Profile of Dr. I. LAURENCE AROQUIARAJ

Educational Qualifications	:	M.Sc., M.Phil., M.Tech., M.C.A., Ph.D. (Computer Science)
Teaching Experience	:	15 years
Research Experience	:	15 years
Industrial Experience	:	3 years
Area of Research	:	Medical Image Processing
Areas of Interests	:	Data Mining, Internet Technologies and Networking.
International Conferences attended	:	16
Conferences/Seminar/ Workshop organized	:	11
No. of Publications International Journals/ Conference Proceedings	:	47
National Journals/ Conference Proceedings	:	23
No. of research papers presented	:	40
Member of Professional Bodies	:	CSI (Life Member), IEEE, IAENG, IET Image Processing, Elsevier – ACI, IRG-IJCT, IJCII

Guided

Master of Computer Applications	:	112
Master of Science (M.Sc. (Comp. Sci.))	:	23

M. Phil. (Computer Science)   : 50

Ph. D. (Computer Science)   : 8 (pursuing)

Publications:

International Journal / Conference Proceedings

1. Mr. I. Laurence Aroquiaraj, Dr. K.Thangavel and Mr. R. Manavalan "Removal of Speckle Noise from Ultrasound Medical Image based on Special Filters: Comparative Study", (ICGST-GVIP) International Congress for Global Science and Technology - International Journal of Graphics, Vision and Image Processing (*G*, ISSN 1687-398X, Volume(9), Issue (III), pp 25-32, June 2009. (International – Journal) **(DBLP Indexed)**

2. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel and Mr. R. Manavalan, "Comparative Analysis of Speckle Filtering Techniques", International Journal of Recent Trends in Engineering, Vol. 2, No. 2, ISSN 1797-9617, Academy Publisher, pp 120-123, November 2009. (International – Journal)

3. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel "Impulse Noise Removal from Mammogram Images using Combiner Approach", International Journal of Global Research in Computer Science, ISSN 2229-371X, Vol. 1, No. 2, pp 22-27, October 2010.

4. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Feature Extraction Analysis using Mammogram Images: A New Approach", Journal of Computer Science and Applications (JCSA), RIP Journal on Image and Video Processing, International Research Publication House, ISSN No. 2231-1270, Volume 3, Number 1, pp. 33-44, January-June, 2011. (International)

5. Mr. I. Laurence Aroquiaraj and Dr. K. Thangavel, "Mammogram Image Segmentation Using Fuzzy Entropy", in Proceedings on International Conference on Advanced Computer Technology (ICACT 2011) from 29th and 30th July 2011 organized by J.K.K.Nattraja College of Engineering and Technology, Kumarapalayam. (International – Proceedings)

6. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Mammogram Image Segmentation Using Auto Adaptive Fuzzy Index Measure", ICTACT Journal on Image and Video Processing, ID No. IJIVP/1/091. ICTACT Journal on Image and Video Processing, (An International Publication of ICT Academy of Tamil Nadu), ISSN 0976-9099, Vol.02, No. 1, pp. 274-278, August 2011. (International)

7. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Mammogram Image Segmentation using Weighted Fuzzy Entropy", in Proceedings on 2nd International Conference on Simulation, Modeling and Analysis (COSMA 2011) from 14th and 16th December 2011 organized by AMRITA School of Engineering, Coimbatore. (International – Proceedings)

8. Mr. I. Laurence Aroquiaraj, R. Poongothai, and D. Kalaivani, "A Novel Pectoral Removal Approach in Digital Mammogram Segmentation and USRR Feature Selection", International Journal of Engineering Research and Applications **(IJERA)**, ISSN 2248-9622, Volume 2, Issue 4,pp. 1847-1851, July-August, 2012. (International)

9. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Unsupervised Feature Selection in Digital Mammogram Using Tolerance Rough Set based Quick Reduct", in Proceedings on International Conference on Computational Intelligence and Communication Networks (CICN 2012) from 3rd and 5th November 2012 organized by GLA University, Mathura. **(IEEE Xplore) (Scopus Indexed)** (International – Proceedings)

10. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Mammogram Image Feature Selection using Unsupervised Tolerance Rough Set Relative Reduct Algorithm", in Proceedings on International Conference on Pattern Recognition, Informatics and Mobile Engineering (PRIME 2013) from 21st and 22nd February 2013 organized by Department of Computer Science, Periyar University, Salem. **(IEEE Xplore) (Scopus Indexed)** (International – Proceedings)

11. I. Laurence Aroquiaraj, T. Dharani, "A Survey on Content Based Image Retrieval", in Proceedings on International Conference on Pattern Recognition, Informatics and Mobile Engineering (PRIME 2013) from 21st and 22nd February 2013 organized by Department of Computer Science, Periyar University, Salem. **(IEEE Xplore) (Scopus Indexed)** (International – Proceedings)

12. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Mammogram Edge Detection Using Hybrid Soft Computing Methods", International Journal of Scientific & Engineering Research (IJSER), ISSN No. 2229-5518 , Volume 4, Issue 6, pp 550-557, June-2013 **(DBLP Indexed)**

13. Mr. I. Laurence Aroquiaraj, Ms. T. Dharani, "Content Based Image Retrieval System Using Feature Classification with modified KNN algorithm", International Journal of Computer Trends and Technology, Vol. 4 , Issue 7, pp. 2008-2013, July 2013. ISSN No. 2231-2803 **(DBLP Indexed)**

14. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Pectoral Muscles Suppression in Digital Mammograms using Hybridization of Soft Computing Methods", World Academy of Science, Engineering and Technology, International Journal of Computer Science and Engineering Vol. 7, No.2, pp. 938-945, 2013 **(Scopus and DBLP Indexed)**

15. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "Mass Classification Method in Mammogram Using Fuzzy K-Nearest Neighbour Equality", International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS), ISSN No. 2279-005), Vol. 8, No. 1, pp. 118-122, March-May, 2014. **(DBLP Indexed)**

16. Mr. I. Laurence Aroquiaraj, Mrs. K. Kokila, "Ear Biometrics For Automatic Index Segmentation Using Canny Edge Detection", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol. 4, No.3, pp. 190-198, December 2014.

17. Mr. I. Laurence Aroquiaraj, Mr. K. Mohan, "Comparative Analysis of Spatial Filtering Techniques in Ultrasound Images", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol. 4, No.3, pp. 207-213, December 2014.

18. Mr. I. Laurence Aroquiaraj, Mrs. B. Saranya, "Performance Analysis For Blood Vessel Segmentation In Hypertensive Retinopathy", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol. 5, No.2, pp. 173-180, September 2015.

19. Mr. I. Laurence Aroquiaraj, Mr. K. Veeramani, "FP-AODV Packet Forwarding in Mobile Adhoc Network", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol. 5, No.2, pp. 137-143, September 2015.

20. Dr. I. Laurence Aroquiaraj, Mrs. S. Sivakalai, "Fuzzy-Rough Multi Thresholding Segmentation Using Renal Caliculi Images", Indian Journal of Engineering, Vol. 12, No. 30, pp. 345-349, 2015.

21. Dr. I. Laurence Aroquiaraj, Mr. M. Gnanashanmugam, "Fingerprint Image Enhancement and Minutiae Extraction Using Fuzzy Approach", Indian Journal of Engineering, Vol. 12, No. 30, pp. 229-237, 2015.

22. Dr. I. Laurence Aroquiaraj, Dr. H. Hannah Inbarani, "Mass Classification Method in Mammogram Using Fuzzy Swarm Nearest Prototype", Open Journal of Engineering Research and Technology, Volume 1, Issue 1, pp. 1-13, March 2016.

23. Dr. I. Laurence Aroquiaraj, Mr. M. Ashok Kumar, Ms. P. Surya "Big Data Analytics in Healthcare: Challenges, Tools, and Techniques: A Survey", International Journal of Advanced Research in Biology Engineering Science and Technology (IJARBEST), ISSN: 2395-695X, Vol. 2, Special Issue No. 10, pp. 798-808, 2016.

24. Dr. I. Laurence Aroquiaraj, Mr. M. Ashok Kumar, Ms. P. Surya "Survey on Big Data: Issues, Challenges, Tools", International Journal of Advanced Research in Biology Engineering Science and Technology (IJARBEST), ISSN: 2395-695X, Vol. 2, Special Issue No. 10, pp. 839-848, 2016.

25. Dr. I. Laurence Aroquiaraj, Ms. P. Surya, Mr. M. Ashok Kumar, "The Role of Big Data Analytics in Agriculture Sector: A Survey", International Journal of Advanced Research in

Biology Engineering Science and Technology (IJARBEST), ISSN: 2395-695X, Vol. 2, Special Issue No. 10, pp. 830-838, 2016.

26. Dr. I. Laurence Aroquiaraj, Ms. T. Dharani, "An Appraisal of Content Based Image Retrieval by Means of Unlabelled Images", International Journal of Advanced Research in Biology Engineering Science and Technology (IJARBEST), ISSN: 2395-695X, Vol. 2, Special Issue No. 10, pp. 919-928, 2016.

27. Dr. I. Laurence Aroquiaraj, Ms. V. Mageshwari, "A Competent Segmentation of Volcanic Eruption Flow through Volcano Using Fuzzy C-Means and Texture Segmentation Filter", International Journal of Advanced Research in Biology Engineering Science and Technology (IJARBEST), ISSN: 2395-695X, Vol. 2, Special Issue No. 10, pp. 929-936, 2016.

28. Dr. I. Laurence Aroquiaraj, Ms. G. Kavitha, "A Prime Survey on Face Recognition System", International Journal of Advanced Research in Biology Engineering Science and Technology (IJARBEST), ISSN: 2395-695X, Vol. 2, Special Issue No. 10, pp. 954-962, 2016.

29. Dr. I. Laurence Aroquiaraj, Ms. V. Mageshwari, Ms. T. Dharani, "A Resourceful Comparison of First Order Edge Detections Using Grayscale Intensities", Imperial Journal of Interdisciplinary Research (IJIR), Vol-2, Issue-5, ISSN: 2454-1362, pp. 146-150, 2016. (Impact Factor: 3.7)

30. Dr. I. Laurence Aroquiaraj, Ms. T. Dharani, Mrs. V. Mageshwari, "Comparative Analysis of Edge Detection Algorithms Based on Content Based Image Retrieval with Heterogeneous Images", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol.5, No.4, pp. 374-381, March 2016.

31. Dr. I. Laurence Aroquiaraj, Ms. M. Priyadharshini, "Image Processing Techniques Using Synthetic Aperture Radar (SAR) Images: A Survey", 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. (International – Proceedings)

32. Dr. I. Laurence Aroquiaraj, Ms. K. Priya, "Data Mining Algorithm and Its Application in Healthcare big data: A Survey", 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. (International – Proceedings)

33. Dr. I. Laurence Aroquiaraj, Mr. K. Satheesh, "A Traffic Intelligent System Supervision Approaches and Research Challenges Based on VANET", 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. (International – Proceedings)

34. Dr. I. Laurence Aroquiaraj, Ms. G. Madhu Bala, "Predicting Lung Cancer Using Image Processing Techniques : A Survey", 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. (International – Proceedings)

35. Dr. I. Laurence Aroquiaraj, Ms. V. Mageshwari, Ms. T. Dharani, "A Proficient Segmentation of Remote Sensing Images using Modified Kernel Fuzzy C-Means Algorithm", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol. 6, No.1, pp. 82-87, June 2016.

36. Dr. I. Laurence Aroquiaraj, Ms. C. Nandini, "A Survey on Protein Sequence Classification with Data Mining Techniques", International Journal of Science and Engineering Research (IJSER), Vol. 7, Issue 7, ISSN 2229-5518, pp. 1442-1449, July-2016. (Impact Factor 3.8)

37. Dr. I. Laurence Aroquiaraj, Ms. V. Mageshwari, Ms. T. Dharani, "A Realistic Medical Image Segmentation of Abnormal HIV in Blood Cells Using Morphological Operations", International Conference on Inventive Computation Technologies (ICICT 2016) on 26-27 August 2016. (International – Proceedings)

38. Dr. I. Laurence Aroquiaraj, Ms. T. Dharani, Ms. V. Mageshwari, "Diverse Image Investigation using Image Metrics for Content Based Image Retrieval System", International Conference on Inventive Computation Technologies (ICICT 2016) on 26-27 August 2016. (International – Proceedings)

39. Dr. I. Laurence Aroquiaraj, Mr. R. Krishnamoorthy, "A Comparative Study of Clustering Algorithm For Lung Cancer Data", International Journal of Science and Engineering Research (IJSER), Vol. 7, Issue 9, ISSN 2229-5518, pp. 1022-1029, September-2016. (Impact Factor 3.8)

40. Dr. I. Laurence Aroquiaraj, Ms. V. Mageshwari, Ms. T. Dharani, "Big Data in Health Care Revolution – A Survey", International Research Journal of Engineering and Technology (IRJET), Vol.3, Issue 9, September 2016. (Impact Factor 4.45)

41. Dr. I. Laurence Aroquiaraj, Ms. G. Madhu Bala, "Lung Cancer Image Segmentation and Classification using Soft Computing Techniques", International Journal of Computational Intelligence and Informatics" (IJCII), ISSN: 2231-0258, Vol. 6, No.2, pp. 117-123, September 2016.

42. Ms. G. Kavitha, Dr. I. Laurence Aroquiaraj, "A Survey of Cybercrime Face Recognition System", IEEE Sponsored International Conference on Engineering and Technology (ICET) on 16th and 17th December 2016 organized by the Department of Electronics and Communication Engineering, Karpagam College of Engineering, Coimbatore, Tamilnadu, India. (International – Proceedings)

43. Dr. I. Laurence Aroquiaraj, Ms. R. Gayathri, "Performance Analysis of Data Mining Techniques to Predict In Chronic Kidney Disease (CKD)" at 4th International Conference on Engineering Technology and Science, Organized by the Muthayammal Engineering Institutions, Rasipuram, Namakkal Dt., Tamilnadu, held on 30th and 31st March 2017. (International – Proceedings)

44. Dr. I. Laurence Aroquiaraj, Mr. C. Murugesan "Performance Analysis of Various Classifications Using Soft Computing Techniques Diabetic Data Set" at International Conference on Applied Science and Technology, (ICAST-2017) Organized by the Mahendra College of Engineering, Namakkal Dt., Mallasamudram, Tamilnadu, held on 14th and 15th June 2017. (International – Proceedings)

45. Ms. T. Dharani, Dr. I. Laurence Aroquiaraj, "Pattern Based Image Retrieval System built with Object Tracking and Segmentation Concepts" at International Conference on Science, Technology and Management, (ICSTM-2017) Organized by Institution of Electronics and Telecommunication Engineers, Bengaluru, Karnataka, held on 24th September 2017. (International – Proceedings) IJCMS, Vol. 6, Issue 9, ISSN 2347-8527 (UGC Approved Journal)

46. Ms. V. Mageshwari, Dr. I. Laurence Aroquiaraj, "Social Media Mining for Analyzing HIV/AIDS – A Preliminary Study" at International Conference on Science, Technology and Management, (ICSTM-2017) Organized by Institution of Electronics and Telecommunication Engineers, Bengaluru, Karnataka, held on 24th September 2017. (International – Proceedings) IJIACS, Vol. 6, Issue 9, ISSN 2347-8616 (UGC Approved Journal)

47. Dharani, T and Laurence Aroquiaraj, I, "An Essential Image Augmentation Processes for Pattern Based Image Retrieval System" (November 15, 2017). Proceedings of the International Conference on Intelligent Computing Systems (ICICS 2017 – Dec 15th -16th 2017) organized by Sona College of Technology, Salem, Tamilnadu, India. Available at SSRN: https://ssrn.com/abstract=3120213. (Elsevier's SSRN eLibrary – Journal of Information Systems & eBusiness Network -ISSN: 1556-5068) (UGC Approved Journal)

48. Ms. S. Angelin Sophy, and Dr. I. Laurence Aroquiaraj, "An Approach for Road Traffic Management to Reduce Traffic Congestion in VANET" at 1st International Conference on 'Recent Advances in Computing and Communication" organized by Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai, held on 23rd and 24th February 2018. (International – Proceedings) (International Journal of Advanced Research in Computer Science -ISSN: 0976-5697, Vol.9, (Special Issue 1), pp-75-78, February 2018 (UGC Approved Journal) (Impact Factor – (ISRAJIF: 3.727, ICV: 81.45, GIF: 0.765, SJIF: 7.234))

49. Mr. M. Ashok Kumar, and Dr. I. Laurence Aroquiaraj, "Diabetes Data Analysis Using Map Reduce and Classification Techniques" at 1st International Conference on 'Recent Advances in Computing and Communication" organized by Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai, held on 23rd and 24th February 2018. (International – Proceedings) (International Journal of Advanced Research in Computer Science -ISSN: 0976-5697, Vol.9, (Special Issue 1), pp-49-55, February 2018 (UGC Approved Journal) (Impact Factor – (ISRAJIF: 3.727, ICV: 81.45, GIF: 0.765, SJIF: 7.234))

National Journal / Conference Proceedings

1. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel and Mr. R. Manavalan, "A Survey on Prostate Medical Images and Comparative Analysis" in Proceedings on National Conference on Soft Computing from 17th and 18th November 2006 organized by Hindustan College of Engineering and Technology, Coimbatore, pp. 81-87. (National – Proceedings)

2. Mr. I. Laurence Aroquiaraj and Mr. S. Sivakumar "Data Mining Security in E-Commerce" in Proceedings of National Seminar on "Strategic Management: Opportunities and Challenges in Post LPG Era", PRIMS, Periyar University, Salem – 11 held on February 15th and 16th, 2007. (National – Proceedings)

3. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel and Mr. R. Manavalan, "Feature Extraction Using Trace Mean" in the Proceedings of Second National Conference on Management Science and Practice, Indian Institute of Technology, Chennai, held on March 9th – 11th, 2007. (National – Proceedings)

4. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, "impulse noise removal from Mammogram images using combines approach" in the Proceedings of National Conference on Intelligent Computing Model (NCICM-2008), Department of Computer Science Periyar University, Salem -11 held on 22, 23 February 2008. (National – Proceedings)

5. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel and Mr. R. Manavalan, "Elimating Speckle noise from Ultra sound Medical Images. A Non-linear Approach", in the Proceedings of National Conference on Intelligent Computing Model (NCICM-2008), Department of Computer Science, Periyar University, Salem – 11, held on 22nd and 23rd February, 2008.

6. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel, a paper on "Comparative Analysis for the application of noise removal Techniques using Spatial Domain Filters" in the Proceedings of National Conference on Intelligent Computing Model (NCICM-2008), Department of Computer Science, Periyar University, Salem – 11, held on 22nd and 23rd February 2008.

7. Participated and presented in NCICM-2008, a paper on "Comparative Analysis for the Application of Noise Removal Techniques using Frequency Domain Filters", organized by the Department of Computer Science, Periyar University, Salem – 11, held on 22nd and 23rd February 2008.

8. Mr. I. Laurence Aroquiaraj, Dr. K. Thangavel and Mr. R. Manavalan, "Eliminating Speckle Noise from Ultrasound Medical Images: A Non-Linear Approach", Intelligent Computing Models, Narosa Publishing House Pvt. Ltd., ISBN 978-81-7319-955-4, pp 173-180, 2009. (National –Proceedings)

9. Mr. I. Laurence Aroquiaraj,   "Comparative Analysis of Edge Detection Algorithms", organized by Dept. of Computer Science, M.V.Muthiah Government Arts College for Women, Dindigul, Tamilnadu, held on 25th February 2011. (National –Proceedings)

10. Mr. I. Laurence Aroquiaraj, "A Novel Approach for Text Detection Using ", organized by Dept. of Computer Science and Engineering, Muthyammal College of Engineering, Rasipuram, Tamilnadu, held on 25th February 2011. (National –Proceedings)

11. Mr. I. Laurence Aroquiaraj, Mr. K. Satheesh, "An Evaluation of Face Segmentation Algorithms", organized by Dept. of Computer Applications, Sona College of Technology, Salem, Tamilnadu, held on 11th August 2012.

12. Mr. I. Laurence Aroquiaraj, Ms. R. Poongothai, "Detection of masses and shape spectral analysis in digital mammogram", organized by PG and Research Department of Statistics, Loyola College, Chennai, Tamilnadu, held on 23-25 August 2012.

13. Mr. I. Laurence Aroquiaraj, Mrs. D. Kalaivani, "A Comparative Analysis of Unsupervised Feature Selection Methods in Digital Mammogram", organized by PG and Research Department of Statistics, Loyola College, Chennai, Tamilnadu, held on 23-25 August 2012.

14. Mr. I. Laurence Aroquiaraj, Mrs. A. Jasmine Rajakumari, " A Comparative analysis of Ant-Miner and Weka Classifier Algorithms", organized by PG and Research Department of Statistics, Loyola College, Chennai, Tamilnadu, held on 23-25 August 2012.

15. Mr. I. Laurence Aroquiaraj, Mrs. A. Shandhiyakumari, "A Hybrid Image Compression Technique for wavelet and Fractal Images" in "NMACK-2K13 National conference on Advanced Computing "Magna College of Engineering,on August 2013.

16. Mr. I. Laurence Aroquiaraj, Ms. M. Yogarani, "Mammogram Image Border Detection Using Hybridization of Soft Computing Methods" in "NMACK-2K13 National conference on Advanced Computing "Magna College of Engineering,on August 2013.

17. Mr. I. Laurence Aroquiaraj, Mrs. K. Kokila, "Automatic Ear Index Segmentation Using Canny Edge Detection", Third National Conference on Intelligent Computing, Organized by the Department of Computer Science, K.S.R. College of Arts and Science (Autonomous), Tiruchengode, held on 8th and 9th August 2014.

18. Mr. I. Laurence Aroquiaraj, Mr. K. Mohan, "A Study on Various methods in Medical Termination of Fetal Abnormal Pregnancy", Third National Conference on Intelligent Computing, Organized by the Department of Computer Science, K.S.R. College of Arts and Science (Autonomous), Tiruchengode, held on 8th and 9th August 2014.

19. Mr. I. Laurence Aroquiaraj, Mrs. B. Saranya, "Performance Analysis For Segmentation of Blood Vessel in Hypertensive Retinopathy", Third National Conference on Intelligent Computing, Organized by the Department of Computer Science, K.S.R. College of Arts and Science (Autonomous), Tiruchengode, held on 8th and 9th August 2014.

20. Mr. I. Laurence Aroquiaraj, Mr. K. Veeramani, "FP-AODV Packet Forwarding in Mobile Adhoc Network", Third National Conference on Intelligent Computing, Organized by the Department of Computer Science, K.S.R. College of Arts and Science (Autonomous), Tiruchengode, held on 8th and 9th August 2014.

21. Dr. I. Laurence Aroquiaraj, Ms. S. Karthiga, "Performance Analysis Lung Cancer Segmentation Using Soft Computing Techniques", National Conference on Recent Trends in Information, Communication and Computing Technologies – RTICCT'17, Organized by the K.S.R. College of Engineering (Autonomous), Tiruchengode, held on 22nd April 2017.

22. Dr. I. Laurence Aroquiaraj, Ms. T. Narmatha, "Comparative Analysis of Malaria Red Blood Cell Image Segmentation", National Conference on Recent Trends in Information, Communication and Computing Technologies – RTICCT'17, Organized by the K.S.R. College of Engineering (Autonomous), Tiruchengode, held on 22nd April 2017.

23. Dr. I. Laurence Aroquiaraj, Mrs. V. Sudha, "Comparative Study of Routing Protocol using Emergency Vehicle in VANET", National Conference on Recent Trends in Information, Communication and Computing Technologies – RTICCT'17, Organized by the K.S.R. College of Engineering (Autonomous), Tiruchengode, held on 22nd April 2017.

Participation in International and National Conferences / Seminars / Workshops

1. Participated in the Seminar on "Robotics Implementation for Information Technology" organized by School of information Technology, Bharathidasan University, Trichy, held on 20th to 24th March 2002.
2. Participated in the Seminar on "ENVIRO '2005" organized by Department of Electrical and Electronics Engineering, Dr.Pauls Engineering College, Vanur (TK), Villupuram (DT), held on 15th and 16th January 2005.
3. Participated in the Seminar on "ICARUS' 2005" organized by Department of Electrical and Instrumentation engineering, Dr.Pauls Engineering College, Vanur (TK), Villupuram (DT), held on 25th and 26th February 2005.
4. Participated in the Seminar on "Integrated global Business Management the Indian Experience" organized by PRIMS, Periyar University, Salem – 11, held on 24th and 25th March 2006.
5. Participated in the Workshop on "Software Testing" organized by Centre for Information Technology, K.S.R College of Arts and Science, Tiruchengode-637 209, held on 9th September 2006.
6. Participated in the Seminar on "Recent Trend in Computing" organized by Department of Computer Science , Periyar University, Salem – 11, held on 28th October 2006.

7. Presented and participated in Conference on "Soft Computing" organized by Department of Computer Science and Engineering, Hindustan College of Engineering and Technology, Coimbatore -641 032, held on 17th and 18th November 2006.

8. Participated in workshop on "Mammogram Image Processing and Analysis" organized by Department of Computer Science, Periyar University, Salem – 11, held in 26th November 2006.

9. Participated in the Workshop on "Image and Pattern Recognition" (WIPREC) organized by Department of Information Technology, Bharathidasan Institute of Technology, Bharathidasan University, Trichy, held on 27th December 2006.

10. Participated in Seminar on "Fuzzy Image Processing" organized by the Department of Computer Application, Kongu Engineering College, Erode-638 052, held on 26th and 27th January 2007.

11. Participated and presented on "Data Mining Security in E-Commerce in the National Seminar on Strategic Management: Opportunities and Challenges in post LPG Era" organized by the Department of Management Studies, Periyar University, Salem – 11, held on 15th and 16th February 2007.

12. Presented a paper on "Performance Analysis of Statistical Filtering Techniques" participated in the UGC sponsored National Conference on Data Mining and its Applications organized by the Department of Computer Science, Gobi Arts and Science College, Gobichettipalayam – 638 453, held on 9th and 10th March 2007.

13. Participated and presented a paper on "Feature Extraction Using Trace Mean" in the Second National Conference on Management Science and Practice organized by Indian Institute of Technology, Chennai, held on 9th to11th March 2007.

14. Participated in the Workshop on "Data Mining using Roughset" organized by the Department of Computer Science, Periyar University, Salem – 11, held on 3rd March 2007.

15. Participated in the Workshop on "Pattern Recognition" organized by the Department of Computer Science, Periyar University, Salem – 11, held on 01st September 2007.

16. Participated in " A two day progressive Ph.D aspirants meet on research excellence" organized by Department of Computer Science and Engineering , National Engineering College Kovilpatti -628503 , held on 23rd and 24th November 2007

17. Participated and presented in NCICM-2008, a paper "impulse noise removal from Mammogram images using combines approach" organized by Department of Computer Science, Periyar university, Salem -11 held on 22, 23 February 2008.

18. Participated and presented in NCICM-2008, a paper on "Elimating Speckle noise from Ultra sound Medical Images. A Non-linear Approach", organized by the Department of Computer Science, Periyar University, Salem – 11, held on 22nd and 23rd February, 2008.

19. Participated and presented in NCICM-2008, a paper on "Comparative Analysis for the application of noise removal Techniques using Spatial Domain Filters" organized by the Department of Computer Science, Periyar University, Salem – 11, held on 22nd and 23rd February 2008.

20. Participated and presented in NCICM-2008, a paper on "Comparative Analysis for the Application of Noise Removal Techniques using Frequency Domain Filters", organized by the Department of Computer Science, Periyar University, Salem – 11, held on 22nd and 23rd February 2008.

21. Participated in the National Seminar on "Role of IT industries in Global environment" in the National Seminar on Global Business Environment: Opportunities and Challenges

organized by the Department of Periyar Institute Management Studies, Periyar University, Salem – 11, held on 28th and 29th January 2009.

22. Participated in the Workshop on "Faculty Development Programme", organized by Microsoft Corporation on Advanced Developer Technologies on 24th April 2009.

23. Participated in the Workshop on Faculty Training Programme on "J2EE and Best Practices in Application Development", organized by ICT Academy of Tamil Nadu and Periyar University, Salem-11, held on 10-11 November 2009.

24. Participated in the Workshop on "Mobile Computing Using Rough Set Theory", organized by the Department of Computer Science, Periyar University, Salem -11, held on 13th November 2010.

25. Participated and Presented in NCECP – 2011, a paper on "Comparative Analysis of Edge Detection Algorithms", jointly organized by M.V. Muthiah Government Arts College for Women, Dindigul-1 and Department of Computer Science, Periyar University, Salem -11, Tamil Nadu, held on 25th February 2011.

26. Participated and Presented in ICACT – 2011, a paper on "Mammogram Image Segmentation Using Fuzzy Entropy", organized by J.K.K.N. Nattraja College of Engineering and Technology, Tamilnadu, India, held on 29th and 30th July 2011.

27. Participated and Presented in COSMA – 2011, a paper on "Mammogram Image Segmentation Using Weighted Fuzzy Entropy", jointly organized by Dept. of Mechanical Engineering, AMRITA School of Engineering, Coimbatore and Dept. of Mechanical Engineering, National Institute of Technology, Calicut, India, held on 14th and 16th December 2011.

28. Participated in the International Conference on Pattern Recognition, Informatics and Medical Engineering (PRIME – 2012), organized by Dept. of Computer Science, Periyar University, Salem, Tamilnadu, India, held on 21- 23, March 2012.

29. Participated and Presented in the CSIR Sponsored National Conference on Emerging Trends in Rough Sets, Fuzzy Sets, Data Mining and Granular- Soft Computing, a paper on "Pectoral Muscle removal and detection of masses in digital mammogram using fuzzy with ccl", organized by Dept. of Computer Applications, Kongu Engineering College, erode, Tamilnadu, held on 3-4, August 2012.

30. Participated and Presented in EITECH – 2012, a paper on "An Evaluation of Face Segmentation Algorithms", organized by Dept. of Computer Applications, Sona College of Technology, Salem, Tamilnadu, held on 11th August 2012.

31. Participated and Presented in ICSIA – 2012, a paper on "Detection of masses and shape spectral analysis in digital mammogram", organized by PG and Research Department of Statistics, Loyola College, Chennai, Tamilnadu, held on 23-25 August 2012.

32. Participated and Presented in ICSIA – 2012, a paper on "A Comparative Analysis of Unsupervised Feature Selection Methods in Digital Mammogram", organized by PG and Research Department of Statistics, Loyola College, Chennai, Tamilnadu, held on 23-25 August 2012.

33. Participated and Presented in ICSIA – 2012, a paper on " A Comparative analysis of Ant-Miner and Weka Classifier Algorithms", organized by PG and Research Department of Statistics, Loyola College, Chennai, Tamilnadu, held on 23-25 August 2012.

34. Participated and Presented in " 12th International Conference on Tamil Science Congress, Periyar University, August – 23 to 25, 2012.

35. Participated and Presented in CICN – 2012, a paper on "Unsupervised Feature Selection in Digital Mammogram Image Using Tolerance Rough Set Based Quick Reduct ", organized by GLA UNIVERSITY, MATHURA, INDIA, held on 3-5 November 2012.

36. Participated and Presented in NMAC-2K13, a paper on " A Hybrid Image Compression Techniques for Wavelet and Fractal Images" in the National conference on Advanced Computing organized by Department of Computer Science and Engineering, Magna College of Engineering, Chennai-5, Tamilnadu, held on 17 August 2013.

37. Participated and Presented in NCAIOCP – 2013, a paper on " Content Based Image Retrieval System with Modified KNN Algorithm" in the CSIR and ISTE sponsored National Conference on Advances in Intelligent and Optimized Computing Paradigm organized by Faculty of Computer Applications – MCA, Vivekanandha Institute of Information and Management Studies, Tiruchengode, Namakkal(Dt.), Tamilnadu, held on 6 and 7 September 2013.

38. Participated in the Faculty Development Programme (FDP) on "Attributes of Holistic Teaching", organized by the Internal Quality Assurance Cell (IQAC), Periyar University, Salem -11, held on 17 to 20th December 2014.

39. Participated in the Workshop on "Project Writing Skills and Funding Agencies", organized by the School of Sciences, Periyar University, Salem -11, held on 12th February 2015.

40. Participated in the Workshop on "Technical Aspects of High Speed Computers and Applications" (THSCA-2015), organized by Centre for Instrumentation and Maintenance Facility (CIMF), Periyar University, Salem -11, held on 27th March 2015.

41. Participated and Presented in IPSN – 2015, a paper on " Fuzzy-Rough Multi Thresholding ", Segmentation Using Renal Calculi Images" in the DST sponsored national conference on Information Processing in Sensor Networks organized by Department of Master of Computer Applications, Sona College of Technology, Salem, Tamilnadu, held on 20 and 21 August 2015.

42. Participated and Presented in IPSN – 2015, a paper on "Finger Print Segmentation Using Fuzzy Set Approach" in the DST sponsored national conference on Information Processing in Sensor Networks organized by Department of Master of Computer Applications, Sona College of Technology, Salem, Tamilnadu, held on 20 and 21 August 2015.

43. Participated and Presented in IPSN – 2015, a paper on "Lung Image Segmentation Using Soft Computing Techniques" in the DST sponsored national conference on Information Processing in Sensor Networks organized by Department of Master of Computer Applications, Sona College of Technology, Salem, Tamilnadu, held on 20 and 21 August 2015.

44. Participated and Presented in IPSN – 2015, a paper on " Image Segmentation Using Watershed Algorithm and ACO Algorithm" in the DST sponsored national conference on Information Processing in Sensor Networks organized by Department of Master of Computer Applications, Sona College of Technology, Salem, Tamilnadu, held on 20 and 21 August 2015.

45. Participated in the International Workshop on "Scholarly Research Publications: Writing, Citations and Plagiarism (RPCP-16)", organized by Department of Library and Information Science, Periyar University, Salem -11, held on 01 February 2016.

46. Participated and Presented in ICGICT – 16, a paper on "Big Data Analytics in Healthcare: Challenges, Tools, and Techniques: A Survey" in the International conference on Global Innovations in Computing Technology organized by Department of Computer Science and Engineering, Jay Shriram Group of Institutions, Tirupur, Tamilnadu, held on 4th and 5th March 2016.

47. Participated and Presented in ICGICT – 16, a paper on "Survey on Big Data: Issues, Challenges, Tools" in the International conference on Global Innovations in Computing Technology organized by Department of Computer Science and Engineering, Jay Shriram Group of Institutions, Tirupur, Tamilnadu, held on 4th and 5th March 2016.

48. Participated and Presented in ICGICT – 16, a paper on "The Role of Big Data Analytics in Agriculture Sector: A Survey" in the International conference on Global Innovations in Computing Technology organized by Department of Computer Science and Engineering, Jay Shriram Group of Institutions, Tirupur, Tamilnadu, held on 4th and 5th March 2016.

49. Participated and Presented in ICGICT – 16, a paper on "An Appraisal of Content Based Image Retrieval by Means of Unlabelled Images" in the International conference on Global Innovations in Computing Technology organized by Department of Computer Science and Engineering, Jay Shriram Group of Institutions, Tirupur, Tamilnadu, held on 4th and 5th March 2016.

50. Participated and Presented in ICGICT – 16, a paper on "A Competent Segmentation of Volcanic Eruption Flow through Volcano Using Fuzzy C-Means and Texture Segmentation Filter" in the International conference on Global Innovations in Computing Technology organized by Department of Computer Science and Engineering, Jay Shriram Group of Institutions, Tirupur, Tamilnadu, held on 4th and 5th March 2016.

51. Participated and Presented in ICGICT – 16, a paper on "A Prime Survey on Face Recognition System" in the International conference on Global Innovations in Computing Technology organized by Department of Computer Science and Engineering, Jay Shriram Group of Institutions, Tirupur, Tamilnadu, held on 4th and 5th March 2016.

52. Participated and Presented in ICRIE'16, a paper on "Prdicting Lung Cancer Using Image Processing Techniques : A Survey" in the 3rd International Conference on Recent Innovation in

Engineering (ICRIE'16) on 2nd April 2016. Organized By Department of CSE | IT | ECE | MECH. Sri Subramanya College of Engineering and Technology, Palani, held on 2ⁿᵈ April 2016.

53. Participated and Presented in ICRIE'16, a paper on "Data Mining Algorithm and Its Application in Healthcare big data: A Survey" in the 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. Organized By Department of CSE | IT | ECE | MECH, Sri Subramanya College of Engineering and Technology, Palani, held on 2ⁿᵈ April 2016.

54. Participated and Presented in ICRIE'16, a paper on "A Traffic Intelligent System Supervision Approaches and Research Challenges Based on VANET" in the 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. Organized By Department of CSE | IT | ECE | MECH, Sri Subramanya College of Engineering and Technology, Palani, held on 2ⁿᵈ April 2016.

55. Participated and Presented in ICRIE'16, a paper on "Image Processing Techniques Using Synthetic Aperture Radar (SAR) Images: A Survey" in the 3rd International Conference on Recent Innovation in Engineering (ICRIE'16) on 2nd April 2016. Organized By Department of CSE | IT | ECE | MECH, Sri Subramanya College of Engineering and Technology, Palani, held on 2ⁿᵈ April 2016.

56. Participated and Presented in ICICT 2016, a paper on "A Realistic Medical Image Segmentation of Abnormal HIV in Blood Cells Using Morphological Operations", International Conference on Inventive Computation Technologies (ICICT 2016) on 26-27 August 2016.

57. Participated and Presented in ICICT 2016, a paper on "Diverse Image Investigation Using Image Metrics for Content Based Image Retrieval System", International Conference on Inventive Computation Technologies (ICICT 2016) on 26-27 August 2016.

58. Participated in the International Seminar on "International Seminar on Measurement of Quality Publications: Issues, Challenges and Opportunities (MQPICO 2016)", organized by Department of Library and Information Science, Periyar University, Salem -11, held on 23 November 2016.

59. Participated and Presented in NCRIIT'17, a paper on "A Study on Data Mining Techniques in Chronic Kidney Disease", National Conference on Recent Innovations in Information Technology (NCRIIT'17) on 25ᵗʰ February 2017.

60. Participated in "CSI-2016", CSI Convention on 23ʳᵈ to 25ᵗʰ January 2017 organized by the CSI Coimbatore Chapter, Coimbatore, Tamilnadu, India.

61. Participated in the National Workshop on "Statistical Tools for Research (STFR-2017)", organized by Department of Library and Information Science, Periyar University, Salem - 11, held on 3rd March 2017.

62. Participated in the International Seminar on "International Seminar on Recent Trends in Higher Education: Challenges and Strategies", organized by Department of Library and Information Science, Periyar University, Salem -11, held on 15th March 2017.

63. Participated in the National Workshop on "Technical Aspects of Internet of Things (TAIOT 2017)", organized by Centre for Instrumentation and Maintenance Facility (CIMF), Periyar University, Salem -11, held on 23rd March 2017.

64. Participated and Presented in ICETS'17, a paper on "Performance Analysis of Data Mining Techniques to Predict In Chronic Kidney Disease (CKD)" at 4th International Conference on Engineering Technology and Science, Organized by the Muthayammal Engineering Institutions, Rasipuram, Namakkal Dt., Tamilnadu, held on 30th and 31st March 2017.

Professional Activities

1. "National Seminar on Bio-Computing", Department of Computer Science, held on 07.03.09. (Seminar - Coordinator)

2. "Software Testing & Personal Development", Department of Computer Science, held on 12.03.11. (Dr. Daniel Jai Pandian) (Workshop - Coordinator)

3. CSIR Sponsored National Workshop on Emerging Trends in E-Technology (NWETET-2013), Department of Computer Science (Supported by UGC-SAP), held on 14.03.2013 and 15.03.2013. (Organizing Secretary)

4. "Food Safety Issues for Health Promotion", Weekly Seminar, held on 18.01.2013 (Dr. P. Nazni, Head i/c, Dept. of Food Science and Nutrition) (Coordinator)

5. CSIR Sponsored National Workshop on Emerging Trends in E-Technology (NWETET-2013), Department of Computer Science (Supported by UGC-SAP), held on 14.03.2013 and 15.03.2013. (Organizing Secretary)

6. "BITBAY-2013", Technical Symposium, Department of Computer Science, held on 20.09.2013. (Coordinator)

7. Two day Research Workshop on Medical Image Segmentation Techniques (MIST-2014) Department of Computer Science, held on 21.11.2014 and 22.11.2014 (Organizing Secretary)

8. "VB .NET and Project Demo", Student Training Programme, held on 24.07.2015 (Mr. Kuppuraj, Unisco System Pvt. Ltd) (Coordinator)

9. "Intramail (Intra Office mail without using Internet) ", Student Training Programme, held on 31.07.2015 (Mr. K. Rajavelu, Megawin Swithchgear, Salem) (Coordinator)

10. "Placement Training ", Student Training Programme, held on 14.08.2015 (MIKROSON Technology, Salem) (Coordinator)

11. Coordinator for **Web Design** Event as a Member of organizing committee for the National level Technical Symposium, held on 04.09.2015 (Continum-2015)

12. IQAC Sponsored Seminar on "Role of ICT in Quality Sustenance and Enhancement in Higher Education", Internal Quality Assurance Cell, Periyar University, 14 December 2015. (Organizing Secretary)

13. National Science Day Celebrations – 2017, Theme: "Science and Technology for Specially Abled Persons", Organized by Periyar University, Salem -11, held on 28.02.2017 (Quiz competition held for the students of Schools of Mathematics – Evaluator)

14. Two day Special Lecture Programme on Cloud Computing (Trainer: Mr. Vineet Kumar, Cognizant MBP, Bangalore) Department of Computer Science, held on 21.08.2017 and 22.08.2017 (Coordinator)

Projects:

S.No.	Title	Cost (in Rupees)	Duration	Agency	Summary
1	Early Detection of Breast Cancer from Mammogram Using soft computing techniques	2,00,000.00	2 years	UGC	Detection and Diagnosis of breast cancer in its early stage increases the chances for successful treatment and complete recovery of the patient. To disseminate the feature sets and the results of the feature selection in the Mammogram databases

					using different soft computing techniques like Genetic algorithms, Fuzzy set, Rough set etc.,

Extension Activities

1. Delivered a special lecture on "Embedded Systems and Hardware Trouble Shooting" organized by Department of Computer Science, American College, Madurai, held on 09.03.2007.

2. Delivered a special lecture on "e-Governance", Organized by Nachiappa Institute of Co-operative Management, Salem, held on 16.07.2009.

3. Resource person on "Fundamentals of Computer Science", Young Student Scientist Programme Organized by Periyar University, Salem and Tamilnadu State Council for Science and Technology, Chennai, held on 2010 and 2012.

4. Resource person on "National Seminar", Organized by Department of Computer Science, Periyar University Constitution College of Arts and Science, Papireddipatti, held on 2013.

5. Resource person on "National Seminar", Organized by Department of Computer Science, Periyar University Constitution College of Arts and Science, Harur, held on 2014.

6. Resource person on "Special Lecture on Medical Image Processing", Organized by Department of Computer Science, Padmavani College of Arts and Science, Salem, held on 2014.

7. Resource person on "International Conference on Innovations in Mobile and Medical Image Processing", Organized by Department of Computer Science and Applications, Kailash Women's College, Nangavalli, Salem, held on 29th July 2015.

8. Resource person on "Special Lecture programme on Database Management System – Query Processing", Organized by Department of Computer Science, Muthyammal College of Arts and Science, Rasipuram, Namakkal, held on 19th August 2015.

9. Resource person on "Seminar - Recent Trends in Data Mining", Organized by Department of Computer Science, Sri Balamurugan Arts and Science College,Sathapadi,Mecheri, held on 28th September 2015.

10. Resource person on "Seminar - LAMP - Technology", Organized by Department of Computer Science, Paavendhar Arts and Science College, Deviyakurichi, Attur, held on 8th October 2015.

11. Resource person on "Seminar - Recent Trends in IT", Organized by Department of Computer Science and Applications, Mahendra Arts and Science College, Kallipatti, Nammakal , held on 22nd January 2016.

12. Resource person on "Seminar - Advancement in Computer Technology (Career Guidelines)", Organized by Department of Computer Science and Applications, Laxminarayana Arts and Science College for Women, Thadangam Village, Thokkampatty Post, Dharmapuri , held on 12th February 2016.

13. Resource person on " Special Lecture Programme - Technology Handling Techniques", Organized by Department of Periyar Institute of Management Studies (PRIMS), Periyar University, Salem, held on 15th July 2016.

14. Resource person on "Seminar - Advanced Operating System", Organized by Department of Computer Science, Vivekananda Arts and Science College for Womens, Sankari - TK, Salem, held on 6th January 2017.

15. Resource person on "State Level Seminar – Recent Trends in Computer Technology", Organized by Department of Computer Science and Applications, Pachamuthu Arts and Science College for Womens, Dharmapuri, held on 18th February 2017.

16. Resource person on "National Level Seminar – Image Processing", Organized by Department of Computer Science and Applications, Sri Kailash Women's College, Thalaivasal, Salem, held on 10th July 2017.

17. Resource person on "International Seminar on "Advanced Trends in IT and Image Processing", Organized by Department of Computer Science, Sengunthar Arts and Science College, Tiruchengode, Namakkal, held on 18th August 2017.

18. Resource person on "National Conference on "Innovative Trends in Computational Technologies", Organized by Academy of Computer Science, Muthayammal College of Arts and Science, Rasipuram, Namakkal, held on 24th January 2018.

19. Resource person on Association Meet on "TECHNOPHILIA of Computer Science", Organized by Department of Computer Science, King College of Arts and Science, Namakkal, held on 31st January 2018.