Dr. C.SELDEV CHRISTOPHER

Professor,
Computer Science and Engineering
Department,
Mobile : +919443425874
Email   : seldev@sxcce.edu.in

R&D PROJECTS On-going: 01 Completed: 01	PATENTS Filled: 01 Published: 01	JOURNAL PUBLICATIONS SCI : 17 Scopus : 21	CONFERENCE PUBLICATIONS International: 35 National: 05

BOOKS PUBLISHED Books : 01 Book Chapters : 02	GUESTLECTURES DELIVERED Technical : 34 Non-Technical : 02	Ph.D. RESEARCH GUIDANCE Completed: 08 Pursuing: 10

Faculty Identification

- **AICTE** Faculty Id **: 1-466530291**
- **Anna University Chennai** Faculty Id **: 9622033**
- **Orchid** Id **: 0000-0002-5228-029X**
- **Scopus** Author Id**: 56431206800**
- **Web of Science** Researcher ID **: AAD-4851-2021**

Areas of Interest

- Digital Image Processing
- Digital Signal Processing

	Research Project Funding Undertaken

- Financial support for the project titled "**Audio Electronics system for Matured Coconut Identification**" from **Department of Science & Technology(DST)**, Government of India under Technology Development Programme (Agro-Tech) at a total cost of Rupees seventeen lakhs ninety four thousand three hundred and three only (**RS.17,94,303/-**) for a period of two years (November 2020 to October 2022).

	Research Guidance

Research Scholars Completed their Ph.D Program

SL. NO	NAME OF THE SCHOLAR	TOPIC OF RESEARCH	UNIVERSITY	MONTH AND YEAR OF COMPLETION
1.	Gnana King G. R.	Certain Investigations on Compound Image Compression Using Hybrid Image Processing Schemes	Anna University Chennai	January 2016
2.	Jereesha Mary S.J.	Study and Analysis of Watermarking of Compressed Images and to present a Novel Watermarking of Compressed Images	Anna University Chennai	December 2017
3.	J. Annrose	Conventional Optimization Techniques for Feature Reduction and Search Space Reduction in Content Based Image Retrieval	Anna University Chennai	March 2018
4.	Sebastin Antony Joe S	A Novel Multidimensional time Frequency Watermarking Approach for Copyright Protection	Anna University Chennai	July 2018
5.	Sahaya Stalin Jose G	Secure Data and Fault Tolerance in Cloud Storage System	Anna University Chennai	March 2019
6.	Ascar Davix.X	Efficient Approaches for Car License Plate Localization	Anna University Chennai	August 2019

Current Research Scholars

S.NO	REGNO	NAME OF THE SCHOLAR	REG YEAR	REG SESS	UNIVERSITY	STATUS
1.	2011140172	Beni G	2011	JAN	Anna University Chennai	Synopsis Submitted
2.	17244897214	Minola Davids D	2017	JUL	Anna University Chennai	Confirmation completed
3.	17244897492	Sheeba M.c.	2017	JUL	Anna University Chennai	Confirmation completed
4.	17294897163	Shana L	2017	JUL	Anna University Chennai	Confirmation completed
5.	18244891191	Fernisha S R	2018	JAN	Anna University Chennai	Confirmation completed
6.	18244891219	Lyernisha S R	2018	JAN	Anna University Chennai	Confirmation completed
7.	19144897187	Jushwanth Xavier X	2019	JUL	Anna University Chennai	Course Work
8.	20144891151	Benjamin L	2020	JAN	Anna University Chennai	Course Work
9.	21244891248	Jensha Haennah J H	2021	JAN	Anna University Chennai	
10	21244891463	Blessy J	2021	JAN	Anna University Chennai	

Academic Qualification

- **Doctorate in Philosophy** in Communication Systems Engineering- Computer Science and Engineering (Interdisciplinary) from Manonmaniam Sundaranar University with thesis title "A Study And Analysis on Image Compression Techniques and Design of a Novel Class of Compression Techniques for Single Sensor Array Camera Images", in August 2010.

- **Master of Engineering** in **Communication Systems** from Mepco schlenk Engineering College, Sivakasi, Madurai Kamaraj University, in November 1999.

- **Bachelor of Engineering** in **Electronics and Communication Engineering** from The Indian Engineering college, Vadakankulam, Manonmaniam Sundaranar University, in April 1996.

Professional Experience

- **Professor** in the Computer Science and Engineering Department of St. Xavier's Catholic College of Engineering, Nagercoil affiliated to Anna University, Chennai from 18th Aug '10 to till date

- **Senior Lecturer** in the Electronics and Communication Engineering Department of C.S.I Institute of technology, Thovalai affiliated to Anna University, Chennai from 17th June '02 to 17th Aug '10

- **Lecturer** in the Electronics and Communication Engineering Department of Jayamatha Engineering college, Aralvoimozhi affiliated to Anna University, Tirunelveli from 3rd Jan '00 to 13th June '02

- **Guest Faculty** for M.Tech (Computer and Information Technology) at Centre for Information Technology and Engineering, Manonmaniam Sundaranar University, Tiruneveli from January 2002 to December 2010

Articles Published in Journals

1. D. Minola Davids, **C. Seldev Christopher, "**An efficient video summarization for surveillance system using normalized k-means and quick sort method", Microprocessors and Microsystems, volume 83, 2021, 103960.
2. X. Ascar Davix, **C. Seldev Christopher**, D. Judson "Detection of the vehicle license plate using a kernel density with default search radius algorithm filter Author links open overlay pane", Optik, Volume 218, September 2020, 164689.
3. Surem Samuel S, **Seldev Christopher** and Vinila Jinny, "Automatic Text Segmentation and Recognition in Natural Scene Images Using Msocr", Current Signal Transduction Therapy, volume 15, pages 1-12, 2020.
4. Dev. R. Newlin, **C. Seldev Christopher**,"Medical Image Denoising Using Different Techniques", International Journal of Scientific & Technology Research, Volume 9, Issue 03, March 2020.
5. D. Benyl Renita, **C. Seldev Christopher**, "Novel real time content based medical image retrieval scheme with GWO-SVM", Multimedia Tools and Applications volume 79, pages17227–17243, March 2020.
6. Shana L, **C Seldev Christopher**, "Multi Variant Feature Similarity Based Behavior Tracking in Video Surveillance using ANN", International Journal of Recent Technology and Engineering, Volume-8 Issue-3,1419-1423 September 2019.
7. Dev. R. Newlin, **C. Seldev Christopher**, "De-noising of Natural Images with Better Enhancement Using Convolutional Auto-Encoder", Journal of Advanced Research in Dynamical and Control Systems, Vol. 11, No. 12, 2019.

8. Rophita Frankes S, **Dr.C.Seldev Christopher**, "Disease Identification Inspinach Leaves" International Journal of Recent Trends in Engineering & Research, special issue march 2019, 125-131.

9. **Dr. C. Seldev Christopher**, T. Vajith Malar, "Detection And Classification of Uterine Fibroid Using Ultrasound Images", International Journal of Recent Trends in Engineering & Research, special issue march 2019, 92-98.

10. G. Sahaya Stalin Jose, **C. Seldev Christopher** , "Secure cloud data storage approach in e-learning systems", Cluster Computing, Springer , 22, 12857–12862 2019.

11. J. Annrose, **C. Seldev Christopher**,"An efficient image retrieval system with structured query based feature selection and filtering initial level relevant images using range query", Optik 157, 1053–1064, 2018.

12. Sebastin Antony Joe , **C. Seldev Christopher** , Jereesha Mary," Novel watermarking scheme with watermark encryption for copyright protection", Biomedical Research, Vol.28 (1), 51-57,2017

13. X. Ascar Davix and **C. Seldev Christopher,** "Edge Based Marker Controlled Watershed Algorithm for Automatic Car Licence Plate Localization", Journal of Computational and Theoretical Nanoscience, Vol. 14, 5539–5551, 2017

14. J. Annrose, **C. Seldev Christopher**, "Content based Image Retrieval using Query based Feature Reduction with K-means Cluster Index", *Asian Journal of Research in Social Sciences and Humanities,* Vol. 6, No. 12, pp. 852-872, December 2016.

15. J. Annrose**, C. Seldev Christopher**," CBIR: Primary Collection of Relevant Image Selection using Rule Based Boolean Query" *Revista Tecnica De La Facultad De Ingenieria Universidad Del Zulia. Vol. 39, Nº 8, 175 - 185, 2016*.

16. **C.Seldev Christopher**,S.J.Jereesha Mary and S.Sebastin Antony Joe, *"Compressed Image Authentication using CDMA Watermarking and EMRC6 Encryption" Revista Tecnica De La Facultad De Ingenieria Universidad Del Zulia. Vol. 39, No.6, 375 - 382, 2016*.

17. J. Jereesha Mary, **Dr. C. Seldev Christopher,** S. Sebastin Antony Joe, '*Novel Scheme for Compressed Image Authentication Using LSB Watermarking and EMRC6 Encryption*', Circuits and Systems, Vol.7, 2016.

18. R. Inigo, k. P. Vinod kumar, V. A. Nagarajan**, C.** PP: 1722-1733**Seldev Christopher**, '*Corrosion Inhibition Studies on Carbon Steel by trans 1-(2,4-dihydroxyphenyl)-3-(3-hydroxyphenyl)prop-2-en-1-one*', Oxidation Communications vol:38, No:4, PP:1748-1755, 2015.

19. S.R. Surem Samuel and **C. Seldev Christopher,** '*Efficient Approach to Detect and Localize Text in Natural Scene Images*', Journal of Advances in Intelligent Systems and Computing Vol.325, PP:665-674, Springer India 2015.

20. L. Larsha , **Dr. C. Seldev Christopher,**' *Adaptive Context Based Bayer CFA Image Compression*', International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 10, No.70, PP: 135-144, 2015

21. M. Gayathri, **Dr. C. Seldev Christopher,**' *Automatic Detection of Cyst/Fibroids Present in the Ultrasound Images of Ovary/Uterus by Using Region Growing Technique*', International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 10, No.70, PP:111-117, 2015

22. I. Jeya Kumar, Dr. A. Lenin Fred, **Dr. C. Seldev Christopher,**' *Color Image Enhancement Based on Depth Order Minimization*', International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 10, No.59, PP:112-120, 2015

23. Monisha Lincy, **C. Seldev Christopher**, '*Biometric Identification using Rectinal Scan*', International Journal of Advanced Research Trends in Engineering and Technology, Vol.II, Special Issue XXIII, March 2015.

24. G.R. Gnana King, **C. Seldev Christopher, '** *Improved block based segmentation algorithm for compression of compound images',* Journal of Intelligent & Fuzzy Systems, Vol.27, PP: 3213–3225, 2014.

25. J. Jereesha Mary, S. Sebastin Antony Joe, **Dr. C. Seldev Christopher**,' *Comparative Study of Watermarking and Encryption Schemes for JPEG2000*

Images', International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 9, No.26, PP:9323-9326, 2014.

26. J. AnnRose, **Dr.C.Seldev Christopher,'** *Performance Analysis of Minimum Distance Classifier and Clustering Algorithm in CBIR',* Journal of Applied Mechanics and Materials, Vol. 626, PP:14-19, 2014.

27. Lekshmi Ajayan, **C.Seldev Christopher,'** *Shadow Removal Using Inpainting and Interpolation Technique',* Journal of Applied Mechanics and Materials, Vol. 626, PP: 32-37, 2014.

28. G.R.Gnana King, **C.Seldev Christopher**,N.Albert Singh,' *A Novel Compression Technique For Compound Images Using Parallel Lempel-Ziv-Welch Algorithm',* Journal of Applied Mechanics and Materials, Vol. 626, PP: 44-51, 2014.

29. A.Anuja Merlyn, **Dr.C.Seldev Christopher,'** *Color Image Segmentation Using Brightness and Color Fusion',* International Journal of Advanced Research in Computer Engineering & Technology, Volume 3, Issue 5, 2014.

30. F. Ramesh Dhanaseelan, **C. Seldev Christopher,'** *FPU-Tree: Frequent Pattern Updating Tree',* International Journal of Advance in Communication Engineering, Volume 1, Issue 1, 2012.

31. Balasubramanian Subbiah, **C. Seldev Christopher, '***Image Classification through integrated K- Means Algorithm',* International Journal of Computer Science Issues, Vol. 9, Issue 2, 2012.

32. F.Ramesh Dhanaseelan, **C. Seldev Christopher, '***Weighted Adaptive Interpolation for Universal Demosaicking'*, International Journal of Advance in Communication Engineering, ISSN: 0975-6094, Vol.4 No.2 2012, Pages: 115-120.

33. N.Krishnan, **C. Seldev Christopher, '***Vector Quantization Based Approach for lossy Mosaic Image Compression',* International Journal of Imaging Science and Engineering, Vol.3, No.1, 2009.

34. N.Krishnan, S.S. vinsley, **C. Seldev Christopher, '** *Adaptive Interpolation and Sharpening for Single Sensor Digital Camera Images',* Journal of Computer Science, may-june 2008.

35. N.Krishnan, **C. Seldev Christopher,** *'Efficient Lossless Compression of using Adaptive Context Based Coding***'**, International Journal of Imaging Science and Engineering (IJISE),Vol.2, No.2, April- 2008.

36. N.Krishnan, **C. Seldev Christopher,** *'Adaptive Prediction based Lossless Compression of mosaic images'*, *International Journal of Imaging Science and Engineering (IJISE), Vol.2, No.2, April- 2008.*

37. N.Krishnan, S.Ravi , **C. Seldev Christopher, '** *Human Face detection in color Images using Mixed Gaussian Color Model',* International Journal of Imaging Science and Engineering, Vol.4, PP:767-773, January- 2008.

38. N.Krishnan, A.Leninfred , **C. Seldev Christopher, '** *A Simple and Fast Finger Print Feature Extraction',* International Journal of Imaging Science and Engineering (IJISE), Vol.3, PP:67-72, January- 2008.

39. N.Santhi, **Seldev Christopher**, K. Ramar, *'Extraction of Structural Shape of Low DOF images using Morphological Operators'*, Journal of Information Technology, Vol.7, PP: 303-308, 2007.

40. N.Krishnan, S.S. vinsley, **C. Seldev Christopher,** *'New Effective Iterative Demosaicing***',** International Journal of Imaging Science and Engineering (IJISE), Vol.38 PP:605-612, July-2007.

Papers presented in Conferences

1. **View-Based and Visual-Attention-Based Background Modeling for Detecting Frequently and Infrequently Moving Objects for Video Summarization,** The International Conference on Communication Systems and

Networks (ComNet-2019), Mar Baselios College of Engineering and Technology in association with the University of Dayton, Ohio, and with Springer as publication partner, 12th & 13th Dec 2019.

2. **Behavior Tracking in Video Surveillance Applications: A Detailed Study**, The International Conference on Communication Systems and Networks (ComNet-2019), Mar Baselios College of Engineering and Technology in association with the University of Dayton, Ohio, and with Springer as publication partner, 12th & 13th Dec 2019.

3. **Disease Identification in Spinach Leaves**, IEEE International Conference on Recent Advances in Energy-efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 7th & 8th March 2019.

4. **Video Summarization using Image Processing**, International Conference on Recent Innovations in Computer and communication, Rohini College of Engineering and Technology,10th & 11th April 2018.

5. **Under Water Image Restoration Based on Illumination, Normalization and Debugging**, International Conference on Recent Advances in Energy-Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

6. **Enhanced Approach to Segment Text from Natural Scenarios,** International Conference on Recent Advances in Energy- Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

7. **Reversible Water Marking Using Adaptive Edge Sensing,** International Conference on Recent Advances in Energy- Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

8. **Non-Texture Image Impainting using Histogram of Oriented Gradients ,** International Conference on Recent Advances in Energy- Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

9. **Image Impainting,** International Conference on Recent Advances in Energy-Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

10. **Under Water Restoration Based on Image Blurriness, Light Absorption and Color Correction,** International Conference on Recent Advances in Energy- Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

11. **Reversible Data Hiding Using Color Partitioning and Prediction Expansion,** International Conference on Recent Advances in Energy- Efficient Computing and Communication, St. Xavier's Catholic College of Engineering, Chunkankadai, 1st & 2nd March 2018.

12. **Enhanced Approach to Segment Text from Natural Scenarios**, International Conference on Novel Issues and Challenges in Science and Engineering, Noorul Islam University, Kumaracoil, 28th & 29th July 2016.

13. **Fusion of Color Saliency map and Gray-Scale Morphological reconstruction for effective Image Segmentation**, Third National Conference on Advanced Communication & Electronic System, Rohini College of Engineering and Technology, Anjugramam, 10th March 2016.

14. **Image Enhancement Using Gradient Histogram Equalization**, Third National Conference on Advanced Communication & Electronic System, Rohini College of Engineering and Technology, Anjugramam, 10th March 2016.

15. **Adaptive Context Based Bayer CFA Image Compression,** International Conference on Advances in Engineering and Applied Sciences, Noorul Islam University, Kumaracoil, 29th & 30th April 2015.

16. **Automatic Detection of Cyst/Fibroids Present in the Ultrasound Images of Overy/Uterus by Region Growing Technique**, International Conference

on Advances in Engineering and Applied Sciences, Noorul Islam University, Kumaracoil, 29th & 30th April 2015.

17. **Lossless Adaptive Context Based Compression of BayersCFA Images**, International Conference on Advances in Engineering and Applied Sciences, Noorul Islam University, Kumaracoil, 29th & 30th April 2015.

18. **Joint Demosaicing and Zooming Using Sobel Gradient Mask and Weighted Edge Sensing Interpolation**, National Conference on Information & Communication Technology, SSN College of Engineering, Kalavakkam, 9th and 10th April 2015.

19. **Human Perception Saliency Based Color Image Segmentation**, National Conference on Innovation in Communication and Networking, Sivaji College of Engineering and Technology, 31st March 2015.

20. **Biometric Identification Using Retina Scan**, International Conference on Recent Advances in Communication System and Technologies, Francis Xavier Engineering College, Tirunelveli, 25th March 2015.

21. **Multi Spectral Depth Sensation Enhancement for Color Images**, International Conference on Engineering and Scientific Innovations, Mar Ephraem College of Engineering and Technology, 20th March 2015.

22. **Multiscale Image Enhancement based on Human Visual System**, International Conference on Engineering and Scientific Innovations, Mar Ephraem College of Engineering and Technology, 20th March 2015.

23. **Lossless Adaptive Context Based Compression of CFA Images**, National Conference on Emerging Trends in Applied Science and Technology, Noorul Islam University, Kumaracoil, 18th March 2015.

24. **Multi-Class Thresholding Technique in Image Segmentation**, International Conference on Recent Trends in Electrical and Communication, Maria College of Engineering and Technology, Attoor, 6th March 2015.

25. **Efficient Technique for Shadow Removal in an Image**, 2014 International Conference on Energy Efficient Technologies for Sustainability at St. Xaviers Catholic College of Engineering, Nagercoil, 7th, 8th & 9th April 2014.

26. **Object level histogram specification for color image enhancement,** 2013 IEEE Conference on Information & Communication Technologies (ICT) at Noorul Islam University, Kumaracoil, 11th & 12th April 2013.

27. **Random valued impulse denoising using robust direction based detector,**2013 IEEE Conference on Information & Communication Technologies (ICT), Noorul Islam University, Kumaracoil, 11th & 12th April 2013.

28. **A Novel Filter for Salt and Pepper Noise using Adaptive Interpolation Technique,** International Conference on Emerging Technology Trends in Advanced Engineering Research (ICETT '12) at Baselios Mathews II College of Engineering, Kollam, February 20th & 21nd 2012.

29. **A New Image Enhancement Technique using Contrast Stretching,** International Conference on Emerging Technology Trends in Advanced Engineering Research (ICETT '12) at Baselios Mathews II College of Engineering, Kollam, February 20th & 21st 2012.

30. **New Efficient Image Compression Method for Single Sensor Digital camera images**, *International Conference on Computational Intelligence and Multimedia Applications* (ICCIMA '07) at Mepco schlenk Engineering College, Sivakasi, December 13th to 15th, 2007.

31. **Skin Detection Using Color Pixel Classification with application to Face Detection: A Comparative Study**, *International Conference on Computational Intelligence and Multimedia Applications* (ICCIMA '07) at Mepco schlenk Engineering College, Sivakasi, December 13th to 15th, 2007.

32. **A Novel Adaptive Weighted Color interpolation Algorithm for Single Sensor Digital Camera Images**, *International Conference on Computational Intelligence and Multimedia Applications* (ICCIMA '07) at Mepco schlenk Engineering College, Sivakasi, December 13th to 15th, 2007.

33. **An Efficient Lossless Compression for Mosaic images**, *Geospatial Conference 2007* at SIERRA ATLANTIC, Hyderabad,13th July 2007.
34. **Extraction of Structural shape of Low DOF images using Morphological Operators**, *International Conference on Signal Processing, Communications and Networking* (ICSCN 2007) at Madras Institute of Technology ,Chennai, 22nd to 24th February, 2007.
35. **New effective Iterative Demosaicing**, *International Conference On Advanced Computing and Communication* (ICACC 2007) at Sethu Institute Of Technology , Kariapatti,9th & 10th February, 2007.
36. **Human Face Detection in Color Images using Mixed Gaussian Color Models**, *International Conference On Advanced Computing and Communication* (ICACC 2007) at Sethu Institute Of Technology , Kariapatti,9th & 10th February, 2007.
37. **A Simple and Fast Finger Print Feature Extraction**, International Conference On *Advanced Computing and Communication* (ICACC 2007) at Sethu Institute Of Technology , Kariapatti,9th & 10th February, 2007.
38. **Removal of blocking artifacts in JPEG compressed images using Dual Tree Complex Wavelet Filters for Multimedia on the Web**, *The third IEEE and IFIP International Conference on Wireless and Optical Communications Networks* (WOCN 2006),Bangalore, 11th to 13th April, 2006.

Professional Activities as Resource person

1. Webinar on "**Designing a fuzzy System"** at St. Xavier's Catholic College of Engineering on 1st May 2020.
2. Resource Person for one day workshop on "**Research Publication Challenges"** at Mar Ephraem College of Engineering, Marthandam on 5th September 2019.
3. Guest Lecture on "**Image Processing in real Life",** at Rohini college of Engineering and Technology, Kanyakumari on 10th January 2019.
4. Guest Lecture on "**Computer Vision**" at Rajas international Institute of Technology for women on 2nd August 2018.
5. Guest Lecture on "**Fuzzy Logic**" at Loyola Institute of Technology and Science on 13th August 2018
6. Resource person for one day workshop on "**Image Processing through MATLAB**" at St. Xavier's Catholic College of Engineering on 28th July 2018.
7. Resource person for three days workshop on "**Algorithm Development in Image Processing**" at St. Xavier's Catholic College of Engineering on 14th June 2018.
8. Resource person for an expert session on "**Practical Applications in Image Processing** " at College of Engineering Kidangoor, Kerala on 16th and 17th February 2017.
9. Resource person for an expert session on "**Application of Image Processing using MATAB**" at College of Engineering Kidangoor, Kerala on 5th and 6th October 2016.
10. Resource person for one day workshop on "**How to do Projects Effectively**" at St. Xavier's Catholic College of Engineering on 31st August 2016.
11. Resource person for an expert session on "**Fuzzy Logic and its Application**" at College of Engineering Kidangoor, Kerala on 5th July 2016.
12. Resource person for the Anna University FDTP on "**Discrete Time Systems and Signal Processing**", at Arunachala College of Engineering for Women on 18th November 2015.
13. Resource person for the UGC sponsored National Seminar on "**Image Processing Techniques and Application**" at Assumption College, Changanacherry on 10th & 11th September 2015.

14. Resource person for the IEEE Inauguration function at Mar Ephram College of Engineering and Technology, Elavuvillai on 06th August 2015.
15. Resource person for the workshop " **MATLAB**", for Staff and PG students at Baselios Mathews II College of Engineering, Sasthamcotta, Kerala on 19th and 20th May 2015.
16. Resource person for the AICTE Sponsored Faculty Development Program "**Signal Processing and Image Analysis**", at Sree Buddha College of Engineering for Women, Ayathil, Pathanamthitta on 20th March 2015.
17. Resource person for the workshop " **MATLAB**", for Staff and PG students at Baselios Mathews II College of Engineering, Sasthamcotta, Kerala on 15th and 16th January 2015.
18. Resource person in the UGC sponsored National Conference "**Advances in Digital Signal and Image Processing**" at MES College, Marampally, Aluva, Kerala on 7th January 2015.
19. Resource person for the workshop "**Image Processing and MATLAB**", for staff members at Baselios Mathews II College of Engineering, Sasthamcotta, Kerala on 7th December 2014.
20. Resource person for two day event " **New Faculty Induction Program**" conducted by the ISTE Faculty Chapter at Dr. Sivanthi Adithanar College of Engineering, Tiruchendur on 17th October 2014.
21. Resource person for the National workshop "**Image Processing Techniques and Practical Applications Using MATLAB**" at Noorul Islam University, Kumaracoil, on 21st and 22nd August 2014.
22. Resource person for the Faculty Development Program ″**Image Processing**", at Pondicherry University, Pondicherry on 18th August 2014.
23. Resource person for the workshop "**Image Processing and MATLAB**", at Baselios Mathews II College of Engineering, Sasthamcotta, Kerala on 18th July 2014.
24. Resource person for the workshop "**Image Processing through MATLAB**", at C.S.I Institute of Technology, Ketti (Ooty) on 6th and 7th February 2014.
25. Resource person for the National Level Seminar "**Research Methodology**", at Shri Vellapally Natesan College of Engineering, Mavalikara, Kerala on 5th December 2013.
26. Resource person for the workshop "**Image Processing and MATLAB**", at Baselios Mathews II College of Engineering, Sasthamcotta, Kerala on 3rd to 5th October 2013.
27. Guest lecture on **Image Processing Application** for PG students at Noorul Islam University, Kumaracoil, 14th August 2013.
28. Resource person in the National Seminar "**Image Processing and Its Application**", at University College of Engineering, Nagercoil on 10th April 2013.
29. Resource person for the National Level Workshop "**Image Enhancement & Segmentation**", at St. Xaviers Catholic College of Engineering, Chunkankadai on 29th and 30th January 2013.
30. Resource person for the workshop "**Image Processing and MATLAB**", at Baselios Mathews II College of Engineering, Sasthamcotta, Kerala on 19th December 2012.
31. Resource person for the Seminar "**Emerging Trends in Digital Image Processing**", at Udaya School of Engineering, Vellamodi on 4th October 2012.
32. Resource person for the workshop "**Advanced digital Image Processing Using MATLAB**", at Sun Collage of Engineering and Technology, Erachakulam on 17th August 2012.
33. Resource person in the National Seminar "**Image Processing and Networks**", at S.T. Hindu College, Nagercoil on 31st March 2012.
34. Resource person for the workshop "**Image & Video Processing**", at Narayana Guru College of Engineering, Manjalumoodu on 29th Nov 2011.
35. Guest Lecture on "**Digital Signal Processing″** at The Indian Engineering college, Vadakangulam, India on September 30th 2011.

36. Resource Person for Fourth National Seminar on "**Research Issues in Digital Image Processing**" at Mepco Schlenk Engineering College, Sivakasi, India on 19th march 2011.

Collaborations with International / National Conferences

- **Publication Chair** in IEEE **International Conference on Recent Advances in Energy-efficient Computing and Communication**, St. Xavier's Catholic College of Engineering, Chunkankadai, 7th & 8th March 2019.
- **Session Chair** and **Technical Committee Member** in **International Conference on Energy Efficient Computing and Communication** at St Xavier's Catholic College of Engineering, Chunkankadai, India, on March 1st & 2nd 2018.
- **Organising Committee Member** for **International Conference on Appied Mathematics and Theoretical Computer Science** at St Xavier's Catholic College of Engieering, Chunkankadai, India, on February 1st to 3rd 2018.
- **Chair** and **Technical Reviewer** for **IEEE International Conference on Emerging Technological Trends**, at Baselios Mathews II College of Engineering, Kollam, kerala, India, on 21st October 2016.
- **Chair** and **Technical Reviewer** for **International Conference on Novel Issues and Challenges in Science and Engineering**, Noorul Islam University, Kumaracoil, 28th & 29th July 2016.
- **Organizing Committee** for **International Conference on Energy Efficient Technologies for Sustainabiity** at St Xavier's Catholic College of Engineering, Chunkankadai, India, on April 7th & 8th 2016.
- **Local Chair** and **Finance Committee Member** for **2nd International Conference on Green High Performance Computing** at St Xavier's Catholic College of Engineering, Chunkankadai, India, on Febrauary 26th & 27th 2016.
- **Chair** and **Technical Reviewer** for **Springer International Conference on Soft Computing Systems** at Noorul Islam University, Kumaracoil, 19th February 2016.
- **Chair** and **Technical Reviewer** for **Springer International Conference on Soft Computing Systems** at Noorul Islam University, Kumaracoil, 20th & 21st April 2015.
- **Chair** and **Technical Reviewer** for **IEEE International Conference on Circuits, Power and Computing Technologies** at Noorul Islam University, Kumaracoil, 19th & 20th March 2015.
- **Chair** and **Technical Reviewer** for **Springer International Conference on Artificial Intelligence and Evolutionary Algorithms in Engineering Systems** at Noorul Islam University, Kumaracoil, 22nd & 23rd April 2014.
- **Hospitality Committee** for **2013 International Conference on Energy Efficient Technologies for Sustainability** at St Xavier's Catholic College of Engieering, Chunkankadai, India, on April 10th - 12th 2013.
- **Chair** and **Technical Committee Member** for **International Conference on Appied Mathematics and Theoretical Computer Science** at St Xavier's Catholic College of Engieering, Chunkankadai, India, on January 24th to and 25th 2013.
- **Chair** and **Technical Committee Member** for **Second International Conference on Emerging Technological Trends** (ICETT-2012) in Advanced Engineering Research at Baselios Mathews II College of Engineering, Kollam, kerala, India, on March 21st and 22nd 2012.
- **Chair** and **Scientific Committee Member** for the International Conference on Applied Computing 2012 organized by The International Journal of Engineering

Technology and Computer Applications (IJETCA) at Nagercoil on March 18th 2012.

- **Key Note Speaker** in **National Conference on Communication, VLSI and Signal processing** about **Research issues in Image processing** at The Indian Engineering college, Vadakangulam, India on march 16th 2012.
- **Executive member and PRO** for **2011 IEEE International Conference on Computational Intelligence and Computing Research** (ICCIC), Cape Institute of Technology, Levengipuram, Kanyakumari, India, Dec 2011.
- **Chair** and **Technical Committee Member** for **First International Conference on Emerging Technological Trends** (ICETT-2011) in Advanced Engineering Research at Baselios Mathews II College of Engineering, Kollam, kerala, India, on March 2011.
- **General Chair** for **International Conference on Emerging trends in Electrical and Computer technology** at St Xavier's Catholic College of Engieering, Chunkankadai, India, on March 23th and 24th 2011.
- **Advisory Committee Members** for **Doctoral Student Conference on Information and Communication Engineering** at Muthayammal Engineering College, Rasipuram, Tamilnadu, India on February 26th 2011.
- **Chair** and **Advisory Committee Member** for one day Conference on **Emerging Trends in Signal Processing and wireless Technology sponsored** by **DRDO** at Dr. Sivanthi Aditanar College of Engineering, Tiruchendur, India on 8th February 2011.
- **Executive member and PRO** for **IEEE Sponsored International Conference** on **Computational Intelligence and Computing Research**, Tamilnadu College of Engineering, Coimbatore , India, Dec 2010.
- **General Chair** for **International Conference on Commuication Control and Computing technologies** conducted by St Xavier's Catholic College of Engineering, Chunkankadai, India, Oct 2010.
- **Steering Committee member** for **IEEE Sponsored International Conference** on **Advanced Computing and Communication** (ICACC 2007), at Sethu Institute of Engineering, Madurai, India on 9th & 10th Feb 2007.

Faculty Development Program/ Workshop/Seminar Organized

- One day Seminar on "**Soft Computing and its Applications**" by Dr. J. Emerson Raja, Professor, Multimedia University, Malaysia on 19th September 2016.
- One day Orientation program "**How to do PG Project Effectively**" at St. Xavier's Catholic College of Engineering, Chunkankadai on 18th & 21st July 2016.
- One Day Workshop on "**Fuzzy logic application using MATLAB**", on 20th October 2015 by Dr. R. K. Selva Kumar, HOD, Dept. of CSE, Agni college of Engineering, Chennai at St. Xavier's Catholic College of Engineering, Chunkankadai.
- Two day workshop on "**Image Processing Application using MATLAB**", at St. Xavier's Catholic College of Engineering, Chunkankadai on 20th & 21st August 2015.
- Two days' workshop on "**Big Data Analytics using R Programming**" by Dr. E. Ben George, Professor, Ibra College of Technology, Sultanate of Oman at St. Xavier's Catholic College of Engineering, Chunkankadai on 16th & 17th July, 2015.

- Seminar on "**How to make the most out of the IEEExplore Digital Library**" by Mr.Dhanu Pattanashetti, IEEE Client Services Manager, Bangalore at St. Xavier's Catholic College of Engineering, Chunkankadai on 19th June 2015.
- Two day Workshop on "**Soft Computing tools in Signal and Image processing**" at St Xavier's Catholic College of Engieering, Chunkankadai, India, on May 21st to and 23rd 2012.

Professional Membership

- Senior Member (80389132) – Institute of Electrical & Electronics Engineers (IEEE).
- Member (1100372980) – Association for Institution of Engineering and Technology (IET).
- Life Member (LM 70267)– Indian society for Technical Education (ISTE).

Faculty Development Program/ Workshop/Seminar Attended

- Faculty Development Training Program on **Exemplary Practices in Teaching Learning and Evaluation courses** by Visvesvaraya Technological University from 3rd to 7th August 2020.
- Faculty Development Training Program on **Perspectives of Artificial Intelligence Applications** by St Josephs Institute of Technology, Chennai 27th July to 01st August 2020.
- Faculty Development Training Program on **Trends and Technologies in Digital Era** by Noorul Islam Centre for higher Education from 27th to 31st July 2020.
- Faculty Development Training Program on **IOT** by Easwari Engineering College, Chennai from 18th to 25th July 2020.
- Faculty Development Training Program on **Artificial Intelligence application through Machine Learning** by Balaji Institute of Technology & Science from 14th to 18th July 2020.
- Faculty Development Training Program on **Contemporary Research Trends in ECE and CSE** by Visvesvaraya Technological University from 06th to 10th July 2020.
- Faculty Development Training Program on **Indigenous Knowledge Systems and Modern Education** by Sree Ayyappa College for Women, Nagercoil from 25th to 29th may 2020.
- Faculty Development Training Program on **Programme on R** by Thiruvalluvar University College of Arts and Science from 21st to 27th May 2020.
- Workshop on **E-Sim** Conducted by Teaching Learning Centre ICT at IIT Bombay at St. Xavier's Catholic College of Engineering, Nagercoil on 21st September 2019.
- **Webinar on Deep Learning** organized by TCS iON Acadamey on 28th June 2018
- Faculty Development Training Program on **Phython** by CSI at St. Xavier's Catholic College of Engineering, Nagercoil from 11th to 15th August 2017.
- **Journals Editorial Roundtable** organized by Taylor & Francis in Bangalore on 08th march 2016

- Workshop on **Paper Publication** Conducted by IET India at St. Xavier's Catholic College of Engineering, Nagercoil on 25th July 2015.
- Faculty Development Training Program on **Programming and Data Structure** at St. Xavier's Catholic College of Engineering, Nagercoil from 08th to 15th December 2014.
- Two week ISTE workshop on **Computer Programming** conducted by Indian Institute of Technology Bombay from 20th May to 21st June 2014.
- Two week ISTE workshop on **Introduction to research Methodologies** conducted by Indian Institute of Technology Bombay from 25th June to 04th July 2012.
- Two day Seminar on **Mathematica 6.0.1 with a focus on Parellel and Grid Computing** organized by SIERRA ATLANTIC, Hyderabad & Centre for Information Technology and Engineering, Manonmaniam Sundaranar University, Tirunelveli, December 7th and 8th,2007.
- Five day workshop on **Image Processing with IDL Programming** organized by Centre for Information Technology and Engineering, Manonmaniam Sundaranar University, Tirunelveli, November 21st -25th ,2007.
- **Ripe Faculty Win Kit** organized by Ripe Institute Private Limited, Nanganallur,Chennai-600061,9th & 10th March 2007.
- One day Seminar on **Grid Computing with Mathematica** organized by Centre for Information Technology and Engineering, Manonmaniam Sundaranar University, Tirunelveli, 9th January,2007.
- Faculty Development Programme on **Total Quality Management** organized by Bannari Amman Institute of Technology, Sathyamangalam, November 26th to 28th, 2004.
- Faculty Development Programme on **Professional Ethics** organized by Raja College of Engineering and Technology, Madurai, May 15th & 16th, 2004.
- Faculty Development Programme on **VLSI DESIGN & INDUSTRIAL INSTRUMENTATION** conducted by Anna University, chennai at Kongu Engineering College, Erode, 24th to 29th November 2003.