CURRICULUM VITAE

Dr. E. JEBAMALAR LEAVLINE
Assistant Professor (Senior Grade)
Department of Electronics and Communication Engineering
UCE – BIT Campus, Tiruchirappalli 620 024

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Mail. ID: jebamalarleavline@gmail.com;
        jebamalarleavline@aubit.edu.in

➢ **Research Area:**

- Signal, Image, and Video Processing
- VLSI
- Computer Networks and Communication Systems
- Soft Computing
- Machine Learning & Deep Learning
- Big Data Analytics & Cloud Computing
- Teaching Learning Process, Pedagogy in Engineering Education
- Education Management
- Bioinformatics

➢ **Educational Qualifications:**

Qualification	College/University	Year of completion	Class
Ph.D. (Information & Communication Engineering)	Anna University, Chennai, India	2015	-
M.E (Applied Electronics)	Anna University, Chennai, India	2008	First class
M.B.A (Education Management)	Alagappa University, Karaikudi, India	2008	First class
B.E (Electronics and Communication Engineering)	Anna University, Chennai, India	2005	First class with Distinction

➤ **Experience:**

Name of Company / Institutions	Designation of Post	From	To
UCE – BIT Campus, Anna University, Tiruchirappalli 620 024	Assistant Professor	19.08.2009	Till Date

➤ **Awards / Honours Received:**

1. Received **Best Paper Award** for the paper entitled "Image Denoising using Fast Multiscale Filter Banks for Contourlet Transform", presented in National Conference on Signals, Systems and Communication (May 2008), organized by Department of Electronics and Communication, College of Engineering, Guindy, Anna University, Chennai – 25.

2. Received **Best Paper Award** for the paper entitled "Effects of False Positive in Cancer Diagnosis Using Mammogram", in TEQIP-II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Systems (ICEEECS'16), organized by Dept. of ECE & EEE, Anna University, BIT Campus, Tiruchirappalli – 24

3. Received **Best Paper Award** for the paper entitled "Reliability Improvement of Static Random Access Memory Bit-Cells", in Second International Conference on Smart Systems and Inventive Technology (ICSSIT 2019), organized by Fransis Xavier Engineering College, Tirunelveli.

4. Achieved hundred percent result in university examination in the subject EC 8702 – Adhoc and Wireless Sensor Networks during 2020.

➤ **Additional / Academic Responsibilities Held:**

1. Academic Co-Cordinator, UCE, BIT Campus, Anna University, Tiruchirappalli – 24 (3.05.2018- Till Date)
2. Coordinator for Internal Assessment Test (January 2013 – Till Date)
3. In-charge for Department Library (January 2013 – Till Date)
4. In-charge for Communication Systems Laboratory (January 2020 – Till Date)
5. Member, Department consultative Committee (January 2020 – Till Date)
6. Coordinator - Redo Courses (January 2020 – Till Date)
7. Coordinator - Value added /Online Courses (January 2020 – Till Date)
8. University Cultural Coordinator, Anna University, Tiruchirappalli-24 (December 2010 – July 2012).
9. Coordinator (Academic), UCE, BIT Campus, Anna University, Tiruchirappalli – 24 (18.12.2012 to 2.05.2018)

10. Member, Room allotment committee, UCE, BIT Campus, Anna University, Tiruchirappalli – 24, (2015)
11. Member, Inspection Committee for Affiliation, Anna University, Chennai (2017)
12. Committee Member, Graduation Day (2016)
13. In-charge for Digital Signal Processing Laboratory (January 2013-January 2019)
14. Class Coordinator for UG students (2010-2014 Batch, 2018-2022 Batch)
15. Students Association Coordinator (2020 – 2021)

➢ **Membership of Scientific and Professional Societies:**

1. IETE (Institution of Electronics and Telecommunication Engineers)
2. ISTE (Indian Society for Technical Education)
3. IAENG (International Association of Engineers)
4. ISRD (International Society for Research and Development)

➢ **Completed PG/UG Projects:**

a. Number of PG Projects Completed: 21 Nos

b. Number of UG Project Completed: 35 batches

➢ **Research Guidance (M.S/Ph.D.) (Ongoing):**

Sl. No	Name of the scholar	Tentative Title of the thesis	Year of registration	Status
1.	Sujitha S	Design of cache memory for multicore processors	JAN 2017	Confirmation completed
2.	Vijaya Kanth K	Modeling of neural network for smart medical System using double gate MOSFET	JAN 2017	Confirmation completed
3.	Sugantha A	Reliable High Speed SRAM Design for Low Power Applications	JAN 2017	Synopsis Submitted
4.	Azhagu Subha M	Spectrum Sensing and Allocation in Cognitive Radio Networks	JULY 2016	Confirmation completed
5.	Padmaja K	Medical image Classification Using Multiscale Features	JULY 2016	Confirmation completed
6.	Jeyapradha B	Outdoor Image enhancement by Degree of Haze Estimation and Dehazing	JULY 2016	Confirmation completed
7.	Revathi G	Speech Recognition Framework with Hybrid Classification Scheme	JULY 2016	Confirmation completed

➢ **Publications:**

a. **Books:**

1. Machine Learning with Java and Weka API: A Hands-on Approach, ISBN: 978-93-91556-46-4

2. Basics of Bioinformatics with Python, Biopython and Weka: A Practical Approach, ISBN: 978-93-91556-47-1

b. **Book chapters:**

1. Reliable Radiation Hardened Memory Cells for Single Event Multiple Effects, In Artificial Intelligence and Evolutionary Computations in Engineering Systems, ISBN: 978-981-16-2673-9

2. Wavelet Feature Based Microcalcification Detection in Mammogram, In Artificial Intelligence and Evolutionary Computations in Engineering Systems, ISBN: 978-981-16-2673-9

3. Design of 1-Bit 6T SRAM Cell with CMOS and FINFET Using LTSPICE, In Proceedings of conference on intelligent computing and communication networks, ISBN: 9789392892097

4. Realization of Simple Neuron with Approximate Computing Using Double Gate MOSFET, In Proceedings of conference on intelligent computing and communication networks, ISBN: 9789392892097.

5. Analysis of Cloud Environment Using Cloudsim, In Artificial Intelligence and Evolutionary Computations, In Engineering Systems Advances in Intelligent Systems and Computing, ISBN: 978-981-10-7867-5

6. Identifying Sensitive Attributes for Preserving Privacy, In Artificial Intelligence and Evolutionary Computing, In Engineering Systems Advances in Intelligent Systems and Computing, ISBN: 978-981-10-3173-1

7. Pragmatic Investigation on Performance of Instance Based Learning Algorithms, In Artificial Intelligence and Evolutionary Computations in Engineering Systems Advances in Intelligent Systems and Computing, ISBN: 978-981-10-3173-1

c. **International Journals:**

1. E. Jebamalar Leavline, A. Sugantha, "Radiation Hardened 11T Memory Cell for Space Applications", Microprocessors and Microsystems, 2023, Vol. 102, Article No.: 104914, ISSN 0141-9331, DOI: https://doi.org/10.1016/j.micpro.2023.104914.

2. E. Jebamalar Leavline, A. Sugantha, "Reliability Improved Dual Driven Feedback 10T SRAM Bit Cell, Microelectronics Reliability", 2022, Vol. 139, Article No.: 114804, ISSN 0026-2714, DOI: https://doi.org/10.1016/j.microrel.2022.114804.

3. E. Jebamalar Leavline, A. Sugantha, "An Efficient Common Source Sense Amplifier for Single Ended SRAM", Memories - Materials, Devices, Circuits and Systems, 2023, Vol.

5, Article No.: 100065, ISSN 2773-0646, https://doi.org/10.1016/j.memori.2023.100065.

4. E. Jebamalar Leavline, S. Sujitha, "Design of FinFET based low power, high speed hybrid decoder for SRAM", Microelectronics Journal, 2022, Vol. 126, Article No.:105499, ISSN 0026-2692, DOI: https://doi.org/10.1016/j.mejo.2022.105499.

5. D. Asir Antony Gnana Singh, S. Appavu alias Balamurugan, E. Jebamalar Leavline, "Identifying Redundant Features using Unsupervised Learning for High Dimensional Data", 2020, 1367, ISSN: 2523-3971, DOI: https://doi.org/10.1007/s42452-020-3157-6

6. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, M. Sushmitha, E. Manjula, "Smart Irrigation System Using Wireless Sensor Network with Cooja and Contiki", International Journal of Automation and Smart Technology, 2019, Vol. 9, No. 1, Pp. 33-39, ISSN: 2223-9766 DOI: 10.5875/ausmt.v9i1.1859

7. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, "Dimensionality Reduction for Classification and Clustering" International Journal of Intelligent Systems and Applications, Vol. 9, No. 4, pp. 61-68, ISSN: 2074-9058. DOI: 10.5815/ijisa.2019.04.0

8. E. Jebamalar Leavline, D. Asir Antony Gnana Singh P. Maheswari, "Local Binary Pattern Family Descriptors for Texture Classification" International Journal of Graphics and Signal Processing, 2018, Vol. 10, No. 10, Pp. 40-45, ISSN: 2074-9082. DOI: 10.5815/ijigsp.2018.10.0

9. D. Asir Antony Gnana Singh, R. Priyadharshini, E. Jebamalar Leavline, "Cuckoo Optimization based Intrusion Detection System for Cloud Computing", International Journal of Computer Network and Information Security, 2018, Vol. 10, No. 11, PP. 42-48, ISSN: 2074-9104, DOI: 10.5815/ijcnis.2018.11.0

10. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, S. Muthukrishnan, R. Yuvaraj, "Machine Learning based Business Forecasting", International Journal of Information Engineering and Electronic Business, 2018, Vol. 10, No. 6, PP.40-51, ISSN: 2074-9031. DOI: 10.5815/ijieeb.2018.06.0

11. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, A. K. Abirami, M. Dhivya, "Plant Disease Detection System Using Bag of Visual Words", International Journal of Information Technology and Computer Science, 2017, Vol. 9, No. 3, PP.57-63, ISSN: 2074-9015, DOI: 10.5815/ijitcs.2018.09.0

12. E. Jebamalar Leavline, A. Sugantha, "Survey on Stability of Low Power SRAM Bit Cells", International Journal of Electronics Engineering Research, 2018, Vol. 10, No. 9, PP.441-447, ISSN: 0975-6450, Available at: https://www.ripublication.com/ijeer17/ijeerv9n3_14.pdf

13. D. Asir Antony Gnana Singh, S. Appavu Alias Balamurugan, E. Jebamalar Leavline, "A Novel Filter Based Feature Selection for Image and Signal Classification", Journal of Optoelectronics and Advanced Materials, 2016, Vol. 18, No. 7, pp. 645-653, ISSN: 1454-4164, Available at: https://old.joam.inoe.ro/index.php?option=magazine&op=view&idu=3999&catid=97

14. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, E. Priyanka, C. Sumathi, "Feature Selection Using Rough Set for Improving the Performance of the Supervised Learner", International Journal of Advanced Science and Technology, 2016, Vol. 87, pp. 1-8, ISSN: 2005-4238, http://dx.doi.org/10.14257/ijast.2016.87.01

15. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, R. Priyanka, P. Padma Priya, "Dimensionality Reduction Using Genetic Algorithm for Improving Accuracy in Medical Diagnosis", International Journal of Intelligent Systems and Applications. 2016, Vol. 8, No. 1, pp. 67-73, ISSN: 2074-904X, DOI: 10.5815/ijisa.2016.01.0

16. D. Asir Antony Gnana Singh, S. Appavu Alias Balamurugan, E. Jebamalar Leavline, "Literature Review of Feature Selection Methods for High Dimensionality Data", International Journal of Computer Applications, 2016, Vol. 136, No. 1, pp. 9-17, ISSN: 0975-8887, DOI: 10.5120/ijca2016908317

17. D. Asir Antony Gnana Singh, A. Escalin Fernando, E. Jebamalar Leavline, "Software Fault Detection Using Honey Bee Optimization", International Journal of Applied Information Systems, 2016, Vol. 11, No. 1, pp. 1-9, ISSN: 2249-0868, DOI: 10.5120/ijais2016451565

18. E. Jebamalar Leavline, Shanmugam Sutha, "Analysis and Modeling of Statistical Properties of FMDFB Subband Coefficients", Journal of Modern Applied Statistical Methods, 2016, Vol. 14, No. 2, Article 40, ISSN: 1538 – 9472. DOI: 10.22237/jmasm/1462077540

19. D. Asir Antony Gnana Singh, E, Jebamalar Leavline, "Model-Based Outlier Detection System with Statistical Preprocessing," Journal of Modern Applied Statistical Methods, 2016, Vol. 14, No. 2, Article 35. ISSN: 1538 – 9472, DOI: 10.22237/jmasm/1462077480

20. D. Asir Antony Gnana Singh, S. Appavu Alias Balamurugan, E. Jebamalar Leavline, "A Novel Feature Selection Method For Image Classification", Optoelectronics And Advanced Materials Rapid Communications, 2015, Vol. 9, No. 11, pp. 1362-1368, ISSN: 1842-6573, Available at: http://oam-rc2.inoe.ro/articles/a-novel-feature-selection-method-for-image-classification/

21. E. Jebamalar Leavline, S. Sutha, D. Asir Antony Gnana Singh, "A New Adaptive Threshold Method For FMDFB Gaussian Subbands For Image Denoising Application", Optoelectronics And Advanced Materials Rapid Communications, Vol. 9, No. 9, pp.

1315-1321, ISSN: 1842-6573, Available at: https://oam-rc.inoe.ro/articles/a-new-adaptive-threshold-method-for-fmdfb-gaussian-subbands-for-image-denoising-application/

22.   D. Asir Antony Gnana Singh, S. Appavu alias Balamurugan, E. Jebamalar Leavline, "An Unsupervised Feature Selection Algorithm with Feature Ranking for Maximizing Performance of the Classifiers", Machine Intelligence Research, (Formerly International Journal of Automation and Computing), 2015, Vol. 12, No. 5, pp. 511-517, ISSN: 1476-8186 (print version) ISSN: 1751-8520 (electronic version), DOI: https://doi.org/10.1007/s11633-014-0859-5

23. E. Jebamalar Leavline, S. Sutha, D. Asir Antony Gnana Singh. "FMDFB Based Speckle Mitigation in Gallstone Ultrasound Images." Journal of Optical Society America A, 2014, Vol. 31, No. 2, pp.283-292, ISSN:1084-7529 (print) ISSN:1520-8532 (online), DOI: https://doi.org/10.1364/JOSAA.31.000283

24. E. Jebamalar Leavline, Shanmugam Sutha, "Denoising Natural Images Using Fast Multiscale Directional Filter Banks", International Journal of Tomography & Simulation, 2015, Vol. 28, No.1, pp. 105 – 116, ISSN 2319-3336, Available at : http://www.ceser.in/ceserp/index.php/ijts/article/view/3490

25. E. Jebamalar Leavline, D. Asir Antony Gnana Singh, S. Prasannanayagi, R. Kiruthika, "A Compendium of Nano Materials and their Applications in Smart Nano Textiles", Research Journal of Nanoscience and Nanotechnology, 2015, Vol. 5, No. 2, pp. 44-59., pISSN: 1996-5044, DOI: 10.3923/rjnn.2015.44.59

26. E. Jebamalar Leavline, Shanmugam Sutha, Dhanasingh Asir Antony Gnana Singh, "On the Suitability of Multiscale Image Representation Schemes as Applied to Noise Removal", International Journal of Innovative Computing, Information and Control (IJICIC), 2014, Vol. 10, No. 3, pp.1135 – 1148, ISSN 1349-4198, Available at: http://www.ijicic.org/contents.htm

27. E. Jebamalar Leavline, Shanmugam Sutha, "Design of FIR Filters for Fast Multiscale Directional Filter Banks", International Journal of u- and e-Service, Science and Technology, 2014, Vol.7, No.5, pp. 221-234, ISSN: 2005-4246, DOI: http://dx.doi.org/10.14257/ijunnesst.2014.7.5.20

28. E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "On Teaching Digital Image Processing with MATLAB", American Journal of Signal Processing, 2014, Vol.4, No. 1, pp. 7-15, p-ISSN: 2165-9354, e-ISSN: 2165-9362, DOI:10.5923/j.ajsp.20140401.02

29. S. Sutha, E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "IHNS: A Pragmatic Investigation on Identifying Highly Noisy Subband in FMDFB for Fixing Threshold to

Deteriorate Noise in Images" Information Technology Journal, 2013, Vol. 12, pp. 1289-1298. eISSN: 1812-5646, pISSN: 1812-5638, DOI: 10.3923/itj.2013.1289.1298

30. E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "Enhanced Modified Decision Based Unsymmetric Trimmed Median Filter for Salt and Pepper Noise Removal", International Journal of Imaging and Robotics, 2013, Vol. 11, No. 3, pp.46-56, ISSN 2231–525X, Available at: http://www.ceser.in/ceserp/index.php/iji/article/view/2832

31. D. Asir Antony Gnana Singh, E. Jebamalar Leavline, "Competency-Based Calisthenics of Learning Outcomes for Engineering Education", International Journal of Education and Learning, 2013, Vol. 2, No. 1, pp. 25-34, ISSN: 2234-8034, Available at: http://article.nadiapub.com/IJEL/vol2_no1/3.pdf

32. Sutha, S., E. Jebamalar Leavline, and D. Asir Antony Gnana Singh. "A Comprehensive Study on Wavelet Based Shrinkage Methods for Denoising Natural Images." WSEAS Transactions on Signal Processing, 2013, Vol. 9, No. 4, pp. 203-215, Print ISSN: 1790-5052, E-ISSN: 2224-3488, Available at: https://wseas.com/journals/sp/2013/125714-170.pdf

33. E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "Salt and Pepper Noise Detection and Removal in Gray Scale Images: An Experimental Analysis", International Journal of Signal Processing, Image Processing and Pattern Recognition, 2013, Vol.6, No.5, pp.343-352, ISSN: 2005-4254, DOI: http://dx.doi.org/10.14257/ijsip.2013.6.5.30

34. E. Jebamalar Leavline, Sutha, S., D. Asir Antony Gnana Singh, "Wavelet domain shrinkage methods for noise removal in images: A compendium", International Journal of Computer Applications, 2011, Vol. 33, No.10, pp. 28-32, ISSN: 0975 – 8887, DOI: 10.5120/4058-5842

d. **International conferences:**

1. Leavline, E.J., Sutha. S, "Gaussian noise removal in gray scale images using fast Multiscale Directional Filter Banks", IEEE International Conference on Recent Trends in Information Technology (ICRTIT), 2011, pp. 884 – 889.

2. D. Asir Antony Gnana Singh, S. Appavu alias Balamurugan, E. Jebamalar Leavline "Towards Higher Accuracy in Supervised Learning and Dimensionality Reduction by Attribute Subset Selection - A Pragmatic Analysis", In Proceedings of IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT - 2012), Aug 2012, pp. 125-130.

3. D. Asir Antony Gnana Singh, S. Appavu alias Balamurugan, E. Jebamalar Leavline, "An Empirical Study on Dimensionality Reduction and Improvement of Classification Accuracy Using Feature Subset Selection and Ranking", IEEE International Conference

on Emerging Trends in Science Engineering and Technology (INCOSET December 2012), pp. 102-108.

4. E. Jebamalar Leavline, S. Megala, D. Asir Antony Gnana Singh, "CORDIC iterations-based architecture for low power and high quality DCT", IEEE International Conference on Recent Trends in Information Technology (ICRTIT), 2014, pp. 1 – 5.

5. E. Jebamalar Leavline, K. Padmaja, "Effects of False Positive in Cancer Diagnosis Using Mammogram", TEQIP-II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Systems (ICEEECS'16), organized by Dept. of ECE & EEE, Anna University, BIT Campus, Tiruchirappalli – 24, Vol.2, pp. 20-25.

6. E. Jebamalar Leavline, G. Revathi, "Study on Wavelet Based Threshold Methods for Preprocessing of Speech Signals", TEQIP-II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Systems (ICEEECS'16), organized by Dept. of ECE & EEE, Anna University, BIT Campus, Tiruchirappalli – 24, Vol.2, pp. 26-29.

7. E. Jebamalar Leavline, B. Jeyapradha, "An Experimental Study on Image Dehazing Methods", TEQIP-II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Systems (ICEEECS'16), organized by Dept. of ECE & EEE, Anna University, BIT Campus, Tiruchirappalli – 24, Vol.2, pp.117-122.

8. E. Jebamalar Leavline, M. Azhagu Subha, "A Survey on Non-Cooperative Sensing Techniques in Cognitive Radio Networks", TEQIP-II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Systems (ICEEECS'16), organized by Dept. of ECE & EEE, Anna University, BIT Campus, Tiruchirappalli – 24, pp. 82-86.

e. **National conferences:**

1. E. Jebamalar Leavline, M. Manikandan, "Fast Multiscale Filter Banks for Contourlet Transform", In proceedings of National Conference on Emerging Trends in Information and Communication Engineering (March `08) organized by Department of Electronics and Communication Engineering, PET Engineering College, Vallioor- 627117, pp. 88-94.

2. E. Jebamalar Leavline, M. Manikandan, "Image Denoising using Fast Multiscale Filter Banks for Contourlet Transform", In proceedings of 4 th National Conference on Signals, Systems and Communication (May 2008), organized by Department of Electronics and Communication, College of Engineering, Guindy, Anna University, Chennai – 25, pp. 71

3. Hemalatha Karnan, E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "Denoising Techniques for Medical Images - A Comparative Analysis", In proceedings of Second National Conference on Recent Trends in Communication, Computation and Security (March 2012), pp. 313-316.

4. A. Suhasini, E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "On Image Denoising Techniques for Natural Images", In proceedings of Second National Conference on Recent Trends in Communication, Computation and Security (March 2012), pp. 267-271

5. S. A. Radha, E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "Wavelet Thresholding Technique for Mixed Poisson Gaussian Noise Removal", In proceedings of Second National Conference on Recent Trends in Communication, Computation and Security (March 2012), pp. 425-429

6. E. Jebamalar Leavline, D. Asir Antony Gnana Singh, "On Methods of Denoising Applied to Florescence Confocal Microscopy Images", In proceedings of Second National Conference on Recent Trends in Communication, Computation and Security (March 2012), pp. 272-274.

7. E. Jebamalar Leavline, D. Asir Antony Gnana Singh, G. Justin Brierly, "An Experimental Study on Image Quality Assessment Methods and Metrics", In Proceedings of National Conference on Image Processing and VLSI, (March 2012), Velammal Engineering College, Chennai, pp. 264-267.

8. Jebamalar Leavline E, Saravanan K, Senthil Murugan M, Stephen S, "Appraisal of Hardware Trojans and their Detection Techniques", National Conference on Computer Science and Informatics (April 2012), Anna University of Technology Madurai, pp. 1-5.

9. E. Jebamalar Leavline, S. Sutha, D. Asir Antony Gnana Singh, "An Analysis of Computational Complexity of Multiscale Image Representation Schemes", National Conference on Emerging Trends in Electrical and Electronics Engineering, University College of Engineering Panruti, 13th March 2013.

10. E. Jebamalar Leavline, M. S. Roshan Begum, P. Saranya, A. Shamiha Banu, J. K. Sree Aswani, "A Study on Electrocardiogram Signal Classification Techniques", (2016), TEQIP – II Sponsored National Conference on Nascent Technologies in Signal Processing and Communications, Organized by Dept. of ECE, Anna University, BIT Campus, Tiruchirappalli – 24, pp. 63 – 67.

11. E. Jebamalar Leavline, N. Rogini, S. Lavanya, "An Overview of Hardware Implementation of Artificial Neural Networks", (2016), TEQIP – II Sponsored National Conference on Nascent Technologies in Signal Processing and Communications, Organized by Dept. of ECE, Anna University, BIT Campus, Tiruchirappalli – 24, pp. 12 – 15.

12. E. Jebamalar Leavline, K. Manju, R. Pattupriya, A. Kareema Begum, "Cognitive Radio Networks and Spectrum Sensing Techniques: A Survey", (2016), TEQIP – II Sponsored National Conference on Nascent Technologies in Signal Processing and Communications, Organized by Dept. of ECE, Anna University, BIT Campus, Tiruchirappalli – 24, pp. 88 – 93.

13. E. Jebamalar Leavline, P. Kiruthiga, S. Praveena, "Study on Artificial Neural Networks and their Applications", (2016), TEQIP – II Sponsored National Conference on Nascent

Technologies in Signal Processing and Communications, Organized by Dept. of ECE, Anna University, BIT Campus, Tiruchirappalli – 24, pp. 44 – 48.

14. E. Jebamalar Leavline, K. Padmaja, K. Arul Vaishnavi, S. Indusha, T. Kayalvizhi, "A Study on Medical Image Classification Algorithms", (2016), TEQIP – II Sponsored National Conference on Nascent Technologies in Signal Processing and Communications, Organized by Dept. of ECE, Anna University, BIT Campus, Tiruchirappalli – 24, pp. 113 – 116.

➢ **Sponsored Research Projects:**

Sl.No	Name of the project	Funding agency	Project value (Rs.)	Duration	Status
1.	Design of soft error robust low power SRAM for space applications	Department of Science and Technology, Govt. of India	18,88,000	2 Years	Completed

➢ **List of Seminar / Short Term Course /FDP/ Workshop organized:**

➢ Two days national level project exhibition "**PEACE**" on 17.09.10 & 18.09.10

➢ Two days national level project exhibition "**PEACE**" on 30th August 2011

➢ One day self-development program "**Reaching the Heights**" 30th September 2011

➢ Two Day National Level Workshop on "**MATLAB – Simulink & Applications**", on 31.01.2013 & 01.02.2013

➢ TEQIP –II Sponsored one week FDP on "**Nascent Technologies in Signal Processing**" during 11.12.13 to 17.12.13.

➢ TEQIP –II Sponsored two weeks FDP on "**Heuristic Approach for Information and Communication Engineering Research Problems**" during 15.06.2016 to 28.06.2016.

➢ One Day National Level Workshop on "**IoT and Android App Development using MATLAB / Simulink**", 22, July 2017

➢ Two Day National Level Workshop on "**SDR and Cognitive Radio**" during 8th & 9th September, 2017.

➢ One Day National Level Workshop on "**Analog and Digital Circuits Simulation using LABVIEW**", 12th September 2019

➢ Two Day **National Level Symposium 'MICFA-19'** during 26th & 27th September, 2019.

➢ Webinar on "**Ad hoc and Sensors Networks: Tools and Applications**" on 06.08.2020.

➢ **List of Seminar / Short Term Course /FDP/ Workshop attended:**

Faculty Development Programs Attended:

- UGC sponsored "Orientation Course" at Academic staff college, Pondicherry University from 19.12-12 – 15-01-13.

- TEQIP –II Sponsored Faculty Development Program on "Signals and Systems" at Chennai during 15.07.2013 to 19.07.2013.

- Anna University CFD approved FDP on "Transmission Lines and Waveguides" during 16th 22nd May 2014, at Jayaram College of Engineering and Technology, Thuraiyur, Trichy.

- TEQIP –II Sponsored Faculty Development Program on "Hands on Cloud and Big Data Analytics" at Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli, during 12.05.2015 to 25.05.2015.

- TEQIP – II Sponsored Faculty Development Program on "Digital Communication" at Department of ECE, University College of Engineering, BIT Campus, Tiruchirappalli, during 19.06.2015 to 25.06.2015.

- TEQIP – II Sponsored Faculty Development Program on "Top Tech Trends – Driving the Future of Information Technology" at Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli, during 30.06.2016 to 13.07.2016.

- The Ministry of Electronics and Information Technology, Government of India Supported Online faculty development program on "VLSI Chip Design Hands-On Using Open-Source EDA" organized by IIITDM, Jabalpur during July 08-12, 2019.

- The Ministry of Electronics and Information Technology, Government of India Supported Online faculty development program on "ICT Tools for Teaching, Learning Process and Institute" jointly organized by electronics and ICT academics, NIT Warangal, IIITDM Jabalpur and NIT Patna during 10th-21st August,2020

- Three weeks Industrial Training on "Communication and Networking Technologies" Conducted by BSNL, from 30.06.2020 to 20.07.2020.

- MEITY Sponsored -Two Weeks Online FDP on "Speech, Audio and Image Processing using Deep Learning Techniques: Research Issues, Innovation and Applications" Organized by University College of Engineering, Ramanathapuram, Tamilnadu in association with E & ICT Academy, NIT Warangal (Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI) during June 7th – 17th, 2021.

- 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) during 11.07.2022 to 15.07.2022.

Seminars/Workshops Attended:

- Two days National Workshop on "Latest Trends in Video Processing" on 7th & 8th March 2008, Organized by Dept. of EEE, New Horizon College of Engineering, Marathahalli, Bangalore, Karnataka.

- Two days National Workshop on "Networking Simulator Tools" on 17th & 18th July 2010, Organized by Dept. of ECE, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- Two days National Level Seminar on "Speech Processing and its Applications" on 23rd & 24th July 2010, Organized by Dept. of ECE, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- National Workshop on "Emerging Trends on High end FPGAs" during 10th to 12th December 2010, Organized by Dept. of ECE, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- One day National Level Workshop on "Discrete Event Simulation for Protocol Design in Wireless Networks" on 22nd December 2010, Organized by Dept. of ECE, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- One day Workshop on "Teaching Methodologies" on 8th January 2011, Organized by Dept. of English, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- Two days National Level Seminar on "Design Issues and Research Challenges of OFDM in Wireless Networks" on 4th & 5th February 2011, Organized by Dept. of ECE, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- One day Seminar on "Research Methodology" on 27th August 2011, Organized by Centre for Research, Anna University of Technology, Tiruchirappalli, Tiruchirappalli24.

- MoES Sponsored Seminar on "Wavelets for Earth Fractals Computation –Research Focus" from 5th-7th January 2012, organized by Dept. of EIE, Kongu Engineering College, Perundurai, Erode.

- One day workshop on "Renesas 16-bit RL78 Microcontrollers", on 30th May 2012, Organized by Dept. of ECE, Anna University of Technology, Tiruchirappalli, Tiruchirappalli-24.

- National Workshop on "MATLAB Programming and Applications" on 20th & 21st July 2012, organized by Dept. of EIE, Kongu Engineering College, Perundurai, Erode.

- National workshop on "Image and Pattern Recognition" on 13th October 2012 organized by Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli.

- National workshop on "Soft Computing Techniques: A Data Mining Perspective" on 20th October 2012 organized by Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli.

- National workshop on "Networking Technologies" on 16th Feb 2013 organized by Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli.

- National workshop on "Data mining in Network Security: Challenges and Opportunities-A Research Perspective" on 23rd Feb 2013 organized by Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli.

- UGC Sponsored two-day workshop on "Research Methodology, Techniques of Writing Research Articles for SCI Journals and Ph.D. Thesis Preparation" on 8th & 9th March

2013, organized by Department of EEE, College of Engineering Guindy, Anna University, Chennai.

- National workshop on "Strategic Teaching Quality Management for Technical Teachers" on 16th March 2013 organized by Department of ECE, Anna University, BIT Campus, Tiruchirappalli.

- TEQIP –II Sponsored Two-day workshop on "Enterprise Computing" 19th & 20th Oct 2013 organized by Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli.

- Two-day workshop on "Hands on Approach to Proficient Document Writing Using LaTeX" on 12th &13th November 2013 at Department of CSE, Anna University Regional Centre, Tirunelveli.

- One day National Level Workshop on "Data Warehousing and Business Intelligence: An Industrial Perspective", on 18.10.2014 organized by Department of CSE, University College of Engineering, BIT Campus, Tiruchirappalli.

- Three days national level workshop on "Open-Source Simulators for Wireless Communication and Networks" organized by Dept. of ECE, UCE, BIT Campus, Anna University, Tiruchirappalli during 3.08.2017 to 05.08.2017.

- One day Training Program on "Advanced Communication Systems", organized by Dept. of ECE, UCE, BIT Campus, Anna University, Tiruchirappalli on 11.07.2017

> **Professional recognitions:**

A) Chairperson for conferences / Seminar / Technical symposia:

- Served as an Expert Member for National Conference on Emerging Trends in Electrical and Electronics Engineering, on 13th March 2013 organized by Dept. of EEE, University College of Engineering, Panruti– 607 106.

- Served as Expert Member for 2nd National Level Technical Symposium ESTORMZ2K13 on 04th Sept 2013 at Dept. of EEE University College of Engineering, Panruti, Panruti – 607 106.

- Served as Jury for paper presentation in one day National Level Technical Symposium "ELECTROCALIFA 2K16" on 08.09.2016 organized by Dept. of ECE, University College of Engineering, Ariyalur.

- Served as Jury for paper presentation in one day National Level Technical Symposium "MILANTRONIKZ-2K17" on 23.02.2017 organized by Dept. of ECE, MIET Engineering College, Trichy.

B) Reviewer/Editor of Journals

- IEEE Transactions on Image Processing (ISSN: 1057-7149)
- IEEE Access (ISSN: 2169-3536)

- Journal of the Optical Society of America A (ISSN: 1084-7529 | eISSN: 1520-8532)
- Optics Express (eISSN: 1094-4087)
- Applied optics (ISSN: 1559-128X (print); ISSN: 2155-3165 (online))
- Optical Engineering (ISSN: 0091-3286, E-ISSN: 1560-2303)
- Journal of Electronic Imaging (ISSN: 1017-9909, E-ISSN: 1560-229X)
- IETE Journal of Research (ISSN: 0377-2063)
- Journal of Electrical Engineering & Technology (E- 2093-7423)
- SpringerPlus (ISSN 2193-1801 (Online))
- Computer Methods and Programs in Biomedicine (ISSN: 0169-2607)
- Australasian Physical & Engineering Sciences in Medicine (ISSN: 0158-9938, E-ISSN: 1879-5447)
- International Journal of Engineering (E-ISSN: 1735-9244, ISSN: 1025-2495)
- Electrical and Electronics Engineering (P-ISSN: 2162-9455, E-ISSN: 2162-8459)
- International Journal of Network and communications (P-ISSN: 2168-4936, E-ISSN: 2168-4944)
- American Journal of signal processing (P-ISSN: 2165-9354, E-ISSN: 2165-9362)
- Microelectronics and Solid-State Electronics (P-ISSN: 2324-643X E-ISSN: 2324-6456)
- American Journal of Biomedical Engineering (P-ISSN: 2163-1050, E-ISSN: 2163-1077)
- Physical Sciences Research International (ISSN: 2437-1300)

(C) Guest lectures delivered:

- Delivered lecture on "**Overview of Digital Signal Processing: Trends and Applications**" on 27.06.2009 at Department of ECE, Sandy Polytechnic College, Tuticorin, Tamilnadu, India.

- Served as Resource person and delivered lecture on "**Wavelet Theory and Applications**" in two-day national level workshop on "MATLAB Simulink & Applications" on 31.01.2013 and 01.02.2013 organized by Department of ECE, Anna University, BIT Campus, Tiruchirappalli – 620 024.

- Served as Resource person and delivered lecture on "**Multiscale Signal Processing**" on 15.12.13 in TEQIP – II Sponsored one week FDP on "Nascent Technologies in Signal Processing" during 11.12.13 to 17.12.13 organized by Department of ECE, Anna University, BIT Campus, Tiruchirappalli – 620 024.

- Served as Resource person and delivered lecture on "**Digital Signal Processing & Applications**" on 24.02.2014 in UGC Sponsored Refresher course on "Applied Physics" organized by Academic Staff College, Bharathidasan University, Tiruchirappalli – 620 024.

- Served as Resource person and delivered lecture on "**Presentation on Framing Learning Objectives & Effective Question Paper Setting**" on 11.11.2014 at Department of ECE, Anna University, BIT Campus, Tiruchirappalli – 620 024.

- Served as Resource person and delivered lecture on "**Hands on Training on Artificial Neural Network Design using MATLAB**" on 11.09.2015 in one day workshop on "Artificial Neural Network using MATLAB" organized by Department of EEE, University College of Engineering, Dindigul – 624 622.

- Served as Resource person and delivered lecture on "**A Practical Approach on Wavelets in Engineering Applications**" on 29.09.2015 in Tamilnadu State Council for Science and Technology sponsored State Level Workshop on "Wavelet Theory and its Engineering Applications" organized by Department of EEE, University College of Engineering, Dindigul – 624 622.

- Served as Chief Guest and delivered key note address on "**Internet of Things Trends, Challenges and Opportunities**" on 31.03.2016 in Fifth National Conference on Ingenious Communication Technologies (NCICT'16) at K. Ramakrishnan College of Engineering, Tiruchirappalli.

- Served as Resource person and delivered lecture on "**Fourier Series Analysis & Spectrum of Continuous Time signals**" on 13.06.2016 in Anna University Chennai Approved Faculty Development Training Programme on EC 6303 – SIGNALS AND SYSTEMS (08th - 14th June 2016 at K. Ramakrishnan College of Technology, Tiruchirappalli.

- Served as Resource person and delivered lecture on "**Wavelets: A Tool for ICE Research**" on 24.06.2016 in TEQIP – II Sponsored Faculty Development Programme on "Heuristic Approach for Information and Communication Engineering Research Problems" organized by Department of Electronics and Communication Engineering, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli – 620 024.

- Served as Resource person and delivered lecture on "**Smart Way to Reference and Citation Management for Technical Writing**" on 25.06.2016 in TEQIP – II Sponsored Faculty Development Programme on "Heuristic Approach for Information and Communication Engineering Research Problems" organized by Department of Electronics and Communication Engineering, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli – 620 024.

- Served as Chief Guest and delivered technical talk on "**Emerging Trends in Electronics Engineering**" on 09.09.2016 in National level Symposium at Dept. of ECE, K. Ramakrishnan College of Technology, Tiruchirappalli.

- Served as Resource person and delivered guest lecture on "**Medical Electronics**" on 15.03.2017 at Dept. of ECE, K. Ramakrishnan College of Technology, Tiruchirappalli.

- Served as Resource person and delivered lecture on "**Machine Learning"** on 10-03-2020 in One Day Hands-on Workshop on Machine Learning, Organized by the Department of CSE/IT, University College of Engineering BIT Campus, Tiruchirappalli – 620 024.

- Served as resource person and delivered hands-on training on "**MATLAB Bioinformatics Toolbox - Exploratory Session I, II & III**" on 19.11.2021 in the Online

Faculty Development Programme (FDP) on Advanced Bio-Informatics (Inter-Disciplinary) during 18th – 27th, November 2021, Organized by E&ICT Academy, National Institute of Technology, Warangal. in association with University College of Engineering BIT Campus, Tiruchirappalli – 620 024.

- Served as resource person and delivered lecture on "**Applications of AI and Natural Language Processing**" on 21.01.2022 in the Online Six Day FDTP on CS8691 – Artificial Intelligence organized by Department of Computer Science and Engineering, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli during Jan 17th to 22nd, 2022

- Served as resource person and delivered hands-on training in "**MATLAB Bioinformatics Toolbox - Exploratory Session I & II**" on 18.05.2022 in the 40-hour Online Faculty Development programme on "Bioinformatics: Algorithms, Applications and Tools" (Inter Disciplinary), organized by E&ICT Academy, NIT Warangal, and University College of Engineering (BIT Campus), Anna University, Tiruchirappalli, during 16th to 25th May, 2022.