Name :ALWIN VINIFRED.C



Designation:	Associate Professor			
Qualification :	M.E.,Ph.D			
Area of Specialization:	Applied Electronics			
Experience :	Industrial Experience		Teaching Experience	
(As on MAY-2025)	1 Year		21 Years	
	No. of workshops attended		No. of FDP attended	
No. of workshop/FDP attended :	9		8	
Publication :	Journal		Conference	
	International	National	International	National
	3	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> <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> </ul>			
	I,NITI Aayog,India for or o			

# **Publications:**

#### **International Journals:**

- Alwin Vinifred Christopher Harish Gnanasambanthan "Enhanced Red Panda Optimization Algorithm for Smart Energy Management in Electric Vehicle Charging at Solar-Powered Charging Station" Energy Storage.Volume-7 Issue-6,Sep-2025, https://doi.org/10.1002/est2.70251
- Subash T D, Subha T D, Janaki Manohar N, 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, Volume-38 Issue-14, Aug-2025, pp 1-14
- 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 OCT2014,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 Muthukumaran 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.

# **Faculty Development Training Programme & Workshops:**

- ➤ 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
- 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
- ➤ 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 March2018.
- ➤ 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 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.
- ➤ 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" 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.