

## PROFILE

Name : L.VIJAYARAJA

Designation : ASST. PROF

Email : vija.yaraja.eee@sairamit.edu.in

Ph No : +91 9884298051

Qualification : B.E, M.Tech, (Ph.D).,

Specialization : POWER ELECTRONICS AND DRIVES

Research Interest : Multilevel Inverter, Renewable Energy, Electric Vehicle

Experience in years : **Teaching**  **Industry**

No. of Workshop/Conferences/  
FDP attended : Workshop  Conferences  FDP

Appreciation/Achievement : 09

No. of Workshop/Conferences/  
FDP Organized : Workshop  Conferences  FDP  Seminar



### Appreciation/Achievement:

1. Invited as a judge for Project Expo “**SAIMAGNICON 2k19**” held at Sri Sairam engineering College on 26.8.2019.
2. Awarded as **Team Mentor in ETWDC 2019** at Bannari Amman institute of Technology, Sathiyamangalam, Tamilnadu.
3. Certificate of Appreciation on being the esteemed member of “**The Confederation of Elite Academicians of IICDC 2019**” powered by AICTE mission, anchored by IIMB@NSRCEL and MyGov.
4. Acted as **JURY MEMBER (Quarter finals round)** in India Innovation Challenge Design Contest (**IICDC 2019**) powered by AICTE mission, anchored by IIMB@NSRCEL and MyGov. <https://innovate.mygov.in/iicdc2019/>
5. Received **Best paper award** from ISTE Ranchi center for the paper presented during 1st International Science Exhibition Congress Symposium (SECS-2020), Ranchi on 12.09.2020 to 13.09.2020. Also honored with “**Dr. Kalyan Singh Yadav Memorial Award**” in Microelectronics Engineering for the paper.
6. Awarded as **Best Team mentor** for the product titled “Learning of Braille Language “at Technology Exhibition 2020 cum Training Program, held at Anna University, Chennai during 27 - 29 February 2020.

7. Certified as **IIC-INNOVATION-AMBASSADOR** for the year 2020 by Ministry of Education and All India Council for Technical Education, New Delhi.

8. Certificate of Appreciation on “**fostering the ecosystem bridging Government, Academia and Industry powered for TI Embedded System Design using MSP430 MCU MooC**” by Texas Instrument in association with All India Council for Technical Education, New Delhi.

9. Received **Best paper award** for the paper entitled “Driving technology in the path of renewable energy-a review” in the International Virtual conference on Robotics, Automation, Intelligent Systems and Energy (IVC-RAISE 2020) held at Department of Mechatronics Engineering, Kongu Engineering College, Perundurai on 15.12.2020.

**Details on Funded Projects:**

1 – Funded by DST, Govt of India under the scheme “Innovation and Entrepreneurship Development” for the product title “Egensor” Year: 2016-2017.

2. Funded by DST, Govt of India under the scheme “Innovation and Entrepreneurship Development” for the product title “Learning of Braille Language” Year: 2018-2019.

Professional Membership	ISTE, SAE, IAENG, AICTSD
Publications	National : 2
	International: 11
	Book Chapter : 2
Achievements	<p>OBTAINED 100% RESULT IN</p> <ul style="list-style-type: none"> <li>• CIRCUIT THEORY</li> <li>• FLEXIBLE AC TRANSMISSION SYSTEM – 3 TIMES</li> <li>• TRANSMISSION AND DISTRIBUTION – 2 TIMES</li> <li>• POWER PLANT ENGINEERING – 3 TIMES</li> <li>• BASIC ELECTRICAL AND ELECTRONICS ENGINEERING</li> <li>• ELECTROMAGNETIC THEORY</li> <li>• POWER ELECTRONICS FOR RENEWABLE ENERGY</li> <li>• POWER SYSTEM TRANSIENTS</li> <li>• MICROCONTROLLER BASED SYSTEM DESIGN</li> </ul>

Any Other Information	<ul style="list-style-type: none"> <li>• IIC-INNOVATION-AMBASSADOR</li> <li>• DEPARTMENT IN CHARGE FOR INNOVATOR CLUB</li> <li>• OVERALL CO-ORDINATOR OF EXAMCELL</li> <li>• OVERALL CO-ORDINATOR OF HEALTH CLUB</li> <li>• DEPARTMENT INCHARGE FOR “INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CELL”. ( till ODD SEM 2017 – 2018 since 2016)</li> <li>• ORGANIZING THREE DAYS “ENTREPRENEURSHIP AWARENESS PROGRAM” PER YEAR FOR OUR DEPARTMENT SINCE 2016</li> </ul>
-----------------------	--

### List of Publications:-

1. Published a paper titled “Simultaneous Ac and Dc Output Using Hybrid Converter Modeling” in International Journals of Power Electronics Controllers and Converter, Vol. 1: Issue 2, JPECC (2015) 1-6.
2. Published a paper titled “Ecofriendly hybrid E Vehicle” in International Journal Of Multidisciplinary Research Centre (IJMRC), ISSN: 2454-3659 (P), Volume I, Issue 4, September 2015.
3. Published a paper titled “Power generation from microbial fuel cell” in International Journal of Analog Integrated Circuits, Vol. 1: Issue 2, JAIC (2015) 10-16.
4. Published a paper titled “Bidirectional intelligent semiconductor transformer” in Journal of Engineering and Fundamentals ISSN: 2149- 0325, Vol. 2(2), pp. 9-16, December, 2015.
5. Published a paper titled “A Review on Multilevel Inverter with Reduced Switch Count” in IEEE XPLORE ISBN: 978-1-5090-1147-6 DOI: 10.1109/ICA-ACCA.2016.7778467.
6. Published a paper titled “Microinverter With High Efficiency Snubber Circuit For A Grid Interactive PV Panel” in International Journal of Creative research Thoughts(IJCRT), Volume 6, Issue 1 January 2018 | ISSN: 2320-2882.
7. Published a paper titled A SOLAR POWERED WATER PUMPING FRAMEWORK USING SWITCHED RELUCTANCE MOTOR in International Journal of Creative research Thoughts(IJCRT), Volume 5, Issue 4 December 2017 | ISSN: 2320-2882.
8. Published a paper titled A KEY MANAGEMENT TECHNIQUE FOR CLOUD STORAGE USING SEMI TRUSTED POLICY PRESERVATION in International Journal of Creative research Thoughts(IJCRT), Volume 5, Issue 4 December 2017 | ISSN: 2320-2882.

8. Published a paper titled “Modified SEPIC Converter Based PV Inverter for Power Quality Improvement” in IEEE XPLORE ISBN: 978-1-5386-2447-0, DOI: 10.1109/ICCPEIC.2018.8525223.
9. Published a paper titled “Improved Source End Power Factor Enhancement of BLDC Motor Using Bridgeless-Landsman Converter” in IEEE XPLORE ISBN: 978-1-5386-2447-0 DOI: 10.1109/ICCPEIC.2018.8525195.
10. Published a paper titled “A New Topology of Multilevel Inverter with Reduced Part Count” in IEEE XPLORE ISBN: 978-1-5386-5586-3 DOI: 10.1109/ICA-ACCA.2018.8609742, <http://www.proceedings.com/47038.html>
11. Published a paper titled “Implementation of Twenty seven level and Fifty one level Inverter using constant voltage sources” in IEEE XPLORE ISBN: 978-1-7281-3185-6 DOI: doi: 10.1109/CHILECON47746.2019.8987978.
12. Published a paper titled “Design of 31-level Asymmetric Inverter with Optimal Number of Switches” in IEEE XPLORE ISBN: 978-1-5386-9543-2 DOI: doi: 10.1109/INCOS45849.2019.8951354.
13. Published a paper titled “Artificial Intelligent Tracing for Inherent Potential Leakage Observance and Control System” in the journal of Test Engineering and Management, ISSN: 0193-4120, Vol no 83, Page No. 7696 – 7701, May – June 2020. <http://testmagzine.biz/index.php/testmagzine/article/view/8707>
14. Published a paper titled “Realization of 485 Level Inverter Using Tri - State Architecture for Renewable Energy Systems”, in Energies, vol no 13, Issue. 6627, Dec 2020, doi:10.3390/en13246627.
15. Published a book chapter “Fog-Computing: A Novel Approach for Cloud-Based Devices Using Perceptual Cloning Manifestation-PerCoINif Taxonomy by Energy Optimization”, Lecture Notes on Data Engineering and Communications Technologies 74, 101.

#### **List of Patents:**

1. Applied a patent under invention title” EGENSOR” Publication Number: 16/2017, Dt 21/04/2017, publication type INA, application number 201741011384, (published online).
2. Applied a patent under invention title” A DEVICE AND METHOD FOR ASSISTING IN SELF-LEARNING OF THEBRAILLE LANGUAGE TO VISUALLY IMPAIRED END USERS” Publication Number: 16/2020, Dt 16104/2020, publication type INA, application number 202041045084, (published online).
3. Applied a patent under invention title” Design of Head light for E-vehicle” Publication no: 350661-001, Dt: 04/10/2021 (published online).

#### **Workshop / Conferences / FDP Attended:-**

1. **ISO Audit Training**, By Creative Management Consultants, At Sri Sairam Institute Of Technology, On 11<sup>th</sup> December 2012.

2. Attended one day Workshop on **“Recent Trends in Renewable Energy”** held on 31.03.2015 at Sri Sairam Institute of Technology.
3. Attended one day FDP on **“A Step Outcome Based Accreditation”** held at Sri Sairam Institute of Technology from 25.06.2015 to 26.06.2015.
4. Attended two days FDP on **“Electromagnetic field theory & Transmission lines”** held at Sri Sairam Institute of Technology from 25.06.2015 to 26.06.2015.
5. Attended one day Online FDP ON **“Circuit simulation / PCB design Using Target 3001 software”** with DellSoft Technologies Pvt. Ltd on 13.07.16
6. Attended International conference on Automatica ICA (IEEE ICS ACCA 2016 Curico, Chile) with paper titled **“A Review on Multilevel Inverter with Reduced Switch Count”** from 19.10.2016 to 21.10.2016. <http://www.proceedings.com/32671.html>
7. Attended 5 days QIP on **“Pulse Width Modulation technique for VSI”** held at Indian Institute of Science, Bangalore from 21st -25th November 2016.
8. Attended two days FDP on **“GREEN and ENERGY EFFICIENT BUILDINGS WITH EMPHASIS ON POWER MANAGEMENT”** at KCG College of Technology on 22.06.2017 & 23.06.2017.
9. Attended seven days FDP on **“EE6801 – Electric Energy generation, utilization and conservation”** at G.K.M college of engineering and technology from 27.11.2017 to 04.12.2017.
10. Attended International conference on **“International Conference on Informatics Computing in Engineering Systems (ICICES - 2018)”** at S.A Engineering college from 21.03.2018 to 22.03.2018.
11. Attended International conference on **“International Conference on Computing of Power, Energy, Information and Communication (ICCPEIC - 2018)”** at Adhiparasakthi Engineering college from 28.03.2018 to 29.03.2018.
12. **ISO Audit Training**, By Creative Management Consultants, At Sri Sairam Institute Of Technology, On 23<sup>rd</sup> April 2018.
13. Attended International conference on **Automatica ICA (IEEE ICS ACCA 2018 Curico, Chile)** with paper titled **“A New Topology of Multilevel Inverter with Reduced Part Count”** from 17.10.2018 to 19.10.2018.
14. Attended one day Workshop on **“DST NIMAT Project facilitation”** held on 19.12.2018 at Sri Venkateswara college of Engineering, Tirupati.
15. Attended one day Workshop on **“Disaster Management and Emergency planning in rural development”** at Dhaanish Ahmed College of Engineering from 27.12.2018 to 28.12.2018.
16. Attended International conference on **“International Conference on “Intelligent Techniques in Control, Optimization and Signal Processing” (INCOS-'19)**

Kalasalingam Academy of Research and Education, Virudhunagar, from 11.04.2019 to 13.04.2019.

17. Attended National conference on “**Innovative Solution in Electrical science Engineering**” at Sri Sairam Institute of Technology from 22.03.2019.
18. Attended 18 days FDP on “**Non Conventional Energy Sources**” held during Jan – April 2019 NPTEL – AICTE course.
19. Attended five days FDP on “**Renewable Energy systems**” at Sri Sairam Engineering from 22.07.2019 to 26.07.2019.
20. Attended five days FDP on “**Artificial Intelligence**” at Sri Sairam Engineering from 05.12.2019 to 11.12.2019.
21. Attended International conference on “**2019 CHILEAN Conference on Electrical, Electronics Engineering, Information and Communication Technologies, Chile**” with paper titled “Implementation of Twenty seven level and Fifty one level Inverter using constant voltage sources” from 29.10.2019 to 31.10.2019, <http://www.proceedings.com/52851.html>
22. Attended ATAL FDP on “**Internet of Things**” from 11.05.2020 to 15.05.2020 at Government college of Engineering, Srirangam, Tamilnadu.
23. Attended Two week refresher program on “**Recent Innovation in Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy**” from 18.05.2020 to 30.05.2020 at Sri Sairam Engineering College, Chennai, Tamilnadu.
24. Attended AICTE sponsored Six days online Short Term Training Programme on “**Smart Grid-Monitoring, Protection and Control**” at R M K College of Engineering and Technology from 20.07.2020 to 25.07.2020.
25. Attended International conference on “**1st International Science Exhibition Congress Symposium (SECS-2020), Ranchi**” with paper titled “Performance study of 81-level inverter using two stage switch ladder circuit” from 12.09.2020 to 13.09.2020.
26. Attended ATAL FDP on “**Electric Vehicles**” from 07.12.2020 to 11.12.2020 at Bhilai Institute of Technology, Durg, Chhattisgarh.
27. Attended “**International Virtual conference on Robotics, Automation, Intelligent Systems and Energy (IVC-RAISE 2020)**” held at Department of Mechatronics Engineering, Kongu Engineering College, Perundurai on 15.12.2020 and presented 4 papers.
28. Attended “**5<sup>th</sup> International Conference (Online) on Renewable Energy Utilization (ICREU-2020)**” organized by Department of Electrical and Electronics Engineering, Coimbatore Institute of Technology, Coimbatore jointly with Oklahoma State University, Stillwater, USA to be held from 16.12.2020 to 18.12.2020 and presented 2 papers.

**Seminar/Workshop / Conferences / FDP Organized:-**

1. Organized three days Entrepreneurship Awareness Camp from 29.08.2016 to 31.08.2016 at Sri Sairam Institute of Technology.
2. Organized three days Entrepreneurship Awareness Camp from 25.09.2017 to 27.09.2017 at Sri Sairam Institute of Technology.
3. Organized one day Workshop on “Innovation & Design Thinking” on 16.12.19 Sri Sairam Institute of Technology.
4. Organized one day seminar on “Machine vision and Industrial automation” on 06.06.2020 Sri Sairam Institute of Technology.