Kings College of Engineering

Department of Computer Science and Engineering

Name: Mrs. S. Abikayil Aarthi	
Designation:	Assistant Professor
Qualification:	M.Tech , Ph.D. (Pursuing)
Area of Specialization:	Artificial Intelligence, Machine Learning
Experience:	Teaching: UG: 5 Years PG: 1 Year Industry: 04 Years
No. of workshop/Conferences/FDP attended:	72
	Journal National: 10
Publication:	International : 04 Conference National : 07 International: 10
Membership:	IEEE Member
Achievements :	Received Enlighten Certification in NPTEL Oracle certifier

Publications:

- 1. "Distributed Computing in Image Analysis using Open source Frameworks and application to image sharpness assessment of Histological Whole Slide Images" in IJSART E- Journal Volume 9, Issue 10, in October 2023.
- 2. "Prediction of Heart Disease using Retinal images by Neural Network Algorithm "in IRJMETS, volume 0, Issue 10, October 2023.
- 3. "A Survey of enabling secure and scalable heart care data exchange through Distributed Computing" in International Journal for Science and Advance Research In Technology(IJSART) Volume 9, Issue 10, in October 2023.
- 4. "Artificial Intelligence in Gaming" in Journal Of Emerging Trends and Novel Research (JETNR)- Journal with Paper ID: 230207, volume 02, Issue 01 in January 2024.ISSN 2984-9276.
- 5. 'AutoMI and Automated Machine Learning Pipelines", in International Journal of Research Publication and Reviews (IJRPV), vol. 05, Issue 04, 01st May 2024.
- 6. 'Lung Disease Detection Using Deep Learning', in International Research Journal of Modernization in Engineering Technology and Science(IRJMETS), vol. 06, Issue 05, May 2024.
- 7. "Sign Language Interpreter using Machine Language "in International Research Journal of Modernization in Engineering Technology and Science(IRJMETS), vol. 06, Issue 05, May 2024.
- 8. "Blockchain Integration in Distributed Systems: Enhancing Security and Trust" in International Research Journal of Engineering and Technology (IRJET)- Journal with Paper ID:, volume 11, Issue 11, November 2024.ISSN 2395-0072
- 9. The Distributed Computing Model Based on The Capabilities of The Internet" in International Research Journal of Engineering and Technology (IRJET)- Journal with Paper ID:, volume 11, Issue 11, November 2024.ISSN 2395-0072
- 10. "An In-Depth Comparative Study of Distributed Data Processing Frameworks: Apache Spark, Apache Flink, And Hadoop Mapreduce" in International Journal for Science and Advance Research In Technology (IJSART)- Journal with Paper ID:, IJSARTV10I11101522.ISSN 2395-1052
- 11. "Edge and Fog Computing in Distributed Sytems: Architectural Insights and Challenges" in International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)- Journal with Paper ID:, Volume 6, Issue 11 2024. ISSN 2582-5208
- 12. "Exploring Data Consistency Models in Distributed Systems: Balancing Consistency and availability" in International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)- Journal with Paper ID:, Volume 6, Issue 11 2024. ISSN 2582-5208
- 13. "Emission Tracker: Instantaneous Monitoring and Explorative Analysis of Vehicle consume discharges for Ecological Sustainability" Published in SCOPUS indexed journal Gradiv Review Journal, ISSN NO:0363-8057, Volume 11Issue 5 2025.
- 14. "Multimodal Biometric ATM Substantiation using face and fingerprint Acknowledgment", published in Peer-Per Journal, IJIRT, Volume 11, ISSUE 12,2025 ISSN:2349-6002.

Patent:

1. UK Design Patent Registered in the Title of "Cloud Computing Device for Enhanced Network Security" under International Design Classification on Version 15-2025.

International /National Conferences:

- 1. "Driver Assistant for the detection of Drowsiness and emergency alert" 2nd National Conference on Recent Advances in Communicative electronics (NCRACE 2023) organized by SRM TRP Engineering College, Trichy
- 2. "AI Techniques for Classifying Human Suspicious Activity Detection Survey" in ICT ,IEEE Sponsored International Conference on Computing ,Communication and Control IC4 April 2023. Organized by Kings college of Engineering.
- 3. "Human Suspicious activity detection using AI techniques" 2nd National Conference on Recent Advances in Communicative electronics (NCRACE 2023) organized by SRM TRP Engineering College, Trichy.
- 4. "Lung disease detection using deep learning" International Conference on recent innovation in computer communication and manufacturing organized by AAA College of Engineering, Sivakasi.
- 5. "COVID-19 prediction using machine learning" National level conference on promoting Innovation in environmental research and science organized by Bannariamman Institute of technology, Erode QCPRL & CMRL.
- 6. "Yoga posture analysis using deep learning techniques" 13thInter National Conference on Science and Innovative engineering 2023 organised by Jawahar Engineering college, Chennai.
- 7. "Smart energy meter and digital billing system using android app" International conference on Innovation in electrical, electronics & communication engineeringorganised by St. Ann's College of Engineering& Technology, Chirala, Andra Prade.
- 8. "Smart Analyzer storing student academic and showing result" Two day Virtual conference quality enhancement of institutions of Higher Learning: Transformational Role of NEP 2020 organized by St. Aloysius college, Elthuruth. Kerala.
- 9. "Speech Emotion Recognition using Machine Language" in 3rd National Conference on NCRACE 2024, Organized by SRM TRP Engineering College, Trichy during 14th-15th March 2024.
- 10. "Speech Emotion Recognition using Machine Learning Techniques" at 1st International Conference on Innovation Research in Engineering Sciences(ICIRES-2004) organized by CHRIST THE KING Engineering college during April 10th, 2024.
- 11. "Speech sensation acknowledgement by means of Machine Learning" at International Conference on "Recent Trends in Engineering & Science (ICRTES 2024)" organized by Kings College of Engineering, Pudukkottai during May 02-03, 2024.

- 12. "Rice Blast: Plant Detection using Internet of Things and AI Technologies" at International Conference on "Recent Trends in Engineering & Science (ICRTES 2024)" organized by Kings College of Engineering, Pudukkottai during May 02-03, 2024.
- 13. "Application of E-Commerce in E-Learning" at 4th International Conference on Intellectual Research in Science , Engineering and Management (ICIRSEM 2024)" organized by St. Joseph College of Engineering , Thanjavur during 17th & 18th April 2024.
- 14. "Survey on Application of E-Commerce in E-Learning" at International Conference on "Recent Trends in Engineering & Science (ICRTES 2024)" organized by Kings College of Engineering, Pudukkottai during May 02-03, 2024.
- 15. "Suspicious activity detection using AI Techniques" at International Conference on "Recent Trends in Engineering & Science (ICRTES 2024)" organized by Kings College of Engineering, Pudukkottai during May 02-03, 2024.
- 16. "Ticketing Tool for College Laboratory" at National Conference on Recent Innovation in Engineering and Science (NCORIES' 2K24) organized by University College of Engineering, Pattukkottai during 27th May 2024.
- 17. "Survey on sustainability and the SDG's" in the National Conference on "Quality Assurance Learning" organized by Dr. M. R. Educational and Research Institute, Chennai during 21.06.2024.

Book & Book Chapters:

1. Database Management System Book

FDP/Seminar attended

- 1. FDP on Microsoft Power BI data analyst associate organized by ICT Academy during 01/08/2022 to 05/08/2022
- 2. FDP on Recent Trends in AI & CS 01/11/2022 05/11/2022
- 3. FDP on Next Gen data Platforms 2023 during 18/11/2022 to 19/11/2022
- 4. FDP on Advanced Java Programming during 05/12/2022 to 09/12/2022
- 5. FDP on Societal Application of Machine Learning during 26/12/2022 to 30/12/2022
- 6. FDP on Machine Learning and Deep Learning during 23/01/2023 to 28/01/2023
- 7. FDP on Full Stack Web development during 27/02/2023 to 01/03/2023
- 8. FDP on Recent advances in data science, Data Analytics and Cyber security during 01/03/2023 to 05/03/2023
- 9. FDP on Artificial Intelligence & Machine Learning in smart energy systems during 03/03/2023 to 05/03/2023

- 10. FDP on Marketing Analytics for strategic Decisions A case Based Approach during 24/04/2023 to 28/04/2023.
- 11. FDP on Data Science and its Engineering Application during 22/05/2023 to 26/05/2023.
- 12. "Machine Learning and Deep Learning with Data Science" during 17/07/23 to 21/07/23
- 13. "Emerging Technologies" organized by ICT Academy, during 17/08/23 to 19/08/23.
- 14. "Cloud Infra" organized by Brainovision during 21/08/23 to 25/08/23.
- 15. "Deep Learning" organized by NITTTR, Chandigarh during 11/09/23 to 15/09/23
- 16. Microsoft Power BI" at 3. Staff seminar "Recent Trends of Emerging Technologies" KCE during 19.09.2023 & 22.09.2023
- 17. Exploring Horizons: The Next Wave of AI and Data Science" organised by SRM TRB Engineering College, Trichy during 25/09/23 to 29/09/23
- 18. "Augument Reality (AR) and Virtual Reality (VR) for Teaching and Learning Values" organised by Vellore Institute of Technology, Coimbatore during 13/10/23 to 17/10/23
- 19. Artificial Intelligence in Teaching and Learning the English Language organised by Anna University Chennai in association with Sri S. Ramasamy Naidu Memorial College, Sattur during 14/12/23 to 16/12/23
- 20. ATAL Academy Faculty Development Program on "Federated Learning: Collaborative Artificial Intelligence Research in a Privacy- Preserving Era" organised by A.V.C College of Engineering, Mayiladuthurai 18/12/23 to 23/12/23
- 21. IEEE Sponsored FDP programme on Applications of Digital technologies in Agriculture organised by SRM, Kattangulathur. 29/11/23 to 30/11/23.
- 22. IEEE Madras Section Sponsored 5 Days FDP(Hybrid Mode) on "Emerging Trends in Artificial Intelligence and Deep Learning organised by Sri Sairam Institute of Technology, Chennai. 26/12/23 to 30/12/23.
- 23. 'NAAC and Internal Quality Assurance' scheduled from 26/02/2024 to 01/03/2024 to be conducted in online mode by NITTTR, Chandigarh.
- 24. One-day National online FDP on "Research Methodology and Research Report Writing" Organized by Trinity College of Engineering & Technology, Pedapalli on 21st March 2024.
- 25. National level Seminar on "AI,DH and English studies" Organized by Maharaja Krinakumari Sinhji, Bhavnagar University, Gujarat on 29th March 2024.
- 26. FDP on "AI for Educators" organized by Institute of Public Enterprise(IPR), Hyderbad on May 20th- May 24th, 2024.
- 27. FDP on" Research Methodology for Engineering and Sciences (PS16F)" organized by NITTTR, Kolkata. 27/05/24 to 31/05/24.
- 28. "Outcome Based Education" scheduled from 27/08/2024 organized by Kings College of Engineering, Punalkulam.

- 29. Transformative technologies in Healthcare: Leveraging Data Science, Iot, AI" scheduled from 23/09/2024 to 29/09/2024 organized by St. Joseph College of Engineering & Technology, Thanjavur
- 30. Data Science & Machine Learning applications for Engineering and Science" scheduled from 21/10/2024 to 27/10/2024 organized by Shri Vishnu Engineering College for Women, Bhimavaram.
- 31. Five days National Level Faculty Development Program on "Teacher Student Mentoring: A Key to unlocking Academic Excellence" organized by JP College of Arts and Science, Tenkasi during 21.04.25 to 25.04.25
- 32. Six days Faculty Development Program on Harnessing Intelligent Systems: Accelerating digital Evolution in the Industry 5.0 Framework" organized by Panimalar Engineering College, Chennai during 23.06.25 to 28.06.25
- 33. Faculty Development Program on "Embedded System & IoT for Real world Applications" organized by Alpha College of Engineering, Chennai during 14.07.25 to 19.07.25

Programs organized

- **1.** One day workshop on Web Design" at 02 Feb 2023 at Kings College of Engineering.
- **2.** Engineers day 2023- Event at 15.09.2023
- **3.** External Workshop on Python with Data Science during 19.10.2022 at Kings College of Engineering.
- **4.** Extenal workshop on Machine Learning with Google Colab 28.04.2023
- **5.** External Farmer Awareness Programme during 16th Feb 2024 at Kings College of Engineering.
- **6.** Webinar on "AI tools for Academic Research Writing and Publishing" during 07th March 2024 at Kings College of Engineering
- **7.** "Millet and India Poster Design Competitions" during 12th March 2024 at Kings College of Engineering.
- **8.** Online Webinar on "Gate Perspectives" during 23rd March 2024.
- **9.** IEEE- Project Prelims Round at 23rd March 2024 behalf of IEEE Madras Section on Hybrid mode at Kings College of Engineering.
- **10.** International Conference on Recent Trends in Engineering & science (ICRTES-2024) during 2nd & 3rd May 2024.
- **11.** State Level Technical E-Quiz on "PATENT RIGHTS" on 15.04.2024 Kings College of Engineering
- **12.**Workshop on "Cyber Security: Safeguard your digital world" during 11th & 12th May 2024 at at Kings College of Engineering.
- **13.**Online Webinar on "How to write a Grant Proposal in an effective manner" during 31st May 2024.

- **14.** Guest Lecturing on "Protecting Innovations through IPR" in 17.05.2024 at Kings College of Engineering
- **15.** Webinar on "Transforming Knowledge into Intellectual Property Assets" in 31.07.2024 at Kings College of Engineering, Punalkulam
- **16.**Intelectual Intellectual Property Rights Cell on 20.08.2024 at Pattukkottai Polytechnic College.
- **17.**One day National Level Workshop on "Generative AI" on 30.09.2024 at Kings College of Engineering, Punalkulam
- **18.** Speech Competition in "Leveraging Technology for a Better Tomorrow" in 27.09.2024 at Kings College of Engineering
- 19. Seminar on Project End in View in 23.09.2024 at Kings College of Engineering.
- **20.**Convener for IEEE Madras section sponsored Workshop on Machine Learning and Data Science, KCE, during 18.10.23 to 20.10.24
- **21.** Carrom Tournament on 28.10.2024 to 04.11.2024 at Kings College of Engineering.
- **22.**5 Days International FDP on "Revolutionizing Education with Machine Learning & Generative AI" 28.01.25 to 01.02.25
- 23. Two days' workshop with Hands-on "Digital Marketing" during 10.03.25& 11.03.25
- **24.**Webinar "Generative AI and Big data analytics for smart Health system" during 17.03.2025
- 25. Mega ICT QUIZ under the IEEE CS MAS during 25.03.2025
- **26.** Webinar on : Igniting Innovation: The Entrepreneurial Spirit" during 15.04.2025

Out Reach Activity:

- 1. Acted as a Resource person for the Guest Lecture event on the topic "Cloud Operating Sytems" Organized by Dept. of Computer Science, Bon Secours College for Women, Thanjavur on 29.08.23
- 2. Acted as a IEEE Young Professional Representative from 2023- till date
- 3. Acted as a Reviewer in3rd international Conference on Smart Technologies and System for Next Generation Computing (ICSTSN 2024), IFET college of Engineering
- 4. Acted as a PILOT in "IEEE YESIST12 Project Expo" Preliminary round by presenting IEEE Madras Section during 23rd March 2024
- 5. Awareness Session for "Adullam Hone for the Aged" at Mangalapuram, Thanjavur during 14 July 2025.
- 6. Acted as a Reviewer in IEEE 2nd International Conference on Green Industrial Electronic and Sustainable Technologies (GIEST 2025), NIT Jamshedpur.