

Dr. S. Alagu					
Designation:	Assistant Professor				
Qualification:	M.E, Ph.D				
Area of specialization:	Biomedical Image Processing and Machine learning				
Experience : (As On December 2024)	Industrial Experience		Teaching Experience		
	-		16 Years		
Number of workshop / FDP attended:	Number of Workshops		Number of FDPs		
	44		20		
Publications:	Conference		Journal		
	National	International	SCI	Scopus	Others
	8	20	2	4	5
Patents:	National		International		
	5 Published		-		
Professional Body Membership:	IETE – F 506190				
	ISTE – LM 39312				
	IEEE- 95366128				
	International Association of Engineers(IAENG)- 291494				

Workshops / FDP / STTP Attended [64 Nos]

1. Attended the Faculty Development Programme on "Leveraging Explainable AI to enhance Communication Systems, Signal and Image Processing" Organized by IEEE Madras Section and hosted by IEEE SB, Sri Sairam Engineering College, Chennai during 17th to 22nd November 2025. **[6 Days]**
2. Participated and completed successfully six days online Professional Development Programme on "Advanced Design and Optimization Techniques for Next-Generation Antennas" organised by the Department of Electronics and Communication Engineering, Sri Sairam Engineering College during 03rd November 2025 08th November 2025. **[6 Days]**
3. Participated and completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on "SEMI-TECH: Semiconductor Innovation & Technology for Next-Gen Electronics" at SRM Institute of Science and Technology from 18th August 2025 to 23rd August 2025. **[6 Days]**
4. Participated in the Five-Day Faculty Development Programme on "Next-Generation Health Technologies: Integrating Signal Processing, Teleneurology & AI" organized by the Department of Electronics and Biomedical Engineering Adi Shankara Institute of Engineering and Technology, Kalady in association with the Telemedicine Society of India – Kerala Chapter held from June 3 to June 7, 2025. **[5 Days]**
5. Participated in the Faculty Development Programme on " Innovation and Entrepreneurship held from 24th to 28th March 2025 at Vellore Institute of Technology Chennai campus organized by the All India Council for Technical Education (AICTE) and Ministry of Education's Innovation cell (MIC). **[5 Days]**
6. Participated in the Faculty Development Programme on " Perspectives of 6G towards Next Gen Communications" organised by the department of ECE from SriSaiRam Engineering College from 07.04.2025 to 11.04.2025.**[5 Days]**
7. Participated in 5-Day Faculty Development Program on "Next-Generation Wireless Communication Systems: Trends, Technologies and Future Directions" , organized by Department of Electronics & Communication Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram, NTR District held during 10.02.2025 to 14.02.2025.**[5 Days]**
8. Participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on AI and Quantum Computing:Glimpsing the Near Future at Sri Sai Ram Engineering College from 20/01/2025 to 25/01/2025. **[5 Days]**
9. Participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Next-Generation Algorithms and Technological Advances at MIT Campus, Anna University from 06/01/2025 to 11/01/2025. **[5 Days]**
10. Participated in the "Five-day Faculty Development Programme on High Impact Publication and Funding Opportunities," Organized by CEDAAR Chennai, from 25th to 29th November 2024. **[5 Days]**

11. Participated in one week workshop on “Idea to Market-confiscating National and International Patents” conducted by centre of Intellectual Property Rights, Anna University from 18th to 22nd June, 2024.[1 week]
12. Attended AICTE sponsored one week FDP on”Universal Human Values II” conducted by Anna University from 14th to 18th May 2024.[1 week]
13. Attended National level seminar on collaborative learning. [1 day]
14. Participated National level seminar on Digital literacy beyond the classrooms: Preparing students for the future. [1 day]
15. Attended FEP on “CS3491-Artificial Intelligence and Machine learning” organized by Department of Electronics Engineering, MIT campus, Anna University from February 05th to 10th, 2024. [1 week]
16. Presented in the “Thesis in 3 minutes presentation” event in Empow(H)er- International conclave for women in STEM held at Anna University Chennai on March 18th and 19th, 2024.[2 days]
17. Participated in the social debate on the topic “Challenges and Opportunities for women in Research” in the Empow(H)er- International conclave for women in STEM held at Anna University Chennai on March 18th and 19th, 2024.[2 days]
18. Participated in Two Weeks Industrial training on “Internet of Things (IIoT)” organized by NSIC, Hyderabad from November 30th to December 14th, 2022. [2 weeks]
19. Attended one-week professional development program on “3D Bio printing and Applications” organized by Karpagam Academy of Higher Education from 12th-17th December, 2022. [1 week]
20. Participated in Online workshop on “AI based medical Imaging” organized by BDG Life sciences on January 26, 2023. [1 day]
21. Attended FDP on “Powering IOT using Rasperry pi or Arduino” organized by Department of Information Technology, MIT campus, Anna University from January 30th to February 04th, 2023. [1 week]
22. Attended Online workshop on “Cell Imaging” organized by BDG Life sciences on February 05th 2023. [1 day]
23. Participated in One Week Online Basic Course on “Biomedical Research” organized by Science Tech Institute, Lucknow from 21st- 27th February, 2023. [1 week]
24. Attended Faculty Development Program On “Emerging Trends in Biomedical Engineering Research for Healthcare 4.0” organized by S.S.N. College of Engineering, Chennai from 27th-29th March, 2023. [3 days]
25. Participated in One Week Online Workshop on “Basic Course on Biomedical Research” organized by Science Tech Institute, Lucknow, UP, India from 21st -27th February, 2022. [7 days]

26. Participated in five days AICTE-ATAL Academy Sponsored 5-days FDP on “Bio-inspired computing for data analytics” organized by Laki Reddy Bali Reddy College of Engineering, New Delhi from 08th – 12th, February, 2022. **[5 days]**
27. Participated in five days FDP on “Precision Health Technology” organized by NIT, Jamshedpur from 04 - 08 August 2021. **[5 days]**
28. Participated in International Workshop on “Advance Statistical Data Analysis using SPSS” organized by Science Tech Institute, Lucknow, UP, India. 21st – 27th September 2021. **[7 days]**
29. Participated in five days FDP on “Universal Human Values in Education” organized by AICTE from 26-30 July 2021. **[5 days]**
30. Participated in AICTE-ATAL Academy Sponsored 5-day FDP on Bio-Medical Signal Processing for Smarter Mobile Healthcare conducted by the Department of Electronica and communication Engineering, GIET University, Odisha, India, July 19-23, 2021.**[5 days]**.
31. Participated in two weeks FDP on “Speech audio and image processing using deep learning techniques: research issues, innovations and applications” conducted by University College of Engineering, Ramanathapuram in association with E&ICT Academy, NIT Warangal. **[2 weeks]**
32. Participated in Webinar on “Design and Simulation of Microstrip Antenna with RF Components and connectors using Pathwave ADS” Conducted by Department of Electronics and Communication Engineering, Dr. Mahalingam College of Engineering and Technology, Pollachi on 16th June 2021. **[1 day]**
33. Participated in a National Level Three Day Online Workshop on “Modern Ideas & It's Applications – Artificial Intelligence and Machine Learning” Organized by Department of Electronics and Communication Engineering, St. Martin’s Engineering College, Dhulapally, Secunderabad, T.S, India June 10-12, 2021. **[3 days]**
34. Participated in Three Days Online Workshop on “GAN Art - Introduction to Generative Adversarial Networks” conducted by Department of Computer Science and Engineering, NIT Calicut & AI Club, NIT Calicut, May 20-22, 2021. **[3 days]**
35. Participated in AICTE Training and Learning (ATAL) Academy Online FDP on "Machine Learning" during December 7-11, at R.M.K college of Engineering and Technology, Chennai. **[5 days]**
36. Participated in the six-days online STTP on “AI in Healthcare” during December 14-20, 2020 at S.S.N. College of Engineering, Chennai. **[6 days]**
37. Participated in online Short-term Course on “Advances in Medical Imaging “from March 15-19, 2021, at IIT (BHU), Varanasi Supported by Technological Innovation Hub on interdisciplinary data analytics and predictive technology (IDAPT) and sponsored by Dept. of Science & Technology, Ministry of Science &Technology, Govt. of India. **[5 days]**

38. Participated in a Xilinx Webinar on "Embedded System Design Flow on “Zynq using Vivado” organized by CoreEL Technologies and Xilinx, INDIA on 9thApril 2020. [1 day]
39. Participated in 2 Days Instructor Led Live Online Workshop On “ML& AI Using Covid-19 Virus Data Analysis”organized by Finland Labs (A Unit of Revert Technology Pvt. Ltd.) in association with NSS - IIT Roorkee, INDIA from 25thApril to 26thApril 2020. [2 days]
40. Participated in a Webinar on “Image Processing – open CV” organized by IETE (Mumbai) in association with PANTECH, INDIA on 8thMay 2020. [1 day]
41. Participated in a Webinar on “Image Processing using Python” organized by Mount Zion college of Engineering and Technology in association with PANTECH, INDIA on 12thMay 2020. [1 day]
42. Participated and completed a one-day workshop on “Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop” Conducted by the Teaching Learning Centre (ICT), funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, Govt. of India, Coordinated from IIT Bombay, INDIA on 16thMay 2020. [1 day]
43. Participated in a Webinar on “How ML works for open CV applications” hosted by PANTECH E Learning, INDIA on 18thMay 2020. [1 day]
44. Attended an online Faculty Development Program on “Computing & Signal Processing in IOT Applications” technically Co-sponsored by IEEE SSIT Madras Section and organized byQIS College of Engineering & Technology, Ongole from 23rdto 27th May 2020. [1 week]
45. Participated in a Webinar on “Data science and its applications” hosted by Meenakshi college of Engineering in association with PANTECH E Learning, INDIA on 27thMay 2020. [1 day]
46. Attended a one-day colloquium on “Grant proposal writing” conducted by CIT-TLC, on 13thJune 2020 through online mode. [1 day]
47. Attended National Level Webinar on “COVID 19: Yesterday, Today and Tomorrow” organized by R.M.K Engineering college, Chennai on 14th June 2020. [1 day]
48. Attended Webinar on “Open Book Examination” conducted by CIT – TLC on 23rd June, 2020 through online mode. [1 day]
49. Attended the webinar titled "Becoming a Beacon" conducted by the Rotaract Club of MIT, Madras Institute of Technology Campus, Anna University on June 20, 2020. [1 day]
50. Attended the webinar titled "Financial Benefits over IPR" conducted by the SAEINDIA collegiate club of MIT, Madras Institute of Technology Campus, Anna University on June 27, 2020. [1 day]
51. Participated in the two days International Workshop on “Applications of Data Science” organized by the Department of Electronics and Communication Engineering, SSN College of Engineering, Chennai during June 29-30, 2020. [2 days]

52. Participated in Faculty Development Programme on "Geometry, Imaging and Parallel Computing Techniques for Cancer Treatment-2019, organized by NIT, Calicut, India from 10-June-2019 to 15-June. **[1 week]**
53. Attended an International level seminar on "LABVIEW (Hands on Training)" organized by Department of Electronics Engineering, MIT Campus, Chennai, India from 14-Feb-2019 to 15-Feb-2019. **[2 days]**
54. Participated in a National level workshop on "AICTE approved FDP(FDP101X) on Foundation program in ICT for Education" organized by IITBombay, India from 08-Mar-2018 to 12-Apr-2018. **[2 weeks]**
55. Participated in a National level workshop on "Machine Learning Techniques, Tools and Applications" organized by CEG, Anna University Campus, India from 23-Feb-2018 to 25-Feb-2018. **[3 days]**
56. Participated in a National level workshop on "Image processing, Computer vision and Machine Learning (IPCVML'17) (Hand-on Training)" organized by MIT Campus, Chennai, India from 23-Nov-2017 to 25-Nov-2017. **[3 days]**
57. Attended a National Level Short Course on "CMOS, mixed signal and Radio Frequency VLSI Design (ISTE STTP)" organized by IIT, Kharagpur, INDIA from 26-Dec-2016 to 04-Feb-2017. **[2 weeks]**
58. Attended an International Level Short Course on "Computer Networks (FDP)" organized by Department of Electronics Engineering, MIT campus, Anna University, INDIA from 28-Nov-2016 to 04-Dec-2016. **[1 week]**
59. Participated in a National level workshop on "Computational Intelligence Techniques" organized by Electronics Engineering MIT campus, Anna University, INDIA from 20-Oct-2016 to 21-Oct-2016. **[2 days]**
60. Attended One-week FDP on Computer Networks at MIT, Anna University from 28th Nov to 4th Dec 2016. **[1 week]**
61. Participated in a Workshop on "Mobile computing and Communication" organized by Sri Venkateswara College of Engineering, Sriperumputhur, Chennai, Jan 29-30.2009. **[2 days]**
62. Participated in a FDP on "Digital System Design" organized by Arulmigu Kalasalingam College of Engineering, Srivilliputhur, from Nov 22-26, 2004. **[1 week]**
63. Participated in the AICTE-ISTE sponsored STTP on "DSP and its applications" conducted by P.S.N.A college of Engineering, Dindigul, March 29- April 3, 2004. **[1 week]**
64. Participated in a FDP on Microcontroller programming, organized by Arulmigu Kalasalingam College of Engineering, Srivilliputhur, from Nov 10-15, 2003. **[1 week]**

Publication Details:

International Journals [11Nos]

1. Alagu, S, Vasanthan B , ‘Enhanced Classification of Garbage Images Using an Adapted Multi-Branch Deep Learning Model’, YMER, Vol. 24 : Issue 08 (Aug) - 2025, pp. 621-630.
2. Alagu, S, Kavitha, G & Bhoopathy Bagan, K, ‘Advanced Detection of Acute Lymphoblastic Leukemia Using Integrated Deep Features and Metaheuristic Algorithms’, Indian Journal of science and Technology, 2024;17(43):4487–4493
3. Alagu, S, Kavitha, G & Bhoopathy Bagan, K, ‘A Novel deep learning approach for Sickle Cell Anemia detection in Human RBCs using an improved wrapper-based feature selection technique in Microscopic blood smear images’, Journal of Biomedical Engineering/ Biomedizinische Technik, De Gruyter Publications, Available online 06 October 2022. DOI: 10.1515/bmt-2021-0127.
4. Alagu, S, Ahana Priyanka, N, Kavitha, G & Bhoopathy Bagan, K 2021, ‘Automatic Detection of Acute Lymphoblastic Leukemia Using UNET Based Segmentation and Statistical Analysis of Fused Deep Features’, Applied Artificial Intelligence, Taylor and Francis Publications, vol.35, no.15, pp.1952-1969.
5. Alagu. S. Madhu Priya. S, and K. Bhoopathy Bagan, “Skin lesion classification for dermoscopy images using convolutional neural network”, Published in American Institute of Physics (AIP) conference proceedings, March 2021.
6. Alagu S. and Madhu Priya, “Optimized transfer learning approach for classification of skin lesions in dermoscopy images”, GIS science Journal, Volume 7, Issue 11, page 1097, 2020.
7. S. Alagu and K. Bhoopathy Bagan, “Performance Analysis of Hybrid PDM-OFDM Technique for Free space Optical Communication system under adverse weather conditions”, Published in Journal of Emerging Technologies and Innovative Research, volume 6, Issue 6, June-2019
8. S. Alagu and K. Bhoopathy Bagan, ”Classification of Leukocytes using Convolutional Neural Network and Transfer learning in Microscopic Blood smear images”, Published in International Journal of Research and Analytical Reviews, volume 6, Issue 2, May-2019
9. S. Alagu and K. Bhoopathy Bagan, “Copy-move and splicing image forgery detection using DCT and local binary pattern”, Published in International Journal for Research in Engineering Application & Management (IJREAM), volume , Issue 2, May-2019
10. S. Alagu and K. Bhoopathy Bagan, “Apple Fruit disease detection using Multiclass SVM classifier and IP Webcam APP”, Published in International Journal of Management Technology and Engineering, volume IX, Issue V, May-2019
11. M. Jayasudha and S. Alagu “An Effective Approach for Image Reconstruction and Refining using Demosaicing”, Published in Journal of Engineering Research and Studies Volume I, Issue I, pages 98-110, July-September, 2010

National/ International Conferences [25 Nos]

1. Alagu S, “ A decentralized V2V-enabled smart traffic management framework using low-cost LiDAR and cooperative perception,” Proc. 2nd Nat. Conf. AI Solutions for Sustainable Electronics and Wireless Systems (AISSEWS 2026), Dept. of Electronics Engineering & Centre for Internet of Things, Madras Institute of Technology, Anna University, Chennai, India, Jan. 29–30, 2026.
2. Alagu S, “ S. Alagu, “AI-assisted thermoelectric energy harvesting from vehicle exhaust for sustainable battery charging systems,” Proc. 2nd Nat. Conf. AI Solutions for Sustainable Electronics and Wireless Systems (AISSEWS 2026), Dept. of Electronics Engineering & Centre for Internet of Things, Madras Institute of Technology, Anna University, Chennai, India, Jan. 29–30, 2026.[Won Best Paper Award]
3. Alagu S., “IoT-enabled embedded thermoelectric energy harvesting system for assistive mobility of persons with disabilities,” presented at the International Conference on Information Technology Enablers for Persons with Disability (INTEND 2.0), IETE Chennai Centre, Chennai, India, Sept. 19–20, 2025.
4. Alagu.S, Ilamathi, Parameshwaran, ”I-HCMS:IoT powered vital parameter monitor system for healthcare using Twillo API “ , presented in the 16th International Conference on computing communication and networking Technologies(ICCNT) from July 6 to 11, 2025 at IIT Indore, Madhya Pradesh, India.
5. Shanthini, Sujithra, Boomika and Alagu S, “Thermo electric energy harvesting from vehicle silencer and engine heatfor battery recharging and headlight powering” in national Technical paper contest-2025 organised by the IETE, Pune centre in association with AISSMS College of Engineering, Pune on March 27th 2025.
6. Harithra, Divyadharsini, Suvetha and Alagu S, “ Hybrid ensemble methods for acute lymphoblastic leukemia diagnosis integrating CNN features with artificial rabbit optimization algorithm presented in the 11th International conference on Bio signals, Images and Instrumentation at SSN college of Engineering held from March 26 to 28, 2025. [**Won Best Paper Award**].
7. S.Alagu, Sushmitha A, Shohail Sahahabudeen, “ Improving Hepatitis-C detevtion accuracy using improved C5.0 Algorithm with chi-square feature selection”, presented in the 11th International conference on Bio signals, Images and Instrumentation at SSN college of Engineering held from March 26 to 28, 2025.
8. Naveen Prashanth G, Lalith Kumar M, Abinaya S, Alagu S, “Generative Adversarial Networks Based Segmentation Model for Acute Lymphoblastic Leukemia Detection”,presented in the International Conference on Research Trends in AI and IoT for Infrastructure and Industry, conducted by Centre for research, College of Engineering Guindy, Anna University, Chennai held from March 6-7, 2024.
9. Naveen Prashanth G, Lalith Kumar M, Abinaya S, Alagu S, “ Integrating custom GAN segmentation with advanced deep learning classifiers for enhanced acute lymphoblastic leukemia detection”, presented in 2024 Tenth International Conference on Biosignals,Images and Instrumentation, conducted by Sri Sivasubramaniya Nadar college of Engineering,

Chennai in association with Drexel university, Philadelphia, USA held from March 20-22, 2024 [**Won Best Paper Award**].

10. Naveen Prashanth G, Lalith Kumar M, Abinaya S, Alagu S, “Glitch waveform classification with Swin Transformer based on LIGO data”, presented in Fifth International conference on Recent Trends in Machine learning, IoT, Smart cities and Applications, conducted by CMR Institute of Technology, Hyderabad, Telangana state, India held from March 28-29, 2024. [**Published as Book Chapter**]
11. Prasanna A, Saran S, Manoj N M and Alagu S, “A Deep Learning Framework for Semantic Segmentation of Nucleus for Acute Lymphoblastic Leukemia Detection”, 9th International Conference on Biosignals, Images and Instrumentation (ICBSII 2023), 3, SSNCE, Chennai, March 16 – 17, 2023
12. S.Alagu, G Kavitha, K. Tamilarasan and L.Rajesh, ”Challenges in online education and effective teaching methodologies for future education” International conference on Emerging trends in online Teaching, Assessment and Learning (eTOTAL) conducted by RUSA, February 24-25, 2023
13. S Alagu, G Kavitha and K Bhoopathy Bagan, “Computer aided diagnosis of Acute Lymphocytic leukemia in microscopic blood smear images U-Ner based segmentation and deep learning networks”, presented in the 7th National Conference on Information and Communication Technologies (NCICT 2022), conducted by Sri Sivasubramaniya Nadar College of Engineering, Chennai on 23rd February, 2022
14. Cranaf R, Kavitha G and Alagu S, “Selective kernel U-Net Segmentation Method for Detection of Nucleus in Acute Lymphoblastic Leukemia blood cells”, presented in national Conference on Signal processing, Communication and VLSI design (NCSCV’21), organized by Anna University Regional Campus Coimbatore, India from 23rd-24th December, 2021
15. Breesha.R and S.Alagu, “ A deep learning approach for detection and malaria infected cells in smartphone microscopic images”, presented in the International Conference on Innovations in Electronics and communication (ICIECS2021), conducted by R.M.K College of Engineering and Technology, Chennai from May 6-7, 2021. [**Won Best paper Award**]
16. Sneha.D and S.Alagu, “A novel segmentation approach for the diagnosis of Acute lymphocytic leukemia using deep learning”, ”, presented in the International Conference on Innovations in Electronics and communication (ICIECS2021), conducted by R.M.K College of Engineering and Technology, Chennai from May 6-7, 2021
17. R.Breesha and S.Alagu , “ Malarial Parasite Detection Based On smartphone Microscopic Imaging Using Deep Learning Approach ”, presented in the RTU TEQIP-III Sponsored 2nd International Conference on Artificial Intelligence: Advances and Application (ICAIAA 2021), conducted by Poornima College of Engineering, Jaipur and Rajasthan Technical University Kota, India in Association with Soft Computing Research Society from March 27-28, 2021
18. D.Sneha and S.Alagu , “ Chronological Sine Cosine Algorithm Based Deep CNN for Acute Lymphocytic Leukemia Detection”, presented in the RTU TEQIP-III Sponsored 2nd International Conference on Artificial Intelligence: Advances and Application (ICAIAA 2021), conducted by Poornima College of Engineering, Jaipur and Rajasthan Technical

University Kota, India in Association with Soft Computing Research Society from March 27-28, 2021

19. S.Alagu, Madhu Priya.S and K.Bhoopathy Bagan, “Skin lesion classification for dermoscopy images using convolutional neural network”, presented in the International Conference on Computational Sciences -Modelling, Computing and Soft Computing (CSMCS 2020), conducted by National Institute of Technology, Calicut, India from September 10-12, 2020. **[Published as Book Chapter]**
20. R.Manikarnika and S.Alagu, "Computer Aided Diagnosis of Malaria Parasites in Blood Smear images using Machine Learning Techniques" presented in a national Conference on Signal processing communication and VLSI design NCSCV'20,organised by Anna University Regional Campus Coimbatore, India from 12-13June, 2020
21. S.Alagu and K.Bhoopathy Bagan, “Computer assisted classification framework for detection of acute myeloid leukemia in peripheral blood smear images using morphological features and Random forest classifier”, submitted in the International Conference on Innovations in Computational Intelligence and Computer Vision (ICICV-2020), to be conducted by Manipal University, Jaipur, India from 17-19 January, 2020. **[Published as Book Chapter]**
22. S.Alagu and K.Bhoopathy Bagan, “Acute Lymphoblastic leukemia diagnosis in microscopic blood smear images using texture features and SVM classifier” presented in the Alliance International conference on Artificial Intelligence and Machine Learning (AICAAM), organized by Alliance University,Bengaluru,India from 26-27 April, 2019
23. S.Alagu and P.Melindo Sudan Raj, “Design of multiplier using approximate 15-4 compressor " presented in the International level conference on International conference on Smart structures and systems(ICSSS 2017) organized by Saveetha Engineering College, India on 28-Mar-2018
24. S.Alagu and Malavika.S.M, "Optimal Design of parity preserving Full Adder/Subtractor using reversible gate" presented in an International level conference on International conference on Smart structures and systems (ICSSS 2017), organized by Saveetha Engineering College, India on 28-Mar-2018
25. S.Alagu and Vimalleshwari.A, "Implementation of Area efficient digit serial multiplier" presented in a International level conference on The International Conference on Electrical, Communication and Computing (ICECC-2017), organized by Tagore Engineering college, India from 07-Mar-2017 to 08-Mar-2017
26. S.Alagu and Sambhavi.B,"A floating point fused Multiply-add for four-term Dot product unit" presented in the International level conference on International Conference on Electrical, Communication and computing (ICECC-2017), organized by Tagore Engineering college, India from 07-Mar-2017 to 08-Mar-2017
27. S.Alagu and G.Geetha, “Simulation study of OCDMA schemes for local access upgrade” presented in a National conference on Signals, Systems and Communication (NCSSC'08), organized by College of Engineering Guindy campus, Anna University Chennai, from 08-May-2008 to 09-May-2008

28. S.Alagu, G.Geetha and M.Meenakshi, “Modeling and simulation of Direct sequence optical CDMA for local access upgrade”, presented in a National Conference on Recent Trends in Information and Communication Technology (RTICT 2008) organized by Bannari Amman Institute of Technology, Sathyamangalam from 17-Mar-2008 to 18-Mar -2008.[**Won Best paper Award**]

Patents Published:

S.No	Title of the Invention	Published Date	Grant Date
1	A system with dynamic roadway dividers and method thereof Application No: .202441054011 A	02/08/2024.	Under Process
2	An IoT Enabled Smart School Bag Application No: 202441104566 A	10/01/2025	Under Process
3	Smart Berth Occupancy Detection and Passenger Estimation System Using IoT and Method Thereof Application No: 202541010773 A	14/02/2025	Under Process
4	Computer Vision Based Automatic Driver Seat Belt Detector for Four-Wheeler Application No: 202441065561 A	05/12/2025	Under Process
5	Modular thermoelectric generator system and method for multi-zone vehicle waste heat Recovery Application No.202541096957 A	12/12/2025	Under Process

Online Certification Courses details [14 Nos]

1. **February 2026:** Completed online course on “Beginning your peer review journey” by springer Nature.
2. **February 2026:** Completed online course on “Focus on peer Review” by springer Nature.
3. **December 2025:** Completed Apple teacher Training

4. **October 2025:** 12- Weeks NPTEL Course on Patent Search For Engineers And Lawyers by Prof. M.Padmavathi, IIT-KGP
5. **October 2025:** 12- Weeks NPTEL Course on Intellectual Property Portfolio Management by Prof. Rajat Agarwal, IIT - ROORKEE
6. **October 2025:** 12- Weeks NPTEL Course on Development Research Methods, by Prof. Rajshree Badamatta, IIT Madras.
7. **October 2025:** 12- Weeks NPTEL Course on Deep Learning, by Prof. Sudharsan Iyenkar, IIT Ropar.
8. **October 2025:** Social Emotional Education: Knowledge to Practice (SEEK) organized by UNESCO, MGEIP.
9. **September 2025:** NPTEL 8- Weeks Course on Introduction To Machine Learning by Prof. Balaraman Ravindran, IIT Madras.
10. **April 2025:** NPTEL 4- Weeks Course on “ Design Thinking (A Primer) ” by Prof. Aswin Mahalingam and Prof Bala Ramadurai, IIT Madras.
11. **April 25:** NPTEL 8- Weeks Course on “ Python for Data science” by Prof. Rangunathan Rengusamy, IIT Madras.
12. **April 25:** NPTEL 8- Weeks Course on “ Introduction to Machine learning ” by Prof. Bala Subramaniyan Ravindran, IIT Madras.
13. **September 2024:** NPTEL 8- Weeks Course on “ Introduction to Machine learning (Tamil)” by Prof. Arun Rajkumar, IIT Madras.
14. **September 2024:** NPTEL 4- Weeks Course on “ Patent Drafting for Beginners” by Prof. Feroz Ali, IIT Madras.
15. **February 2024:** NPTEL 4- Weeks Course on “Medical image Analysis” by Prof. Debdoot Sheet, IIT Kharagpur
16. **September 23:** NPTEL 4- Weeks Course on” Introduction to Bio mimicry” by Prof Shiva Subramaniyam, IIT Madras
17. **August 2023:** Course on “Explore machine learning using Python” from Infosys, Springboard
18. **August 2023:** Course on “Data visualization using Python” from Infosys, Springboard
19. **Aug 2023:** Course on “Python for Data science” from Infosys, Springboard
20. **Aug 2023:** Course on “Introduction to Data science” from Infosys, Springboard
21. **April 2023:** 12- Weeks Course on “Principles of Communication Systems – I” by Prof. Aditya K. Jagannatham, IIT Kanpur
22. **April 2023:** 12- Weeks Course on “Computer Vision and Image Processing - Fundamentals and Applications” by Prof. M.K. Bhuyan, IIT Guwahati

23. April 2022: 12- Weeks Course on “Principles of Signals and Systems”

Reviewer

1. Scientific Reports- Springer- Nature
2. Iranian Journal of Science and Technology- Springer-Nature
3. Journal of Peer J- Computer Science and Engineering
4. Journal of Biomedical material and Devices
5. Journal of Advances in Biology & Biotechnology
6. Automatika Journal for Control, Measurement, Electronics, Computing and Communications
7. Cloud Computing
8. Signal Image and video processing
9. Annual Research & Review in Biology
10. Journal of BioData Mining
11. Reviewer for "International Conference on Green Revolution in Electronics Engineering and Networks Conference (GREENCON-2025)," School of Electronics Engineering, Vellore Institute of Technology (VIT), Chennai, March 19-20, 2025.

Conference Chaired / Co-chaired:

1. Program chair in International level conference titled "Electrofocus" Conducted by Madras Institute of Technology from 31-Jan-2019 to 02-Feb-2019.

Invited Lectures/ Guest Lectures Delivered:

1. Delivered a talk as a resource person at IEEE Madras Section Sponsored Six Day Faculty Development Programme on “Leveraging Explainable AI to Enhance Communication Systems, Department of ECE, Sri Sairam Engineering College, Tambaram, 17th -22nd November 2024. **Topic: Biomimicry and its applications.**

Workshop / Conference/FDP Organized:

1. As coordinator, **Guest Lecture** on “Unlocking 8051: Timers, Interfaces and Beyond Sri Sairam Engineering College, Chennai, India, Feb. 17, 2026.
2. As coordinator, organized IEEE Madras Section Sponsored **Six Day Faculty Development Programme** on “Leveraging Explainable AI to Enhance Communication Systems, Department of ECE, Sri Sairam Engineering College, Tambaram, 17th -22nd November 2024.

3. As coordinator organized **Guest Lecture** on “Power amplifier and its applications,” , Department of Electronics and Communication Engineering, Sri Sairam Engineering College, Chennai, India, Nov. 4, 2025.
4. As coordinator, organized **Distinguished Lecture Program** on “Human–AI evaluation in real world engineering projects” , Dept. of ECE & CSE (IoT), Sri Sairam Engineering College, Chennai, India, Apr. 30, 2025.
5. As coordinator, **Guest Lecture** on “Large signal amplifiers and its applications,” Department of Electronics and Communication Engineering, Sri Sairam Engineering College, Chennai, India, Apr. 25, 2025.

Ph.D Scholar Guidance:

Ph. D students on Roll: 4

1. **Mrs.Benita Jaslin.R**, Reg. No.26244991296, Month / Year of Joining: Jan 2026
2. **Mrs. Karthikadevi.V**, Reg. No. 26234991278, Month / Year of Joining: Jan 2026
3. **Mr.Vairamanikandan.G**, Reg. No.26149991242, Month / Year of Joining: Jan 2026
4. **Mr. Sivakumar.V** Reg. No. 26144991297, Month / Year of Joining: Jan 2026

FACULTY INTERACTION WITH OUTSIDE WORLD:

DC Member

1. **Mrs.Angelein Silviya S**, Reg. No.25249997166, Month / Year of Joining: July 2025
2. **Mrs. Ms.G. Gnancy Subha** Reg. No. 25249997186, Month / Year of Joining: July 2025
3. **Mr.Naveen D**, Reg. No.26144991171, Month / Year of Joining: Jan 2026
4. **Ms. Keerthana G**, Registration No.: 26229991318, Month / Year of Joining: Jan 26

Achievements/Awards:

1. **2025:** IEEE Academic Mentor
2. **2025:**NPTEL STAR Award “NPTEL BELIEVER”
3. **2025:**NPTEL Mentor Award

4. **2025:** Selected as one of the 174 IEEE mentor among 1100 applicants for student career guidance for the year 2025
5. **2025:** Won Best paper Award in the International Conference on Innovations in Electronics and communication (ICIECS2021), conducted by R.M.K College of Engineering and Technology, Chennai from May 6-7, 2021.
6. **2025:** Got NPTEL STAR award “Motivational Learner”
7. **2025:** Achieved ‘Elite with Silver Medal’ for attending NPTEL 8- Weeks Course on “Python for Data science”
8. **2025:** Achieved ‘Elite with Silver Medal’ for attending NPTEL 8- Weeks Course on “Introduction to Machine learning ”
9. **2025:** ‘Received ‘Elite’ for attending NPTEL 4- Weeks Course on “ “ Design Thinking (A Primer) ”
10. **2024:** Received ‘Elite’ for attending NPTEL 12- Weeks Course on “Introduction to Machine learning (Tamil)”
11. **2023:** Achieved ‘Elite with Silver Medal’ for attending NPTEL 12- Weeks Course on “Principles of Communication Systems – I”
12. **2023:** Received ‘Elite’ for attending NPTEL 12- Weeks Course on “Computer Vision and Image Processing - Fundamentals and Applications”
13. **2022:** Achieved ‘Elite with Silver Medal’ for attending NPTEL 12- Weeks Course on “Principles of Signals and Systems”
14. **2021:** Won ‘Best Paper Award’ for “A deep learning approach for detection and malaria infected cells in smartphone microscopic images”, presented in the ICIECS
15. **2018:** Received a Certificate of Excellence for participating in the International level workshop on "AICTE approved FDP (FDP201X) on Pedagogy for Online and Blended Training- Learning Process’ organized by IIT, Bombay
16. **2006:** Awarded with ‘Best Teacher award’ from Arulmigu Kalasalingam College of Engineering.
17. **Rank Holder** in both school and colleges.th school and colleges.