

R KUMARA SWAMY

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Education

	Degree	Year	Institute	Specialization
1	B.E	1991	S.I.T Tumkur	Instrumentation
2	M.E	1997	B.M.S.C.E Bangalore	Electronics
3	Ph.D	2007	I.I.T.M Dept of CSE	Signal Processing

Professional Experience

	Date (from-to)	Designation	Organization
1	05.09.2008 till date	Professor	S.I.T Tumkur
2	28.01.2008 to 04.09.2008	Asst Professor	S.I.T Tumkur
3	13.10.2003 to 27.01.2008	Senior Lecturer	S.I.T Tumkur
4	12.10.1998 to 12.10.2003	Lecturer	S.I.T Tumkur
5	1995 July to Nov 1995	Lecturer	B.I.E T Davanagere

Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

	Date (from-to)	Position	Organization
1	19.11.2013-18.11.2016	Head of the Department	S.I.T Tumkur
2	21.11.2019-20.11.2022	Head of the Department	S.I.T Tumkur
3	2018-2020	Research progress monitoring committee	S.I.T Tumkur
4	2023-till date	Institute Project Monitoring committee	S.I.T Tumkur

Affiliations of Professional organizations

- IEEE Senior member(No. 80735386) (Member from 2008)
- Fellow, Institute of Engineers (F-1206644)
- Life Membership of ISTE (26455, Indian Society for Technical Education), since 30-03-1992

Awards and Honors

- Best poster award (Third) at 12th National Conference on "Science and Technology for Start-ups", 20-21, July, 2022, KSTA and STBI, Tumkur.
- Best Project award at SHRISTI 2019, Saint Gits College of Engineering, Kottayam, Feb. 18-19, 2019.
- Best paper award at National Conference on Electronics, Signals, Communication & Optimization (NCESCO-15), GSSSIETW, Mysooru, for the paper titled "Determining number of speakers in multi-speaker condition with additive noise.", July 9, 2015.
- Best paper award at NCRAEC-2013, Bengaluru for the paper titled "Comparison of statistical and signal processing approaches for speaker separation in multispeaker environment", May 3, 2013.
- Best paper award at ICVSP-2012 for the paper titled "Bilingual speech recognition system", KSIT, Bengaluru, May 4-5, 2012.
- Best project of the Year award for the project titled "Artificial Intelligence" at the KSCST seminar cum exhibition held at N.I.T. Suratkal during Sept. 4-5, 2009.
- Cash award and a certificate by IEEE Bangalore section for the Journal publication during AGM on 14th Feb. 2010.
- Felicitated by Dr. Belagere Krishna Shastry during the Rotary club function at Hiriyur in Sept. 2008.
- Felicitated by his Holiness Dr. Sri Sivakumara Swamigalu at Birla Auditorium during Sept. Oct. 2008.
- Certificate of Merit and Medal, honoured by S.I.T. Tumkur (Karnataka) for securing First place in University Examination in August, 1989.

Courses Taught

Undergraduate Courses :	Postgraduate Courses
1. Signals and Systems	1. Detection Theory
2. Random Process	2. Statistical Signal processing
3. Probability and Random Process	3. Detection and Estimation

4. Analog Communication
 5. Digital Signal Processing
 6. Digital Communication
 7. DSP Architecture
 8. Optical Communication
 9. Engineering Economics and Industrial Management
 10. Control System components
 11. Speech Processing
 12. Communication Systems -III
 13. Artificial Neural networks
 14. Machine learning
 15. Deep learning
4. Speech processing
 5. Advanced wireless communication
 6. Pattern recognition
 7. Speech and audio processing

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1	M S Rudramurthy	Speaker recognition in uncontrolled environment	2016
2	M S Prasanna Kumar	Advanced strategies for separation of Speech mixture	2018
3	K C Narendra	A study on Multimodal authentication system	2019
4	Hemavathi R	A study on multispeaker environment	2021

Research Areas

- Speech signal processing
- Pattern recognition
- Human-Machine interaction
- Artificial intelligence

Sponsored Projects

Completed Projects:

1. Consortium project: Development of prosodically guided phonetic engine for searching databases in Indian Languages

Sponsoring agency: DIT Govt. of India

Monitoring agency: RIT Kottayam, Kerala

Amount and duration: **Rs. 16.5 Lakhs Three Years**

Role: Investigator

2. Rs. 6,00,000=00 (Rupees Six Lakhs only) from V.T.U. Belgaum under Sponsored research projects scheme for the year 2011-2014

Role: Investigator

3. Mentor, DST sponsored project "Speaker separation in multi-speaker environment",

Amount and Duration : **Rs 14,95,000.Three years(2017-20)**

Journal Papers

1. R. Kumara Swamy, K. Sri Rama Murty and B. Yegnanarayana, "Determining the Number of Speakers from a Multispeaker Speech Signal using Excitation Information", IEEE Signal Processing Letters, vol. 7, pp 483-486, July 2007.
2. B. Yegnanarayana, R. Kumara Swamy and K. Sri Rama Murty, "Determining Mixing Parameters from Multispeaker Data using Speech-Specific Information", IEEE Trans. on Speech, Audio and Language Processing, vol. 17, pp. 1196-1207, No. 6, Aug. 2009.
3. K.C.Narendra and R. Kumaraswamy, "Speaker Recognition in Uncontrolled Environment:A Review",Journal of Intelligent Systems, vol. 22, issue 1,pp. 49-65, Mar. 2013.
4. J.K Ashwini and R. Kumaraswamy, "Single-Channel Speech Enhancement Techniques for Distant Speech Recognition",Journal of Intelligent Systems, vol. 22, issue 2, pp. 1-13, May 2013.
5. M.S. Rudramurthy, V Kamakshi Prasad and R. Kumaraswamy, "Voice activity detection algorithm using zero frequency filter assisted peak-ing resonator and empirical mode decomposition",Special issue of Journal of Intelligent Systems, vol. 22, issue 3,pp. 269-282, Sept. 2013.
6. Rudramurthy M.S, Kamakshi Prasad V, Kumaraswamy.R, "Speaker Verification Under Degraded Conditions Using Empirical Mode Decomposition Based Voice Activity Detection Algorithm", Journal of Intelligent Systems, 23(4):359-378,2014.
7. Rudramurthy M.S, Nilabh Kumar Pathak, Kamakshiprasad V, Kumaraswamy R, "Speaker Identification using Empirical Mode Decomposition based Voice Activity Detection Algorithm under Realistic Conditions", Journal of Intelligent Systems, 23(4):405-421,2014.
8. Prasanna Kumar M K and R Kumaraswamy, "Supervised and unsupervised

- separation of convolutive speech mixtures using f_0 and formant frequencies", International Journal of Speech Technology: Volume 18, Issue 4, Page 649-662, 2015.
9. Prasanna Kumar M K and R Kumaraswamy, "An unsupervised approach for co-channel speech separation using Hilbert-Huang Transform and Fuzzy C-Means Clustering", International Journal of Speech Technology, Vol. 20, Issue 1, page 1-13, 2017.
 10. Prasanna Kumar M K and R Kumaraswamy, "Single-channel speech separation using Empirical Mode Decomposition and multi pitch information with estimation of number of speakers", International Journal of Speech Technology, Vol. 20, Issue 1, page 109-125, 2017.
 11. Prasanna Kumar M K and R Kumaraswamy, "Single-Channel speech separation based on Empirical Mode Decomposition and Hilbert Transform", IET Signal Processing, Vol. 11, Issue 5, page 579-586, June 2017.
 12. K.C.Narendra, R. Kumaraswamy and Sanjeev G, "Performance Comparison of multitaper techniques for speaker verification with expressive speech", International Journal of Speech Technology, Vol. 21, No. 3, pp 463-472, 2018.
 13. Hemavathi R, and R Kumaraswamy, "A Study on unsupervised monaural reverberant speech separation", International Journal of Speech Technology, vol. 23, pp 451-457, May 2020 ISSN 1381-2416, DOI 10.1007/s10772-020-09706-x.
 14. Prasanna Kumar MK and R. Kumaraswamy, "Unsupervised speech separation by detecting speaker changeover points under single channel condition", International Journal of Speech Technology, Vol. 21, Issue 8, pp. 1101-1112, Aug. 2021.
 15. Hemavathi R.;Kumaraswamy R., "Voice Conversion Spoofing detection by exploring artifacts estimates", Multimedia Tools and Applications, Vol. 80, pp. 23561-23580, 2021.
 16. Prasanna Kumar M K and R Kumaraswamy, "Role of Speech Separation in verifying the speaker under degraded conditions using EMD and Hilbert Transform", Algorithms for Intelligent Systems(PCCDS-2021), Vol. 1, pp 309-324, Springer Nature, Electronic ISSN 2524-7573, DOI 10.1007/978-981-16-5747-4-27, 2022.
 17. Prasanna Kumar MK and R. Kumaraswamy, "A hybrid model for unsupervised single channel speech separation", Multimedia Tools and Applications, Vol. 7, pp.1-19, July, 2023. <https://doi.org/10.1007/s11042-023-16108-z>.

Text Books

1. R. Kumara Swamy and Rajesh M Hegde, Digital Signal Processing: An integrated approach, M/s Pooja Publishers, Bangalore.
2. R. Kumara Swamy and Rajesh M Hegde, Digital Communication, M/s Pooja

Publishers, Bangalore.

International Conference Publications

1. R. Kumaraswamy and V. M. Aparanji, A. Joshi, A. Malviya, J. Sharma, Mayank, "Smart Healthcare Assistant," 2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), Tumakuru, India, 2025, pp. 1-7, doi: 10.1109/ICSSES64899.2025.11009275.
2. R. Kumaraswamy, Yashaswini. M N, Yeswanth. H S, Gagan J C and Padmashree.S P, "Channel Estimation in Wireless Communication," 2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), Tumakuru, India, 2025, pp. 1-5, [doi:10.1109/ICSSES64899.2025.11010001](https://doi.org/10.1109/ICSSES64899.2025.11010001).
3. R. Chandana, K. A. Jeevitha, P. S. Reddy, R. R. K. Reddy and R. Kumaraswamy, "JARVIS - A Campus Assist," 2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), May 3-4, Tumakuru, India, 2024, pp. 1-4, doi: 10.1109/ICSSES62373.2024.10561421.
4. C. G. Khushi Prasad, A. B. Jain, V. G. Usha, V. Rajeshwari and R. Kumaraswamy, "A study on performance analysis of NB-IoT," 2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), May 3-4, Tumakuru, India, 2024, pp. 1-9, doi: 10.1109/ICSSES62373.2024.10561306.
5. R. Kumaraswamy, S. G R, J. Gowda N, Kantharaju and C. R, "A Medical Chatbot with Object Detection Feature for Improved Patient Care," 2023 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), Tumakuru, India, 2023, pp. 1-6, doi: 10.1109/ICSSES58299.2023.10200551.
6. R. Kumaraswamy, M. H. K, M. S, N. C and P. C, "Study on performance of MIMO and NOMA system," 2023 4th International Conference for Emerging Technology (INCET), Belgaum, India, 2023, pp. 1-8, [doi:10.1109/INCET57972.2023.10170640](https://doi.org/10.1109/INCET57972.2023.10170640).
7. Narendra K.C, Sanjeev Gurugopinath, and R. Kumaraswamy, "Scaled Magnitude Multi-Channel Correlation Filters for Multimodal Biometric Recognition", Proc. Of 12th International Symposium on Image and Signal Processing and Analysis (ISPA), Croatia, pp. 159-164, Sept. 12-15, 2021,doi: 10.1109/ISPA52656.2021.9552117.
8. Srinidhi A N, Ajay S Kamath and R Kumaraswamy, "Multi-Modal Humanoid", pp1-4, Proc. ICCSP 2020.
9. Hemavathi R, S. Thoshith, and R Kumaraswamy, "Exploring Source Separation as a countermeasure for Voice Conversion Spoofing attack", Proc. of 1st International conf. On Machine learning, Image processing, Network security and Data sciences, pp27, NIT Kurukshetra, Mar. 3-4, 2019.
10. Sarvini T, Sneha T, Sukanya Gowthami G S, Sushmitha S, and R Kumaraswamy, "Performance Comparison of Weed Detection Algorithms", Proceedings of IEEE International Conference on Communication and Signal

Processing, April 4-6, 2019, Melmaruvattur, TN, India.

11. Shashank Satyanarayana, Narendra K.C, Sanjeev Gurugopinath, R. Muralishankar, and R. Kumaraswamy, "Performance Comparison of Cepstral Features for Language Identification using Convolutional Recurrent Neural Networks", Proc. Of IEEE INDICON 2019, Amrita Vishwa Vidyapeetam, Coimbatore, Dec. 16-18, 2018.
12. Hemavathi R and R Kumaraswamy, "Unsupervised Speech Separation Using Statistical, Auditory and Signal Processing Approaches", Proceedings of IEEE WISPNET 2018 conference, pp. 1-5, SSNCE, Chennai, Mar. 22-24, 2018.
13. S. Thoshith, S. Mulgund, Praveen S, N. Yogesh, and R. Kumaraswamy, "Multi-modal Humanoid Robot", Proceedings of IEEE WISPNET 2018 conference, pp. 1-4, SSNCE, Chennai, Mar. 22-24, 2018.
14. Devadarshan K R, Mounica KV, R. Kumaraswamy, and Suryakanth V Gangashetty, "Emotion Recognition using Deep Neural Networks", Proceedings of International Conference On Signal, Image Processing, Communication Automation(ICSIPCA- 2017), pp. 610-615, JSSATE, Bangalore, July 6-7, 2017.
15. Vishweshkumar Aithal and R. Kumaraswamy, "Shift Invariant Nonnegative Factorization Models for Musical Source Separation", Proceedings of ICSIP - 2017, pp. 183-188, MIT, Mysore, Aug. 18-19, 2017.
16. Z. Khamar Anjum and R. Kumaraswamy, "Spoofing and countermeasures for Speaker Verification: A Review", Proceedings of IEEE WISPNET 2017 conference, pp. 481-485, SSNCE, Chennai, Mar. 22-24, 2017.
17. Narendra K.C, Shashank Satynarayan, and R. Kumaraswamy, "VISH: A Multimodal Biometric Database", Proceedings of IEEE WISPNET 2017 conference, pp. 2038-41, SSNCE, Chennai, Mar. 22-24, 2017.
18. Prince Kumar, Nagapushpa K, Vivek raj, Vivek Kumar and R Kumaraswamy, "Multi-Functional Intelligent Humanoid using Speech Processing", Proceedings of IEEE International Conference on Communication and Signal Processing, pp. 244-248, April 6-8, 2017, Melmaruvattur, TN, India.
19. Prasanna Kumar M.K and R. Kumaraswamy, "Speech separation with EMD as front-end for noise robust co-channel speaker identification", Proceedings of IEEE international conference on circuits, control, communication and computing, pp. 101-104, Bangalore 4-6 October, 2016.
20. Lakshmi HR, Sivanand Achanta, Suryakanth V Gangashetty, R Kumaraswamy, "An Investigation Of End-To- End Speaker Recognition Using Deep Neural Networks", International Conference on Signal Processing, Communication and Computational Research (ICSPCCR- 16), IFERP Journal, May 18th-19th, Mysuru, 2016.
21. Naina Teertha, Sai Sirisha Rallabandi, Sai Krishna Rallabandi, R Kumaraswamy, Suryakanth V Gangashetty, " Learning a phoneme manifold using multitask learning for DNN based synthesis of children's stories",

International Conference on Signal Processing, Communication and Computational Research (ICSPCCR- 16), IFERP Journal, May 18th-19th, Mysuru, 2016.

22. Naina Teertha, Sai Sirisha Rallabandi, Sai Krishna Rallabandi, R Kumaraswamy, Suryakanth V Gangashetty, "Correlation based continuity metric for concatenative speech synthesis", International Conference on Signal Processing, Communication and Computational Research(ICSPCCR-16 IFERP Journal, May 18th-19th, Mysuru, 2016.
23. Kavitha S, Veena S and R. Kumaraswamy, "Development of Automatic speech recognition system for voice activated ground control system", Proc. Of IEEE International Conference on Trends in Automation, Communication and Computing Technologies(ITACT2015),.pp.218-222, Dec. 21-22, Bengaluru, India 2015.
24. Akhila K S and R. Kumaraswamy, "Comparative analysis of Kannada Phoneme recognition using different classifiers", Proc. Of IEEE International Conference on Trends in Automation, Communication and Computing Technologies(ITACT2015),.pp.-, Dec. 21-22, Bengaluru, India 2015.
25. Prasanna Kumar M.K and R. Kumaraswamy, ""Role of f0 and formant Frequencies in unsupervised separation of convolutive speech mixtures", Proceedings of IEEE international conference on applied and theoretical computing and communication technology (iCATccT), pp. 316-320, Davanagere, Karnataka, India, 29-31 October, 2015.
26. Prasanna Kumar M.K and R. Kumaraswamy, "Detection and Separation of the sources from Underdetermined Instantaneous Mixtures without Estimating the Inverse Matrix", Proc. Of IEEE Internation Conference on Communication and Signal Processing(ICC2015), pp.92-96, Apr. 2-4, Melmaruvathur, TN, India 2015.
27. Pradeep. R and R. Kumaraswamy, "Comparision of conventional methods and deep belief networks for isolated word recognition", Proc. of IEEE National Conference on Communication, Signal processing and Networking (NCCSN), Palakkad, Kerala, pp 1-5, 2014.
28. B. Raghunandan and R. Kumaraswamy, "A local neural network approach to detect actions of human body", Proc. of IEEE Natioanl Conference on Communication, Signal processing and Networking (NCCSN), Palakkad, Kerala, 2014.
29. Rudramurthy M.S, Kamakshi Prasad V, Kumaraswamy.R, "Improved Recognition Performance Using Empirical Mode Decomposition Based Voice Activity Detection Algorithm", Proceedings of International Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA-13), Aug. 1-3,2014, NMIT, Bangalore.
30. Rajeswari B.S, Kumaraswamy.R, "Speech Enhancement in Multispeaker Environment using Speech-specific Information", Proceedings of International

- Conference on Emerging Research in Computing, Information, Communication and Applications (ERCICA-13), Aug. 1-3, 2014, NMIT, Bangalore.
31. Shridhara M V, Babu K Banahatti, Narthan L, Veena Karjigi and R Kumaraswamy, "Development of Kannada Speech Corpus for Prosodically Guided Phonetic Search Engine", Proc. of International Oriental COCODA Conference-2013, Nov.25-27,2013, Gurgaon, India.
 32. M.S. Rudramurthy, V. Kamakshi Prasad and R. Kumaraswamy, "Voice Activity Detection Algorithm Using Zero Frequency Filter Assisted Peaking Resonator and Empirical Mode Decomposition (EMD)", Proc. Of ICCVSP-2013, pp. 38-43, Feb. 20-22, Tumkur, India.
 33. J.K. Ashwini and R. Kumaraswamy, "Suppressing Unwanted Reflections Smeared In The Distant Speech Signal Using Long Term Linear Prediction", Proc. of ICCVSP-2013, pp. 171-176, Feb. 20-22, Tumkur, India.
 34. Narendra K.C and R. Kumaraswamy, "Automatic Speaker recognition in Reverberant environment", Proc. of ICVSP-2012, pp 155-158, May 4-5, Bengaluru, India.
 35. P. Arpitha, T. Ashwini, Kelvin C, Uday Y, Wences Laus and R. Kumaraswamy, "Bilingual speech recognition system", Proc. of ICVSP-2012, pp 233-236, May 4-5, Bengaluru, India.
 36. M.S. Rudramurthy, V. Kamakshiprasad and R. Kumaraswamy, "Speech analysis using Hilbert Huang transform", Proc. of ICRIT, Kottayam, Feb. 10-12, 2011.
 37. K. Karunakara, M.S. Rudramurthy, B.P. Mallikarjuna swamy, and R. Kumaraswamy, "Edge detection of an image using Ensemble bidimensional empirical mode decomposition", Proc. of ICRIT, Kottayam, Feb. 10-12, 2011.
 38. R. Kumara Swamy and B. Yegnanarayana, "Speech recognition in a multispeaker environment", Proc. of Workshop on Image and Signal Processing (WISP-07), I.I.T.Guwahati, pp.106-109, Dec. 28-29,2007.
 39. B. Yegnanarayana, R. Kumara Swamy and S. R. M. Prasanna, "Separation of multispeaker speech using excitation information", in Proc. of ISCA workshop on Non Linear Speech Signal Processing (NOLISP-2005), Spain, pp. 11-18, April 21-23, 2005.
 40. R. Kumara Swamy and S. V. Gangashetty, "Neural network models for categorization of audio data" in Proc. of Int. Conf. on Cognitive and Neural System (ICCNS-2005), Boston, pp 104, May 18-21, 2005.
 41. V. Suresh, C. Krishna Mohan, R. Kumara Swamy and B. Yegnanarayana, "Combining multiple evidence for video classification," in Proc. IEEE Int. Conf. Intelligent Sensing and Information Processing (ICISIP-05), Chennai, India, pp. 187-192, Jan. 4-7, 2005.
 42. V. Suresh, C. Krishna Mohan, R. Kumara Swamy, and B. Yegnanarayana, "Content-based video classification using SVMs," in Proc. Int.Conf. Neural Information Processing (ICONIP-04), Calcutta, India, pp. 726-731, Nov. 22-

25, 2004.

Reviewer of Journals

(Please give details in IEEE format)

Editor/ Reviewer of Journal

- IEEE Access
- International Journal on Speech Technology, Springer Inc since 2012.
- IET journal of signal processing, since 2011.
- Springer's Circuits, Systems and Signal Processing (CSSP)

Patents

Nil

Invited Lectures, talks and workshops

- 1. August 2002, Signal Processing: Issues and pitfalls, Dept. Kalpataru Institute of Technology, Tiptur. (Karnataka, India) of ECE,
- 2. March 1, 2008, Issues in Multispeaker Speech Signal Processing, Dept. of CSE, Sri Jayachamarajendra College of Engineering, Mysore. (Karnataka, India)
- 3. September 9-12, 2008, Speech analysis, Dept. of MACS, National Institute of Technology, Suratkal. (Karnataka, India)
- 4. Febraury 20, 2009, Issues in speech processing and applications, Dept. of ECE, Acharya Institute of Technology, Bangalore. (Karnataka, India)
- 5. September 9, 2009, Filter design, Dept. of Telecommuniation, Kalpataru Institute of Technology, Tiptur, Karnataka.
- 6. January 27, 2010, Digital Filter design, Workshop series for Faculty development programme, Dept. of Instrumentation, S.I.T. Tumkur.
- 7. March 22, 2010, Speech Processing: An overview, VTU sponsored Faculty development Programme on Speech and Image Processing, S.I.T. Tumkur.
- 8. August 17-19, 2011, Applications of DSP: Speech processing, National workshop, Dept. of ECE and TCE, S.J.C.I.T., Chickballapur.
- 9. November 23, 2011, Speech Enhancement, DTE sponsored Faculty development programme (Nov. 21-26) on "Advances in Speech and Audio processing", Dept. of ECE, RGIT, Kottayam, Kerala.
- 10. September 15, 2012, Speech processing: Applications and beyond, Dept. of ECE and PG studies, N.C.E.T., Yelahanka, Bengaluru.
- 11. April 7, 2013, Applications of speech signal processing, National workshop on Recent trends in Signal and Image Processing, Dept. of ECE, M.I.T. Manipal.
- 12. May 23, 2013, Issues in implementation of speech signal processing algorithms in a multispeaker environment, Workshop on Implementation of Signal processing algorithms on FPGAs, BCE Bagalkot.

- 13. July 29, 2013, Basics of Signal processing, workshop on Advances in Signal processing and Pattern recognition, MSRIT, Bangalore.
- 14. Mar 05, 2014, Probabilistic modeling and applications, Workshop on Mathematical methods in Electrical Engineering, SSIT, Tumkur.
- 15. Oct. 10, 2014, Research Trends in Speech Processing, IEEE Conference on Communication, signal processing and networking, NSSCN, Palakkad, Kerala.
- 16. Jan. 22, 2015, Random process and Optimum filtering, Faculty development program on Communication and Recent trends, BNMIT, Bengaluru.
- 17. July 28, 2015, Challenges in Natural signal Processing, Faculty development Program, SIET, Tumakuru.
- 18. Nov. 07, 2015, Probabilistic models and applications, Faculty development program on Speech signal processing and applications, SJCE, Mysuru.
- 19. March 30, 2016, Challenges in Speech Signal Processing, PAPYRUS 2016, BIET, Davanagere.
- 20. Jan. 25-26, 2017, Workshop on NBA, J.N.N.C.E, Shimoga.
- 21. Feb. 14, 2017, Filter design: An Application Perspective, Dept. of IE, S.I.T, Tumkur.
- 22. Feb. 23, 2017, Signal Processing: An Application Perspective, Dept. of TCE, BMSCE, Bengaluru.
- 23. Nov., 03, 2019, NBA Accreditation for Undergraduate Programme of Pharmacy (Criteria-IVV), Siddaganga College of Pharmacy, Tumakuru.
- 24. March 02., 2022, Nature of Speech Signal and Basics of speech Signal processing, in VGST sponsored Faculty Development Programme For Engineering College Teachers (FDP-ENG) On Pathological Speech Signal Processing: Challenges, Opportunities and Future directions (March 02nd 2022 to March 05th 2022), GSSSITW Mysore.
- 25. July 26, 2023, Probability and Random Processes in Communications, in FDP on Mathematical Foundations and Research Trends in Communication from 24-28, July 2023, NMAMIT, Nitte, Karkala, Karnataka.
- 26. Jan. 11, 2024, Multispeaker speech processing, in ATAL-FDP on Advances in Acoustics, Speech, and Signal Processing , 8-13 Jan. 2023 NMAMIT, Nitte, Karkala, India.