakhs)

Administrative Responsibilities Held

SN	Name of the Post	Duration
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1	Deputy Registrar at S. G. G. S. Institute of Engineering and Technology, Nanded	09 Months
2	Registrar at S. G. G. S. Institute of Engineering and Technology, Nanded	09 Months
3	Head, Department of Electronics and Telecommunication Engineering, S. G. G. S. Institute of Engineering and Technology, Nanded	From June 2012 to June 2014