# **Faculty Profile**



**Dr. P. Vinayagam, M.E., Ph.D** Associate Professor - CSE Date of Joining: 17.08.2022

## **HIGHLIGHTS:**

- Number of Journal Publications: 34
- H-Index: 5
- Project Funding Received: 3
- Patents Published: 15
- Patents Granted: 1

### **PROFESSIONAL LINKS:**

- Scopus ID: 56461334200
- Scopus Link: <u>56461334200</u>
- Google Scholar ID: vgP7KnwAAAAJ&hl
- Anna University Faculty ID: 2122654
- AICTE Faculty ID: 1-4718097110
- Anna University Supervisor ID: 4290034
- LinkedIn: vinayagam-p

### **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 14 years
- Industrial Experience: -

## **AREA OF SPECIALIZATION:**

- Image Processing
- VLSI Design

## Ph.Ds AWARDED WITH DETAILS:

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### **Ph.Ds GUIDING:**

- Full Time Scholars: 1
- Part Time Scholars : 5

# **PROJECTS SANCTIONED:**

Sl.No	Amount (in Rs)	Title of the project	Funding agency	Year
1	2,50,000	Smart Security System using AI and IOT	DST	2021-2022
2	2,50,000	3D Obstacle avoidance and Automatic maneuvering	DST	2019-2020
3	2,50,000	Calories / Workout Balance System	DST	2018-2019

## PATENTS PUBLISHED/GRANTED:

S.No.	Journal No	Title	Publication Date & Page No	Status
1.	08/2025	ADVANCEDENCRYPTIONSTANDARDALGORITHMFORTHE5GNETWORKENCRYPTION STANDARDSSTANDARDSStandards	21/02/2025, 19118	Published
2.	08/2025	IOTBASEDHUMANGENDERCLASSIFICATIONANDRECORDMANAGEMENT USING INTELLIGENT	21/02/2025, 19119	Published
3.	08/2025	DEEP LEARNING TECHNIQUES FOR AUTONOMOUS NAVIGATION OF UNDERWATER ROBOTS	21/02/2025, 19121	Published
4.	08/2025	DESIGN AND FABRICATION OF A FLYWHEEL SPRING MACHINE FOR ELECTRIC POWER GENERATION	21/02/2025, 19185	Published
5.	01/2024	AI and Block Chain enabled device for Network Security	11/01/2024 Design Number: 399752-001	Granted
6.	09/2024	Noise removal in Images using Iterative Pixel compression Algorithm	01/03/2024, 21783	Published
7.	09/2024	Deep Learning based Compression with Classification model on CMOS Image Sensors	01/03/2024, 21781.	Published
8.	09/2024	A system to detect mask and body temperature using Convolutional Neural Network	01/03/2024, 21779	Published
9.	40/2023	Noise removal in images using Pixel Likeness Weighted Frame technique	06/10/2023, 66628	Published

10.	33/2023	Modernization Air pollution monitoring system using IOT and Machine Learning	18/08/2023, 54091	Published
11.	13/2023	System for Solar-powered Smart Wheelchair	31/03/2023, 29191.	Published
12.	43/2022	IOT based agri robotic hands for plucking underground crops & automatic spraying	28/10/2022, 68893	Published
13.	23/2022	Implementation of smart mobile robot system using Artificial Intelligence (AI)	10/06/2022, 35348	Published
14.	18/2022	Smart social distancing and monitoring robot for queue using Machine Learning algorithms, IOT and AI	06/05/2022, 28195	Published
15.	01/2023	Three dimensional obstacle avoidance and Automatic Maneuvering system	06/01/2023, 30	Published
16.	20/2021	Self-configured and Internet of Things supported calories and workout balancing system	14/05/2021, 23773	Published

# **COURSES CERTIFIED:**

• IUCEE (Indo Universal Collaboration for Engineering Education) certified Engineering Educator (IIEECP) from July to December 2023

# ACHIEVEMENTS AND AWARDS:

- Indo Universal Collaboration for Engineering Education (IUCEE) certified Engineering Educator (IIEECP) in December 2023.
- Entered into Grand Finale in Smart India Hackathon SIH 2022 on the topic "Document Quality score" under my guidance.
- "Outstanding Service Award" 2014 Indian Association for the Blind, Madurai.
- "Outstanding Service Award" 2013 Indian Association for the Blind, Madurai.
- "Outstanding Faculty" 2011 by IBM India Pvt Ltd.
- "Outstanding Faculty" 2010 by IBM India Pvt Ltd.
- "The Renegade of Change" 2009 by IBM India Pvt Ltd.
- Made S.K.P. Engineering College as TOP 30 Colleges in India for Three Consecutive Years (2010, 2011 & 2012) in the prestigious TGMC sponsored by IBM India Pvt Ltd.
- Recognized by LIMCA Book of Records in 2011.
- Arranged a National level MEGA PROJECT FAIR in 2009.

- Arranged a National level WORKSHOP ON TANNER TOOLS in 2009.
- Produced 100% result in University examinations in the subjects ASIC Design, Computer Architecture & Parallel Processing, Electromagnetic Interference & Compatibility in system design, Circuit & Devices, Electron Devices.
- Certified Project Guide by IBM Academic initiative team.
- Guided 556 students for real time software development projects.

S.No	Event Type	Event Name	Date	Host institution
1	Guest Lecture	Introduction to Microwave passive and active components	28.08.2024	Velammal Engineering College
2	Guest Lecture	Art of writing a Research Article	28.03.2024	Saveetha Engineering College
3	Seminar	Innovation Development, Technology Readiness Level & Technology Transfer	23.02.2024	Velammal Engineering College
4	Guest Lecture	VLSI and Chip Design	09.11.2023	Loyola Institute of Technology
5	Guest Lecture	Microwave Antenna Design and impedance matching	25.08.2023	Velammal Engineering College
6	Workshop	Recent Trends in VLSI Design	29.03.2023	Adhiparasakthi College of Engineering, Kalavai.
7	Career guidance program	What is next? For 12 <sup>th</sup> standard students	11.03.2013	TSM Jain College of Engineering, Kallakurichi

### **SPECIAL SESSIONS DELIVERED:**

## CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

### **INTERNATIONAL CONFERENCES:**

1. P. Vinayagam, S. Santhiya, S. N. Kumar and V. D. Kumar, "Harnessing Technology Deep Learning and IoT for Early Detection of Tomato Diseases," 2025 International Conference on Electronics and Renewable Systems (ICEARS), Tuticorin, India, 2025, pp. 647-652, doi: 10.1109/ICEARS64219.2025.10940436 (Scopus).

2. B. Venkataramanaiah, P Vinayagam, et al., "An IoT Cloud Based Health Monitoring System for Remote Area Using Node MCU: E Health Checker," 2025 3rd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT), Bengaluru, India, 2025, pp. 807-811, doi: 10.1109/IDCIOT64235.2025.10914828 (Scopus).

3. P Vinayagam, Varshney, A. K., & Subramaniyan, K. (2025, January). A CNN based efficient mask and temperature detecting system. In AIP Conference Proceedings (Vol. 3159, No. 1). AIP Publishing. https://doi.org/10.1063/5.0247122 (Scopus)

4. P Vinayagam, Subramaniyan, K., & Subramani, N. (2025, January). An instant medical assistance structure (IMAS) based on artificial intelligence. In AIP Conference Proceedings (Vol. 3159, No. 1). AIP Publishing. https://doi.org/10.1063/5.0247124 (Scopus)

5. Subramaniyan, K., Sakthivelsamy, R., P Vinayagam, & Rajendran, L. (2025, January). An efficient deep learning based algorithm for people detection in surveillance videos. In AIP Conference Proceedings (Vol. 3159, No. 1). AIP Publishing. https://doi.org/10.1063/5.0247201 (Scopus)

6. Varshney, A. K., & P Vinayagam, (2025, January). Compact ambient RF energy scavenger for wireless sensor networks. In AIP Conference Proceedings (Vol. 3159, No. 1). AIP Publishing. https://doi.org/10.1063/5.0247158 (Scopus)

7. K. sudha, M. Mercy Theresa, P. Vinayagam, R. Suganthi, T. Sripriya, G.S. uthayakumar, "Efficient IOT based COVID patient healthcare control system using arduino with mobile app" Measurement: Sensors, Volume 33, 2024, 101161, ISSN 2665-9174, https://doi.org/10.1016/j.measen.2024.101161. (Scopus)

8. Kanagamalliga, S., Vinayagam, P., Yazhvanan, M.A., Winaayag Amit, J., "Innovative Hand Gesture Recognition Techniques for Volume Adjustment in Real-Time" 2024 4th International Conference on Artificial Intelligence and Signal Processing (AISP), doi: 10.1109/AISP61711.2024.10870735. (Scopus)

9. Kanagamalliga, S, Vinayagam, P, Rajesh Kumar, M,Rahul, R, "Exploring Hand Gesture Recognition for Enhanced Human-Computer Interaction", 2024 International Conference on Computing, Sciences and Communications, ICCSC 2024, 2024, doi: 10.1109/ICCSC62048.2024.10830342. (Scopus)

10. P. Vinayagam, S. Santhiya, S. N. Kumar and V. D. Kumar, "Visionary AI Enhancing Diabetic Retinopathy Detection through Image Processing," 2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI), Coimbatore, India, 2024, pp. 928-933, doi: 10.1109/ICoICI62503.2024.10696561 (Scopus).

11. P Vinayagam, "Deep Learning-Powered Intrusion Detection Systems: Enhancing Efficiency in Network Security" 2024, 3rd International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI-2024), doi: 10.1109/ACCAI61061.2024.10602010 (Scopus)

12. P Vinayagam, "FPGA Based automated EEG analysis for efficient emotion detection" 3rd IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2024), doi: 10.1109/ICDCECE60827.2024.10548113 (Scopus).

13. M. Chouksey, Vinayagam P, "Enhancing Underwater Image Quality with Adaptive Gamma Correction, Retinex Sharpening, and NSST Fusion," 2024 International Conference on Wireless Communications Signal Processing and Networking (WiSPNET), Chennai, India, 2024, pp. 1-7, doi: 10.1109/WiSPNET61464.2024.10533173. (Scopus)

14. P Vinayagam, R Yuvaraaj, S Sathiyanandham, S Kanagamalliga, "Parallel VLSI Architectures for High-Throughput Image Processing in Medical Imaging", Procedia Computer Science, Volume 233, (2024), Pages 851-860, ISSN 1877-0509, https://doi.org/10.1016/j.procs.2024.03.274. (Scopus)

15. P. Vinayagam, V. Nithesh Kumar and G. Bhuvan, "Experimental Evaluation of IoT based Human Gender Classification and Record Management using Intelligent Hybrid Learning Principles," 2023 Second International Conference on Advances in Computational Intelligence and Communication (ICACIC), Puducherry, India, 2023, pp. 1-5, doi: 10.1109/ICACIC59454.2023.10435260. (Scopus)

16. P. Vinayagam, N. V. V. Reddy, P. T. K. Kishore and A. Royappa, "Systematic Development of Modified Hybrid Learning based Detection Scheme for White Blood Cancer Cells using Medical Image Processing Methodology with IoT Alert Mechanism," 2023 Second International Conference on Advances in Computational Intelligence and Communication (ICACIC), Puducherry, India, 2023, pp. 1-6, doi: 10.1109/ICACIC59454.2023.10435291. (Scopus)

17. Kanagamalliga, S., Abishek, R., Basam Bala, S.K., Vinayagam, P, "Advancements in Real-Time Face Recognition Algorithms for Enhanced Smart Video Surveillance", Procedia Computer Science, 2023, 230, pp. 486–492. (Scopus)

18. P. Vinayagam, Thanarajan, T, Krishnamurthy, A, Rajendran, S. (2023), Deep learning based compression with classification model on CMOS image sensors, Traitement du Signal, Vol. 40, No. 3, pp. 1163-1170. https://doi.org/10.18280/ts.400332. (SCI, Scopus)

19. P.Vinayagam, "AES Algorithm for the Next Generation of 5G Network Encryption Standards," 2023 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), Chennai, India, 2023, pp. 1-6, doi: 10.1109/ACCAI58221.2023.10199794. (Scopus)

20. P. Vinayagam, Alharbi, M., Alshahrani, M., Rajendran, S. (2023). Pixel optimization using iterative pixel compression algorithm for complementary metal oxide semiconductor image sensors, Traitement du Signal, Vol. 40, No. 2, pp. 693-699. https://doi.org/10.18280/ts.400228. (SCI, Scopus).

21. Vinayagam, P., et al. "Detecting and preventing of DOS attacks in an IOT based Wireless Sensor Network." 2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT). IEEE, 2023. (Scopus)

22. P. Vinayagam, S. Gomathi, S. J. Rubavathy, Indumathi and T. Muthamizhan, "GSM Based Electrical Load Control System for Home Applications," 2022 International Conference on Computer, Power and Communications (ICCPC), Chennai, India, 2022, pp. 640-645, doi: 10.1109/ICCPC55978.2022.10072210 (Scopus).

23. Vinayagam P, Shreenidhi G, "Experimental Analysis of Solar-Powered Portable Vaccine Refrigerator," 2022 International Conference on Edge Computing and Applications (ICECAA), 2022, pp. 895-898, doi: 10.1109/ICECAA55415.2022.9936303 (Scopus).

24. P. Vinayagam, A. Hameem Irfana, K. Sireesha, N. Tabassum Fathima and K. Tanuja, "An AI Tool for Emergency Medical Assistance system" 2022 3rd International Conference on Smart Electronics and Communication (ICOSEC), 2022, pp. 1115-1121, doi: 10.1109/ICOSEC54921.2022.9951990 (Scopus).

25. P.Vinayagam, Dr.P.Anandan, Dr.N.Kumaradharan, "Image denoising using a nonlinear pixel likeness weighted frame technique", Intelligent Automation & Soft Computing, Vol.30 No.3 (2021), [Pages: 869-879], [DOI:10.32604/iasc.2021.016761] (Scopus, SCIE, UGC)

26. Dr.S.Mary Joans, T.S. Vijay Logesh, P. Vinayagam, "Analysis of Various Visual SLAM Algorithms", Turkish Journal of Computer and Mathematics Education Vol.12 No.13 (2021), [Pages: 2436-2445]

27. P. Vinayagam, Karthik Rajan. C, Mohan Raaj. T, Lokesh. R, Mukund. MP, "Image Enhancement Model Using Dehazing Algorithm Application", Turkish Journal of Computer and Mathematics Education Vol.12 No.12 (2021), [Pages: 3142-3148]

28. P.Vinayagam, Y.Haritha, V.HariniPriya, K.SindhuPriya, S.Mythili, P.Pavithra, "Food Calories Measurement Using Convolutional Neural Networks", Journal of Seybold Report, Volume 15, Issue 9 2020. [Pages:1925-1930]

29. P. Vinayagam, L.Swetha, E.Keerthana, A.Aishwarya, "Schizophrenia Diagnosis With EEG Signal", International Journal of Applied Engineering Research (IJAER), Volume 14, Number 6, 2019. [Pages:45-48] (UGC)

30. Vinayagam.P, Rajesh Kumar.G, Mohan raj.G, Sethumathavan.V, "QR Decomposition Based Secure Watermarking Images", International Journal of Applied Engineering Research (IJAER), Volume 14, Number 6, 2019. [Pages:336-339] (UGC)

31. Vinayagam.P, Sreemathi.M, Jeevitha K, Sandhya S, "Kidney Stone Detection Using Neural Network", International Journal of Applied Engineering Research (IJAER), Volume 14, Number 6, 2019. [Pages:67-70] (UGC)

32. P.Vinayagam, Dr.P.Anandan, "A Review on Pixel Performance in CMOS Image Sensors", Journal of Advanced Research in Dynamical and Control Systems (JARDCS), Volume 05, special issue, July 2017. [Pages:20-25] (Scopus, UGC)

33. P.Vinayagam, M.Sathishkumar, "Simulation and Short Channel Effect analysis of Inaln/Gan MOSHEMT with LnGan back barrier", International Research Journal in Advanced Engineering and Technology (IRJAET), Volume 2, issue 2, April 2016. [Pages:899-903]

34. M.Dhinakaran, P.Vinayagam, K.Madhavipriya, "Image Enhancement and Feature Extraction Based on Low-Resolution Satellite Data", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Volume 4, issue 10, October 2015. [DOI: 10.15662]

35. N.Nandhagopal, B.Senthilraja, P.Vinayagam, "Brain Tumour Detection through MRI Image Using Segmented Morphological Approach", International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), Volume 2, issue 12, December 2014. [DOI: 10.15662]

36. S.Kumaravel, Vaidyanathan, P.Vinayagam, "Reversible Watermarking Techniques in Image Authentication Using LSB Data Hiding", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Volume 2, issue 11, November 2013. [DOI: 10.15662]

## NATIONAL CONFERENCES:

1. "Design of an ultrasonic sensor based assistance device (stick) for visually impaired people", at National conference on Recent advances in Engineering and Technology, at Sri Muthukumaran Institute of Technology on 21st October 2022.

2. "Non-invasive glucose monitoring and nerve conduction using IOT based assessment", at Virtual National conference on Recent Advancements in Communication, Electronics & Signal processing, (RACES'22) at Velammal Engineering College on 6th May 2022.

3. "Convolutional Neural Network based Device for detecting temperature and Face Mask", at Virtual National conference on Recent Advancements in Communication, Electronics & Signal processing, (RACES'22) at Velammal Engineering College on 6th May 2022.

4. "Medical Assistance System based on Artificial Intelligence", at Virtual National conference on Recent Advancements in Communication, Electronics & Signal processing, (RACES'22) at Velammal Engineering College on 6th May 2022.

5. "Smart Image Enhancement by Haze Removal using Segmentation Method", at Virtual National conference on Recent Advancements in Communication, Electronics & Signal processing, (RACES'21) at Velammal Engineering College on 9th April 2021.

6. "ANALYSIS OF ORBSLAM 2 - A VISUAL SLAM ALGORITHM", at Virtual National conference on Recent Advancements in Communication, Electronics & Signal processing, (RACES'21) at Velammal Engineering College on 9th April 2021.

7. "Calories / Workout Balance Alert System", at National conference on Advancements in Engineering & Technology, (NCAET '20) at SKP Engineering College on 28th February 2020.

8. "Reliable Wireless Real-Time Home Automation System using Arduino Uno Single-Board Microcontroller", at National Conference on Recent Trends in Power, Energy, Control and Automation (NCRTPECA-2020), at RMK College of Engineering & Technology on 17th February 2020.

9. "Rectenna Powered Electronic Devices", at National Conference on Recent Trends in Power, Energy, Control and Automation (NCRTPECA-2020), at RMK College of Engineering & Technology on 17th February 2020.

10. "Schizophrenia Diagnosis With EEG Signal", at National Conference on Recent Advancements in Communication, Electronics and Signal Processing (RACES' 19), Velammal Engineering College on 15th March 2019.

11. "QR Decomposition Based Secure Watermarking Images", at National Conference on Recent Advancements in Communication, Electronics and Signal Processing (RACES' 19), Velammal Engineering College on 15th March 2019.

12. "Kidney Stone Detection Using Neural Network", at National Conference on Recent Advancements in Communication, Electronics and Signal Processing (RACES'19), Velammal Engineering College on 15 March 2019.

13. "Disaster detection, providing warning using IOT cloud platform" at National Conference on Recent Trends & Emerging Technologies (NCRTET'17), Rajiv Gandhi College of Engineering, Sriperumbudur, on 24th March 2017.

14. "Simulation of AlGaN / AlN / GaN MOS – HEMT structures for high performance microwave with power efficiency" at National conference on Sustainable Modern Advances in Research and Technology (SMART-2016), Dr.Paul's Engineering College, Villupuram, 23rd - 24th March 2016.

15. "Simulation and short channel effect analysis of InAlN / GAN MOS HEMT with InGaN back barrier" at National Conference on Emerging Trends in Wireless Communivations & Signal Processing (NCWCSP), Arunai Engineering College, Tiruvannamalai, 26th February 2016.

16. "A Reconfigurable and High precision VLSI Architecture for FFT" at National Conference on Recent Trends in Electrical and Electronics Engineering (NCRTEEE'11), Jerusalem College of Engineering, Chennai, March 2011.

17. "A Reconfigurable and High precision VLSI Architecture for FFT" at National Conference on Computer and Communications (NCC-2011), RVS College of Arts & Science (Autonomous), Coimbatore, March 2011.

# WORKSHOPS / FDPs ATTENDED

1 Participated in a three-day Faculty Development Programme on 'LaTeX for Academics:Writing, Research and Beyond' from 10.04.2025 to 12.04.2025, organized by the Department of Electronics and Communication Engineering, NSS College of Engineering, Palakkad.

2 Participated in the International Virtual Faculty Development Program on, "Modern Research Convergence in Next Generation Computing" organized by Sri Krishna College of Engineering and Technology from 18-22 December 2023. 3 Participated in 11 –Day International workshop on "Cyber Security 2023" organized by DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE (Autonomous), Arumbakkam, Chennai from 7.08.2023 to 22.08.2023.

4 Attended the Six Days Faculty Development Programme on "Empowering Innovators: Unleashing the Potential of Intellectual Property, Research Funding, Technology and Entrepreneurship" organized by Panimalar Engineering College, from 24.07.23 – 29.07.23.

5 Participated in one week Faculty Development Programme on "MIMO antennas for 5G Communications", organized by Kallam Haranadhareddy Institute of Technology, Guntur, from 26.06.23 – 30.06.23.

6 Participated in the One week Faculty Development Programme on "Recent Trends in Cognitive Science & its Applications" from 13-18 March 2023, organized by VNRVJIET in collaboration with Vikram University, Oriental University & SOC, IPS Academy, Indore.

7 Attended Ten Days Short Term Training Programme on "Cyber Security : Global Hacktivism, Defense Mechanism and Digital Forensics" conducted by Saveetha Engineering College, from 1-11th February 2023.

8 Attended the one week Faculty Development Programme on "Societal Advances in Wireless Systems and Emerging Technologies" conducted by Saveetha Engineering College, from 22-28th January 2023.

9 Participated in one week Virtual Faculty Development Programme on "Bio-Medical Sensors and Signal Processing" conducted by Loyola Institute of Technology, from 9-13 January 2023.

10 Attended the one week Faculty Development Programme on "Python for Image Processing" conducted by Vellore Institute of Technology, from 8-13th December 2022.

11 Attended a "Two Week FDP on Multi-Disciplinary Research" organized by PACE Institute of Technology & Sciences, Ongole from 1st – 11th November 2022.

12 Participated in the One day national workshop on "Effective drafting and filing of patents" organized by Annamalai University on 11th November 2022.

13 Participated in FDP on "Recent Research Convergence in Artificial Intelligence and Internet of Things" organized by Bon Secours College for women, Thanjavur from 21.11.2022 to 25.11.2022.

14 Attended the Role of ARM Processor in Design of Smart Systems held on 20th October 2022 organized by the NDLI Club of Saveetha Engineering College.

15 Participated in the E-Resources: A gateway to research held on 11th October 2022 organized by the NDLI Club of Saveetha Engineering College.

16 Attended an IP awareness / Training Program under National Intellectual Property Awareness Mission on 11th November 2022 organized by Intellectual Property Office, India.

17 Participated an IP awareness / Training Program under National Intellectual Property Awareness Mission on 12th October 2022 organized by Intellectual Property Office, India.

18 Participated in five days faculty development programme on "Recent trends in Artificial Intelligence and Machine Learning" during 26-30th September 2022 at Siddartha Institute of Science and Technology, Puttur, A.P. 19 Attended a Five Days short term course on "VLSI Devices and Circuits for AI Applications (ICT-122)", conducted by Galgotias College of Engg & Technology in collaboration with NITTR, Chandigarh from 19-23 September 2022.

20 Participated in NAAC sponsored NAAC awareness seminar on "Building Quality system in Higher Education Sector" organized by IQAC, Siddartha Institute of Science and Technology, Puttur in association with NAAC during 21-22nd April 2022.

21 Attended a One Day Workshop on "IP commercialization" on 29.03.2022 organized by DPIIT – IPR Chair of Gujarat National Law University and AURO University in collaboration with Ministry of Commerce and Industries, Government of India.

22 Participated in the three days workshop on Intellectual Property Rights & Entrepreneurship organized by the Programme Monitoring Office – Innovation & Entrepreneurship Development Programme (PMO-IEDP) from 07.03.2022 – 10.03.2022.

23 Participated in Two-Day Faculty Development Programme on "Field Exposure on AI for Industrial IoT with Hands-on" during 25-26th February 2022 at Velammal Engineering College.

24 Participated in CSIR sponsored Two-Day National Level Seminar on "Modern Techniques in Biosensors for Environmental and Clinical Analysis" during 18-19th February 2022 at Siddartha Institute of Science and Technology, Puttur, A.P.

25 Successfully completed one week Certificate Course on "Digital Teaching Techniques" from 24.01.2022 to 28.01.2022 organized by ICT Academy.

26 Attended One week Faculty Development Program on "Research Ideas in Image Processing & Communication" from 27.12.2021 to 01.01.2022 at Siddartha Institute of Science and Technology, Puttur, A.P.

27 Attended AICTE sponsored ATAL 5 Days Workshop on "Advances in Electronics and Communication Engineering for Industrial Applications" from 26-07-2021 to 30-07-2021 at Stanley College of Engineering and Technology for Women.

28 Participated Two Days Mentor Development Programme organized by BYST and The City and Guilds of London Institute from 16-17th March 2021.

29 Attended AICTE sponsored ATAL 5 Days Workshop on "Augmented Reality (AR)/ Virtual Reality (VR)" from 15-12-2020 to 19-12-2020 at Dr. Mahalingam College of Engineering and Technology.

30 Attended AICTE sponsored online Six days STTP titled "Optimization of communication & signal processing with machine learning perspectives" from 19-10-2020 to 24-10-2020 at Velammal Engineering College.

31 Attended AICTE sponsored 3 Days "Students Induction program" at Anna University Guindy from 13-15 May 2019.

32 Participated one day workshop on "Workshop on Publishing" on 19.11.2018 at Anna University, Guindy, Chennai.

Attended a three days workshop on "Python & Machine Learning" from 30.10.2018 to 01.11.2018 at Velammal Engineering College, Chennai.

34 Participated in ICMR sponsored three days National workshop on "Major challenges of Medical imaging and Big data analytics in Health care and Clinical Applications" from 2.5.2018 to 4.5.2018 at Velammal Engineering College, Chennai. 35 Attended a one day workshop on "Effective Research Document Writing & Authoring of Books" on 8th November 2017 at University College of Engineering, Kanchipuram.

36 Attended the one day workshop on "The art of writing research article and publication" on 28th April 2016 at SKP Engineering College.

37 Participated in Two week ISTE workshop on "Signals & Systems" conducted by IIT, Kharagpur from 2nd to 12th January 2014.

38 Attended the Faculty Development Training Programme on "Wireless Sensor Networks" at SKP Engineering College organized by ANNA University from 11th to 17th December 2013.

39 Attended in Two week ISTE workshop on "Analog Electronics" conducted by IIT, Kharagpur from 4th to 14th June 2013.

40 Participated in the National Level workshop on "Advanced programming in MATLAB" held on 23rd November 2012 at VRS College of Engineering.

41 Attended the National Level Workshop on "Network Simulator-3" on 25th to 26th October 2012.

42 Participated in the National Level workshop on "Tanner Tools" organized by Trident Tech Labs, Chennai on 3rd October 2010.

43 Attended the National Level Conference on "Emerging Trends In Mobile Communication" (ETMC) at Kamban Engineering College, 27th November 2009.

44 Participated in International workshop & IEEE EDS mini colloquia on "The past & future of Integrated Circuits Technologies" at SKP Engineering College during 4-5 November 2009.

### **PROFESSIONAL MEMBERSHIPS:**

Sl.No	Membership type	Name of the Professional society	Abbreviation
	Fellow –	Institution of Electronics and	
1	Life member	Telecommunication Engineers	IETE
2	Life member	Indian Society for Technical Education	ISTE
3	Professional Member	Institute for Engineering Research and Publication	IFERP
4	Member	International Association of Engineers	IAENG

### **BOOKS & BOOK CHAPTERS PUBLISHED**

Sl.No	Book / Chapter title	Publisher name	ISBN number	
1	VLSI AND CHIP	Scientific International	079 02 5757 591 2	
	DESIGN (Book)	Publishing House	978-93-5757-581-2	
2	Chapter title : Smart	IGI Global Scientific		
	Healthcare Infrastructure	Publishing	ICDN12.	
	and Remote Monitoring		ISBN13:	
	Trends, Technologies,	DOI: 10.4018/979-8-3373-	9798337307619	
	and Challenges	0761-9.ch005		

	Book title : Leveraging Urban Computing for Sustainable Urban Development		
3	Chapter title : Intelligent Home Automation with		
	Multiple Languages		
	Voice Control	CRC Press,	
	Book title : Human Machine Interaction in the Digital Era: Towards Conversational Artificial Intelligence (1st edition)	https://doi.org/10.1201/978100 3428466	9781003428466

# **OUTSIDE INTERACTIONS: REVIEWER / SESSION CHAIR**

S.No	Role	Event Name	Date	Host institution
1	Reviewer	202511thInternationalConferenceonCommunicationand Signal Processing (ICCSP)	5-7 June 2025	Adhiparasakthi Engineering College, Melmaruvathur
2	Reviewer	3 <sup>rd</sup> International Conference on Integrated Circuits and Communications Systems (ICICACS - 2025)	21- 22 February 2025	H.K.E Society's Sir M Visvesvaraya College of Engineering, Raichur
3	Reviewer	7th International Conference onRecent Trends in ImageProcessing and PatternRecognition	19-20 December 2024	Indian Institute of Information Technology, Bhopal
4	Reviewer	3rd International Conference on Integrated Intelligence and Communication Systems	22-23 November 2024	Sharnbasva University, Kalaburagi
5	Reviewer	International Conference on Software, Systems and Information Technology	18-19 October 2024	Sri Siddhartha Institute of Technology Tumkur
6	Reviewer	Third International Conference on Smart Technologies and Systems for Next Generation Computing 2024	18 <sup>th</sup> -19 <sup>th</sup> July 2024	IFET College of Engineering Villupuram
7	Reviewer	IEEE International Conference on Data Science and Network Security	28 and 29 July 2023	KIT, Tiptur
8	Reviewer	Book Chapter	02 February 2024	B P international
9	Reviewer	2024 International Conference on Social and Sustainable Innovations in Technology and Engineering	23-25 February 2024	Sasi Institute of Technology and Engineering, Godavari, AP.
10	Reviewer	ThirdIEEEInternationalConferenceonDistributed	26-27 April 2024	BITM, Ballari

		Computing and Electrical Circuits and Electronics (ICDCECE-2024)		
11	Reviewer	IEEE International Conference on Distributed Computing and Optimization Techniques (ICDCOT-2024)	15-16 March 2024	SJB Institute of Technology, Bengaluru
12	Reviewer	Second IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS - 2024)	23-24 February 2024	S.L.N. College of Engineering, Raichur in association with IEEE Bangalore Section and IEEE North Karnataka Subsection
13	Session chair	Smart Structures and Systems - ICSSS 2023	23-24 November 2023	Saveetha Engineering College
14	Reviewer	Smart Structures and Systems - ICSSS 2023	23-24 November 2023	Saveetha Engineering College
15	Reviewer	Third IEEE International Conference on Mobile Networks and Wireless Communications [ICMNWC-2023	8-9 December 2023	Sri Siddhartha Institute of Technology Tumkur-Kunigal Rd, Saraswathipuram, Tumakuru Karnataka
16	Reviewer	International Conference on Ambient Intelligence, Knowledge Informatics and Industrial Electronics (AIKIIE-2023)	2 & 3 November 2023.	Rao Bahadur Y. Mahabaleswarappa Engineering College (RYMEC), Ballari, Karnataka.
17	Technical Programme Committee Member	International Conference on Communication and Signal Processing (ICCSP 2024)	12-14 April 2024	Adhiparasakthi Engineering College (APEC), Melmaruvathur
18	Reviewer	2023 IEEE 3rd Mysore Sub Section International Conference (MysuruCon)	1 - 2 December 2023	IEEE Mysore Subsection
19	Reviewer	IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS–2023)	24 & 25 November 2023	Sharnbasva University, Kalaburagi
20	Reviewer	International Conference on Evolutionary Algorithms and Soft Computing Techniques on (EASCT-2023)	20-21, October 2023	RV Institute of Technology and Management (RVITM), Bangalore
21	Reviewer	IEEE INDISCON-2023	5-7 August 2023	GSSS Institute of Engineering & Technology for Women.
22	Reviewer	IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON)	1-2 September 2023	NITTE Meenakshi Institute of Technology, Bengaluru
23	Reviewer	InternationalconferenceonComputationalSciencesandSustainableTechnologies	8 – 9 May 2023	Christ University & Modern College of Business and Sciences, Oman.

		(ICCSST-2023)		
24	Reviewer	IEEEsponsoredOPJUInternationalTechnologyConferenceonEmergingTechnologiesforSustainableDevelopment (OTCON 2.0)	8-10 February 2023	OP Jindal University, Chhattisgarh.
25	Reviewer	IEEE INDISCON-2023	5 - 7August 2023	GSSS Institute of Engineering & Technology for Women
26	Technical Reviewer	SecondIEEEInternationalConferenceon"SmartTechnologiesforNextGenerationComputing(ICSTSN)2023)20231000000000000000000000000000000000000	21-22 April 2023	IFET College of Engineering
27	Reviewer	Signal, Image and Video Processing	Since 2023	Anna University Annexure, SCI, Scopus Indexed journal
28	Scientific Committee member	Second International Conference on Innovative Research in Engineering, Applied Science and Management (IC-IREASM- 2023)	23-25 February 2023	Sree Dattha Institutions, Ranga Reddy
29	Reviewer	IEEE sponsored International Conference for Advancement in Technology (ICONAT)	24-26 January 2023	
30	Peer Reviewer	InternationalJournalofEngineeringResearchinElectronicsandCommunicationEngineering	Since 2022	Journal
31	Primary Evaluator	Toycathon 2021	2021	Ministry of Education Innovation Cell
32	Reviewer	International Research Journal of Innovations in Engineering and Technology (IRJIET)	Since 2020	Journal
33	Reviewer	IET Circuits, Devices and Systems	Since 2018	Journal