

Name :Dr.C.ALWIN VINIFRED				
Designation:	Associate Professor			
Qualification :	M.E.,Ph.D			
Area of Specialization:	Applied Electronics Engineering			
Experience : (As on JAN-2026)	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
	1 Year		21 Years	
No. of workshop/FDP attended :	No. of workshops attended		No. of FDP attended	
	9		8	
Publication :	<b>Journal</b>		<b>Conference</b>	
	International	National	International	National
	5	2	5	5
Professional Membership:	1. ISTE – Life Member-LM131461 2. IEEE-Senior Member-98063818			
Patents:	1. Smart Garden With Intelligent Control System Appn.No.: 202541037993 2. Reconfigurable Smart Antenna System for 5G Network Beamforming and Interference Mitigation, Appn.No.:202341157374 3. AI and IoT based Wireless Sensor Network for Crop Health Monitoring and Irrigation Management, Appn.No.:202341157375			
Staff Achievements:	<ul style="list-style-type: none"> <li>➤ Received certificate of mentors from AIM,NITI Aayog,India for being one of the top 100 mentors of ATL Tinkerpreneur 2023.</li> <li>➤ Received certificate of mentors from AIM,NITI Aayog,India for the most popular mentor in ATL Tinkerpreneur 2022.</li> <li>➤ Received certificate of mentors from AIM,NITI Aayog,India for the most popular mentor in ATL Tinkerpreneur 2021.</li> </ul>			

**Publications:****International Journals:**

1. Alwin Vinifred Christopher, H. Gnanasambanthan "Enhanced Red Panda Optimization Algorithm for Smart Energy Management in Electric Vehicle Charging at Solar-Powered Charging Station Energy Storage", 7 (6) (2025), 10.1002/est2.70251
2. Subash, T. D., T. D. Subha, N. Janaki Manohar, and Alwin Vinifred Christopher. "Enhancing Channel Estimation and Efficiency in Millimeter-Wave Massive Multiple Input Multiple Output Systems by Exploiting Reconfigurable Intelligent Surface and Gegenbauer Graph Neural Networks for High-Resolution Signal Reconstruction." INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS 38, no. 14 (2025).
3. Alwin Vinifred C, Dhandapani S, Ramesh R "Automatic adaptive synchronization (A<sup>2</sup>S): A demand-based automatic synchronization for distribution generators in islanding mode", Knowledge based Systems. 2023,vol:275,110641
4. Alwin Vinifred C,Ramesh R "Fast Synchronization of Distributed Generators with Power Grid under Transient Conditions using Hybrid Optimization Algorithm",Optimal Control Application Methods. 2020,vol:42,pp:700-716.
5. Alwin Vinifred Christopher, Ramesh Rengaswamy , "Grid Variables Synchronization Using Optimization Algorithm for Distributed generation System under Grid Fault Conditions",IJRTE, ISSN: 2277-3878,Volume-8 Issue-5,Jan-2020,pp:2658-2665.

**National Journals:**

1. Alwin Vinifred Christopher "Power Quality Improvement and Energy Management of Grid Integrated Distributed Generators" JETIR,Volume 5, Issue 5 May 2018.pp287-293 ISSN: 2349-5162.
2. Alwin Vinifred Christopher,Sibiah Rex,Anish Kumar."Smart grid challenges and signal processing based solutions -A Literature survey" IJETT, Volume 37 Number 4 July 2016.pp:189-196.

**International Conferences:**

1. C Alwin Vinifred,R Aishwarya,Nivedha Sridhar,F Thiravia Vincy," Intelligent Cart", IEEE -2024 International Conference on Communication, Computing and Internet of Things (IC3iIoT-2024), April-2024, India.
2. Alwin Vinifred C,Abishek Anand A S,Charankumar V,Vijay N, "Event Data Recorder And Transmitter For Vehicular Mishap Analysis Based on Sensordrone" IEEE -2022 International Conference on Communication, Computing and Internet of Things (IC3iIoT-2022), March-2022, India.
3. Alwin Vinifred C,Anupriya E, Fahima Sheerin M, Priya K,"Real time data transmission in underwater using LI-FI" 2021-International Conference on current research in Engineering and Technology (ICCRET-2021),May-2021, Chirala,Andhra Pradesh,India.
4. Alwin Vinifred C,Akshayaa Rajeshwari D, Rathna Sastika V A R, Madhumitha,"Smart waste management using IoT"2021-International Conference on current research in Engineering and Technology(ICCRET-2021),May-2021,Chirala,Andhra Pradesh,India.

5. Alwin Vinifred Christopher, Guhesh Swaminathan, Maheedar Subramanian, Pravin Thangaraj "Distribution line monitoring system for the detection of power theft using power line communication" 2014 IEEE Conference on Energy Conversion, (CENCON) 13-14 OCT 2014, Johor Bahru, Malaysia.

**National Conferences:**

1. Alwin Vinifred C, Anitha S, Sirisha D, Deepika R, "Smart Bus Stop Reminder For Rural Area Using Lora" 2023-National Conference on Recent Trends in Computational Intelligence 2023 (NCRTCI'23) held at SRM Valliammai Engineering College on 29.04.2023.
2. Alwin Vinifred C, Aiswarya R, Nivedha Sridhar, Thiravia Vincy F, "Neural Network based building Crack and Steel Corrosion Assessment using Drone Camera Image" 2022-Innovation, Technology and Sociology (NCITS 2K22), Nehru College of Engineering & Research Centre, Thrissur, Kerala.
3. Alwin Vinifred C, J. Win Joshua, "Design and Implementation of FPGA Based Virus Detection Processor Against Network Security" 2013-NCREACT'13, RRASE College of Engineering, Chennai.
4. Alwin Vinifred C, "Design and Implementation of FPGA Based Active power filter for Harmonic and reactive power current", 2012-Recent Advances in Engineering and Technology (RAET'12), Sri Muthukumar Institute of Technology, Chennai.
5. Alwin Vinifred C, K. Bommanna Raja, "VLSI Implementation Of NN Based Buffer Management System For IP Over ATM", 2005-Recent Advances in Industrial Networking (RAIN'05) Nooral Islam College of Engineering, Kumarakoil, India.

**Book Chapters Published:**

1. Kumar, J.A., Selvam, B.A., Alwin Vinifred, C., Magadevi, N., Anbazhagan, K. (2024). Smart Electronic Speaking Glove for Physically Challenged Person. In: Rathore, V.S., Tavares, J.M.R.S., Surendiran, B., Yadav, A. (eds) Universal Threats in Expert Applications and Solutions. UNI-TEAS 2024. Lecture Notes in Networks and Systems, vol 1006. Springer, Singapore. [https://doi.org/10.1007/978-981-97-3810-6\\_17](https://doi.org/10.1007/978-981-97-3810-6_17)

**Faculty Development Training Programme & Workshops:**

- Successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on AI & IoT Integration in Smart Renewable Energy Networks at R P SARATHY INSTITUTE OF TECHNOLOGY from 19/01/2026 to 24/01/2026.
- NPTEL-AICTE faculty development program completed on Introduction to Industry 4.0 and Industrial Internet of Things from July - October 2023.
- Six days FDP on Universal Human Values-II organized by All India Council for Technical Education from 20.03.2023 to 25.03.23
- Successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on QUANTUM COMPUTING AND ITS FUTURE SCOPE at SRI SAI RAM ENGINEERING COLLEGE from 18/12/2023 to 26/12/2023.
- Five Days Train the Trainer program on Powering IoT using ARDUINO/RASPBERRY PI sponsored by Govt. Of Tamilnadu during 19.09.22 to 23.09.22 at Madras Institute of Technology, Chennai
- 12 Weeks NPTEL-AICTE Sponsored FDP on Introduction to Internet of Things during Jul-Oct-

2022.

- Three days FDP on SoC Design Methodologies using INTEL FPGAs at St Joseph's Institute of Technology during 20.07.22 to 22.07.22.
- Five days FDP on Universal Human Values-I organized by All India Council for Technical Education from 12.07.2021 to 16.07.21
- Six days AICTE sponsored STTP on Applied Mathematics & Scientific Computation for Engineering Approach in S.A Engineering College during 04.11.19 to 09.11.2019
- Successfully completed AICTE Training And Learning (ATAL) Academy Online FDP on "Electric Vehicles" from 09/11/2020 to 13/11/2020 at Teegala Krishna Reddy Engineering college
- Successfully completed AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 19/10/2020 to 23/10/2020 at THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-625 015 . One day Workshop on Arduino Organized by the Teachers Learning Centre,ICT at IIT Bombay on 08.02.2020.
- Two days Workshop on "Opportunities and Challenges in Integrating Renewable Energy with smart grid" organized by VIT University, Chennai during 16-17 March 2018.
- Five days FDP on "Electrical Simulation Software" at Sri Sairam Engineering College, Chennai During 06.11.17 to 10.11.17.
- Three days FDP on "Power System Design and Analysis" conducted by DELLSOFT Technologies Pvt Ltd during 23.05.16 to 25.05.16
- One day Workshop on "Research Challenges in Harnessing solar Energy and its Grid Integration" organized by VIT University, Chennai on 31.03.2014
- One day Workshop on "Design of Electrical Machines using FEA package (Motor Solve)" organized by VIT University, Chennai on 20.02.2014
- One day FDP on MATLAB APPLICATIONS IN ELECTRICAL ENGINEERING at Sri Sairam Engineering College, Chennai.
- One day FDP on Power Flow Solutions & Demo on CYME Power Engineering Solutions at Sri Sairam Engineering College, Chennai.
- One day Workshop on "Research Methodologies and issues in power Quality" conducted by Easwari Engineering College, Chennai on 21.11.2012.
- Two days Workshop on Technical Teachers Quality Improvement conducted by consortium of self-financing professional colleges in tamilnadu held at Sathyabama University, Chennai.
- One day Workshop on "Application of Neural Networks and Fuzzy Logic in product development" conducted by Jayamatha Engineering College.
- AICTE sponsored FDP on "Wireless Networks" during 18 June -01 July 2006 at Bannari Amman Institute of Technology, Sathiyamangalam

#### **Certification Courses:**

- Successfully Completed the **PG certification program on IoT and Embedded Systems** –Cohort-2, from Feb 23, 2025 to Nov 30, 2025 under supervision of Dr. Ankit Dubey, Professor, Department of Electrical Engineering, **Indian Institute of Technology, Jammu.**
- Successfully completed all **six domain specific courses** for SWAYAM-NPTEL Domain

Certification in **"VLSI DESIGN"** and certified by IIT Madras during the period April 2025.

- Successfully completed 12 week course with **"ELITE"** grade on **"Introduction to Industry 4.0 and Industrial Internet of Things"** conducted by IIT Kharagpur during Jul-Oct 2023.
- Successfully Completed National Initiative for Technical Teachers Training (**NITTT**) course all modules (**M1-M8**), Register number: 20212115363 certified by **AICTE** during Feb-2023.
- Successfully completed 12 week course **"ELITE WITH SILVER"** grade on **"Introduction to Internet of Things"** conducted by IIT Kharagpur during Jul-Oct 2022.
- Successfully completed 12 week course with **"ELITE WITH SILVER"** grade on **"Microprocessor and Interfacing"** conducted by IIT Guwahati during Jan-Apr 2021.
- Successfully completed 8 week course with **"ELITE"** grade on **"Discrete Time Signal Processing"** conducted by IIT Kharagpur during Aug-Sep 2018.