# Sri Sai Ram Engineering College

# **Department of Instrumentation and Control Engineering**

| Dr.B.MEENAKSHI                            |  |  |
|---|--|--|
|   |  |  |
| Professor                                 |  |  |
| M.E, Ph.D                                 |  |  |
| Information and Communication Engineering |  |  |
| Teaching:                                 |  |  |
| UG: 30                                    |  |  |
| PG: 7<br>Industry: 1                      |  |  |
|   |  |  |
| National: 16                              |  |  |
| International: 14                         |  |  |
| National: 03                              |  |  |
| International: 25                         |  |  |
| Attended: 32                              |  |  |
| Organized:4                               |  |  |
| Attended: 7                               |  |  |
| Attended: 6                               |  |  |
| Attended: 24                              |  |  |
| NIL                                       |  |  |
| Achieved 100% result in the following     |  |  |
| Subjects:                                 |  |  |
| Electronics Devices & Circuits.           |  |  |
|   |  |  |

|  | Internetworking Technology              |
|--|---|
|  | Neural Networks & Applications to Power |
|  | Systems                                 |
|  | Electronics Devices                     |
|  | Internetworking Technology              |
|  | Bio medical Instrumentation             |
|  | Electrical energy generation,           |
|  | Utilization and conservation            |
|  | Measurements                            |
|  | and Instrumentation                     |
|  | Electrical energy generation,           |
|  | Utilization and conservation            |

# **EXPERIENCE**

| Name of the Employer                          | <b>Position Held</b>   | Period     |            |
|---|------------------------|------------|------------|
|   |                        | From       | То         |
| Tuticorin Thermal Power<br>Station, Tuticorin | Graduate<br>Apprentice | 15.04.91   | 14.04.92   |
| SeethaiAmmal<br>Polytechnic,<br>Sivaganga     | Lecturer, EEE          | 30.6.93    | 01.03.95   |
| Alagappa Polytechnic, Karaikudi               | Lecturer, EEE          | 19.06.95   | 01.10.96   |
| K.L.N. College of Engg. & Tech.,<br>Madurai   | Lecturer, EEE          | 24.10.96   | 01.06.99   |
| EaswariEngg. College, Chennai                 | Lecturer,EEE           | 19.07.99   | 30.05.2001 |
| Hindustan College of Engineering, Padur       | Lecturer,EEE           | 10.06.2002 | 16.03.2006 |
| Sri SairamEngg. College,<br>Chennai.          | Senior Lecturer        | 17.03.2006 | 31.07.2008 |
| Sri SairamEngg. College,<br>Chennai.          | Assistant Prof         | 01.08.2008 | 31.07.2013 |
| Sri SairamEngg. College,<br>Chennai.          | Associate<br>Professor | 01.08.2013 | 30.11.2013 |
| Sri SairamEngg. College,<br>Chennai.          | Professor, EEE         | 01.12.2013 | Till Date  |

**Ph D THESIS TITLE:** Energy Efficient Traffic Free Routing On Double Cluster Head Wireless Sensor Network Architecture.

**BOOKS PUBLISHED: 1.** Published a book "Transmission lines and networks", AL. Vallikannu, B. Meenakshi, Charulatha Publications, 2003

#### **CHAPTER CONTRIBUTION:**

- 1. Dr. Roopa M **Dr. B. Meenakshi** Dr. D. Karunkuzhali S. Hemavathi, contributed a chapter titled "Artificial Intelligence and Network Security", for the book named "Emerging Technologies in Engineering Research", ISBN: 978-93-5419-211-1(Online)., Ch 21; page: 277-288;Dec 2020.
- 2. T Kalaiselvi, G Valarmathi, V Subashini and **Dr B Meenakshi**, contributed a chapter titled "Neural Networks", for the book named "Emerging Technologies in Engineering Research", ISBN: 978-93-5419-211-1(Online)., Ch 21; page: 346-354;Dec 2020.
- 3. Arun Kumar Pallekonda, S Muthukrishnan, **B Meenakshi**, R Saravanan, contributed chapter titled "Creating Cost effective Network of operational resources for Wireless Networks" for the book named, "Cloud Computing with wireless Network and Pattern Recognition" ISBN: 978-81-952585-3-6, Ch 16; pg 85-89;June 2021.
- 4. Dr. C. Priya, Ms B. Umamaheswari, **Dr. B. Meenakshi**, Mr. BarathKanna. C contributed a chapter "CUTTING EDGE TECHNOLOGIES IN HEALTH AND ALLIED SCIENCE" in ESN PUBLICATIONS, ISBN No. 978-93-95196-81-9, book titled SAFETY SYSTEMS IN INDUSTRIES, pp.29-48.

**FUNDED PROJECT**: 1. Received fund of Rs. 100,000/- from DST-IEDC & SAIRAM IEDC for project titled "CAPACITIVE DEIONIZATION BASED WATER DESALINATION SYSTEM USING AN MPPT BASED SOLAR CHARGE CONTROLLER" for 2014-15 academic year.

2. Received fund of Rs. 10000/- from Tamilnadu State Council For Science and Technology (TNSCST) for the project titled "Solid and liquid waste disposal management using MANET powered GIS" for 2017-18 academic year.

#### **CONSULTANCY:**

1. Completed consultancy work titled "Power quality Improvement using PWM Active filters" for NIN energy India pvt limited, Chennai, and received consultancy amount Rs 20,000/-. Project duration Sept 1st, 2021 to 31.01.2022.

## **PATENTS:**

- 1. Published a patent on **Design, Development and Fabrication of Semi-Automatic Hydraulic Emergency Braking System** on 6.12.2019. [201941048055]
- 2. Published a patent on Secured Intelligent Vehicular Systems Using Wireless Sensor Networks on 4.09.2020. [202041034715]
- 3. Patent grant received for Cooperative Sensing, Communication and Control of IoT Network using Machine Learning Algorithms on 23.12.2020. [2020102663]
- 4. Published patent on **Rainfall tracking device using IoT** on 09.04.2021. [202131010625]
- 5. Published patent on **Design of Pulse Oxygen Meter Using IoT** on 28.01.2022 [202141060100]

- 6. Published patent on **Automatic Retrieval Of Electronic Products Using Artificial**Intelligence System on 11.02.2022 [202241005975]
- 7. Published patent titled," **Automatic Traffic Clearance System For Ambulance & Fire Service Vehicle Using Iot Techniques**", Application number: 202241019232 A, date of publication: 15/04/2022.
- 8. Published patent titled," **Design And Implementation Of The Inventory Management System**", Application number: .202341034506 A, date of publication: 16/06/2023.
- **9.** Published patent titled,"**Automated Inspection System For Bearing Caps**", Application number: ..202441006695 A, date of publication: 01/03/2024.
- 10. Published patent titled,"Analyzing The Impact On The Transmission Medium By Broadcast Packets", Application number: .202421031598 A, date of publication: 17/05/2024.
- 11. Published patent titled," PROCESS OF DESIGNING SMART GLOVES FOR AUTISM SPECTRUM DISORDER USING EMBEDDED SYSTEM ", Application number: 202441063664 A, date of publication: 30/08/2024.
- 12. Published patent titled," IOT ENABLED AUTOMATED SYSTEM FOR LOADING AND UNLOADING GUNNY BAGS IN WAREHOUSES ", Application number: 202441067645 A, date of publication: 13/09/2024.
- **13.** Published patent titled,"AUTO DETECT SEGREGATOR ", Application number: No.202441075632 A, date of publication: 18/10/2024.

**INDUSTRIAL TRAINING:** Completed industrial training in IPL, Thirumudivakkam from 6/6/2022 to 11/6/2022.

#### MEMBERSHIP IN PROFESSIONAL BODY:

- 1. Associate member in **Institution of Engineers.** (AM084688-3)
- 2. Fellow member in The Institution of Electronics and Telecommunication Engineers. (F-228060)
- **3.** Member of IACSIT(International Association of Computer Science and Information Technology) Member No. **80344629**
- 4. Senior Member In IEEE society. Member of IEEE HKN, IEEE-WIE affinity group, EDS, PELS, PES, Photonics, IEEE BTS, IEEE VTS, IEEE NPSS, IEEE Nano Technology council, IEEE Sensors council, IEEE Systems council, IEEE Tech ethics community, IEEE smart grid community, IEEE Smart cities community, IEEE Public safety and technology community, IEEE IoT community, IEEE Biological, Artificial and Hybrid Intelligence, IEEE Computer Society Task force, IEEE Bio inspired Computing IEEE computer society special Technical Community, IEEE Bio Nanotechnology &Bio MEMS, IEEE computational life sciences and IEEE SIGHT. Adviser for IEEE, WIE affinity group for Sri Sairam Engineering College. Member no. 94327133.
- 5. Member in ISTE, **LM-131478**
- 6. Senior Fellow Member in **SIESRP** (The Society of Innovative Educationalist and Scientific Research Professional), Chennai, Regd. No. **LMSF220610295**

#### **GLOBAL RECOGNITION:**

- 1. Received **Dr APJ Abdul Kalam Award** for Scientific Excellence, 2019 from Marina Labs research and development.
- 2. Received "DISTINGUISHED PROFESSOR AWARD", from SEEE (Society for

- Engineering Education Enrichment) Awards 2020.
- 3. Received "Academic Excellence award" for the year 2020-2021 from Technical research publications in the year 2021.
- 4. Received "Innovative Research and Excellent Professional Achievement Award" for the year 2022 from The Society of Innovative Educationalist and Scientific Researchers Professional, Chennai.
- 5. Received Best Innovator- Student Project award for the year 2022 from Sri Sairam Engineering College, Chennai.
- 6. Received Certificate of Appreciation from Sharda University for mentoring a team in 5th Technovation Hackathon themed on Smart Health, Agriculture and Hygiene from 30th Jan to 5th Feb 2023.
- 7. Received certificate of Appreciation from IETE, Chennai centre for outstanding contribution towards research activities, Industrial projects, organizing events, collaboration with professional bodies on 28th september, 2023.
- 8. Received IEEE India Council Award- Outstanding WIE professional volunteer of the year 2023.
- 9. Received best paper award for presenting paper titled, "Artificial Intelligence Enhanced Plant and Soil Monitoring System" in a First International Conference on Intelligent Computing and Control for Engineering & Business Systems, 2023.
- 10. Graduated as IEEE VOLT 2023
- 11. Received certificate of appreciation for top performing mentor from NPTEL for Computer Networks and Internet Protocols Subject during Jan-Apr 2024.
- 12. Received Best Faculty Mentor Award 2024 from The Institution of Engineers (India), Hosur Local Centre, at Adhiyamaan College of Engineering, Hosur, on 19-20 Mar, 2024.
- 13. Received Outstanding Faculty Award -2024 from IETE, Madras section.
- 14. Received certificate of participation in ATAL Tinkerpreneur 2024.
- 15. Served as Session chair in International IEEE Conference ICPECTS-2024.
- 16. Received Faculty mentor certificate for guiding project in Niral Thiruvizha-2024 from Tamil Nadu Skill Development Corporation.
- 17. Received certificate appreciation from LEAP, IITM incubation cell for guiding student project "FAIT- Farming using AI Technology" from Feb 2023 to March 2024.
- 18. Received certificate of appreciation for top performing mentor from NPTEL for Introduction to Internet of Things Subject during Nov-Dec 2024.
- 19. Received NPTEL STAR Certificates as NPTEL Beleiver, NPTEL Motivated Learners and NPTEL Discipline Star in Computer Science discipline for Jul-Dec 2024.

## **Resource Person:**

- 1. Editorial board member for Scienxt Journal of Emerging Technologies in Electronics Engineering from Sept 2023.
- 2. Resource person for Seminar on "Journal and project proposal writing", conducted by AIDS department, Sri Sairam Engineering college, on 19th Aug 2022.
- **3.** Editorial board member in The Society of Innovative Educationalist and Scientific Researchers Professional, Chennai.
- **4.** Delivered lecture on Analog Electronics in the FDP conducted by Valliammai Engineering College on 27th June 2022.
- 5. Judge for speech competition Eloquent Expressions opportunities for Girls/ Women in Education conducted by Sri Sairam Institute of technology, IEEE-WIE affinity group on 8th March 2022.
- **6.** Reviewer and Session chair for IEEE International conference (IC3IoT2022) conducted by ECE department, Sri Sairam Engineering College on 11th March 2022.

- 7. Received "Most Consistent mentor" of ATAL Tinkerpreneur in the year 2021.
- **8.** Delivered lecture about **NBA-** Criterion 2 under Margadharshan scheme to New Prince Bhavani College of Engineering, Chennai on 2<sup>nd</sup> April 2021.
- **9.** Served as Session chair for **NCSICC21** conducted by department of Computer Science, Sri Sairam Engineering College, Chennai.
- **10.** Delivered lecture on "**Transmission Layer Protocols and congestion control algorithms**" to the students of Panimalar Engineering College, dated .01.10.2020.
- 11. Delivered lecture on "Underground cables" in the FDP on "Transmission and distribution" held at Valliammai Engineering College, dated 11.1.19 to16.11.19.
- **12.** Delivered lecture on "**Geo thermal power**" in the ISTE sponsored FDP on "Renewable Energy Systems" held at Sri Sairam Engineering college, dated 22.07.19 to 26.07.19.
- **13.** Delivered lecture on "Underground cables" in the Anna University sponsored FDP on "Transmission and distribution" held at Sri Sairam Engineering College, dated 3.12.18 to 15.12.18.
- **14.** Delivered a Guest Lecture on "**Transducers & Its Application**" on 23.03.2017 at Velammal Engineering college.Delivered lecture on "**Performance analysis using MAGNET software**" in the FDP on "Electrical Simulation Software", held at Sri Sairam Engineering college, dated 6.11.17 to 10.11.17.
- **15.** Delivered lecture on "**Energy Efficiency in Wireless Network**" in the "ISTE sponsored Short Term Training programme on Recent trends and Research issues in Wireless Communication" conducted by ECE department in Sri Sairam Engineering College dated 3<sup>rd</sup> August to 8<sup>th</sup> August2015.
- **16.** Served as session chair in ICoAC-13 International conference conducted by Computer Science department, Madras Institute of Technology, Chennai.
- 17. Served as session chair in ICCCT-15 International conference conducted by IT department at Sri Sairam Engineering College, Chennai.
- **18.** Served as judge for Techxibit-15 mini project exhibition conducted by ECE department at Sri Sairam Engineering College, Chennai.
- 19. Served as reviewer for IATMSI-2022, IEEE conference conducted by IIITM, Gwalior.
- **20.** Served as research advisory committee member for research scholar in St peter's Institute of higher education and research.
- **21.** Served as Track Jury for an event ELITECCOM 2024 organized by the IETE Chennai Centre on 24th Feb 2024.
- **22.** Served as Track Jury for an International Conference INSES2024 organized by Loyola ICAM Engineering and Technology, Chennai on 22nd Mar 2024.
- **23.** Served as Track Jury for an International Conference ICPECTS2024 organized by Sri Sairam Engineering College, Chennai on 9th Oct 2024.

#### **RESEARCH PUBLICATIONS:**

## INTERNATIONAL JOURNAL

- 1. **B Meenakshi**, P Anandhakumar, "Fuzzy Based Energy Efficient Clustering Technique for ZigBee(802.15.4) Sensor Networks, EJSR, Vol80, No.1,pp93-108,2012
- 2. **B.** Meenakshi and P. Anandhakumar, "Cluster Based Time Division Multiple Access Scheduling Scheme for Zigbee Wireless Sensor Networks", Journal of computer science, Science

publication Australia, Vol.8, No. 12, pp. 1979-1986,2012.

- 3. **B. Meenakshi** and Anandhakumar, P. "Traffic Free Routing Using Path Load Factor in Wireless Sensor Networks", Information Technology Journal, Science Alert publication, Vol. 12, No. 5, pp. 1050-1054.
- 4. **B Meenakshi** and D Karunkuzhali, "Cluster Based Routing Architecture Using PSO for Zigbee Mobile Wireless Sensor Networks", Asian Journal of Information Technology, Vol. 15, no. 22, pp. 4489-4499, ISSN:1682-3915, Medwell Journals, 2016.
- 5. **B Meenakshi,** Ashwin.R, Harikrishnan.P.M and Manikandan.R, "Design And Implementation For Efficient Power Distribution Using Feeder Automation", Solid State Technology, Vol 63, No.6, 2020.
- 6. Bhuvana Suganthi D, R. Jaichandran, P. Shyamala Bharathi, **B. Meenakshi**, A. Anushya and V. Brindha Devi, "The Defense Against Jamming Attack in Cognitive Radio Networks: Energy Efficiency Management Perspective", Microprocessors and Microsystems; Eleseveir ; <a href="https://doi.org/10.1016/j.micpro.2020.103816">https://doi.org/10.1016/j.micpro.2020.103816</a>, Vol 82, Apr 2021.
- 7. Dr.D.Karunkuzhali, **Dr B Meenakshi**, Keerthi Lingam, "OQR-SC: An optimal QoS aware routing technique for smart cities using IoT enabled wireless sensor networks", Wireless personal communications; Springer; https://doi.org/10.1007/s11277-022-09725-8, June 2022.
- 8. S Muthukrishnan, Arun Kumar Pallekonda, R Saravanan, B Meenakshi, "Fault Detection in the Wind Farm Turbine Using Machine Learning Based On SVM Algorithm ", Journal of Physics: Conference Series, 1964 (2021) 052015, doi:10.1088/1742-6596/1964/5/052015.
- 9. Arun Kumar Pallekonda , S. Muthukrishnan , B. Meenakshi , R. Saravanan, "Intelligent MPPT Control for Wind Energy Conversion Systems Based on Reinforcement Learning", Journal of Physics: Conference Series 1964 (2021) 042076 IOP Publishing doi:10.1088/1742-6596/1964/4/042076.
- 10. Dr.D.Karunkuzhali, **Dr B Meenakshi**, Keerthi Lingam, "An Adaptive Fuzzy C Means With Seagull Optimization Algorithm for Analysis of WSNs in Agricultural Field With IoT", Wireless personal communications; Springer, https://doi.org/10.1007/s11277-022-09801-z,June, 2022.
- 11. V. Subedha, **B. Meenakshi**, B.R.Shyamala Devi,R. Vallikannu," Enhanced Adaptive Geographics Positioning system for MANET Optimization", Neuroquantology, DOI Number: 10.14704/nq.2022.20.10.NQ55494, Vol.20, No.10, pp. 5160-5171, Aug 2022.
- 12. **B. Meenakshi,** Murugananth Gopal Raj, C. Pradipand N Saju., "Improvement of Power Quality in Grid System Based on Zeta Converter Integrated with PV Supply", AIP Conference Proceedings, <a href="https://doi.org/10.1063/5.0110684">https://doi.org/10.1063/5.0110684</a>, Oct 2022.
- 13. **B. Meenakshi** and D.Karunkuzhali, "Enhanced Elman spike neural network for cluster head based energy aware routing in WSN", <a href="https://doi.org/10.1002/ett.4708">https://doi.org/10.1002/ett.4708</a>, Transactions on Emerging Telecommunications Technologies, Wiley Online Library, Vol 34, No. 3, March 2023

- 14. **B. Meenakshi,** D.Karunkuzhali and Syed Muqthadar Ali "Blockchain-enabled joint trust (RF-AOA-HTSA) algorithm-based multiobjective clustering protocol for wireless sensor network", <a href="https://doi.org/10.1002/cpe.7860">https://doi.org/10.1002/cpe.7860</a>, Concurrency and Computation Practice and Experience, Wiley Online Library, 2023.
- 15. **B. Meenakshi,** D.Karunkuzhali," Enhancing cyber security in WSN using optimized self-attention-based provisional variational auto-encoder generative adversarial network", <a href="https://doi.org/10.1016/j.csi.2023.103802">https://doi.org/10.1016/j.csi.2023.103802</a>, Computer Standards & Interfaces, VOI. 88, March 2024.
- 16. D. Karunkuzhali1, B. Meenakshi and Keerthi Lingam,"A QoS-aware routing approach for Internet of Things-enabled wireless sensor networks in smart cities", Multimedia Tools and Applications <a href="https://doi.org/10.1007/s11042-024-18125-v">https://doi.org/10.1007/s11042-024-18125-v</a>, Springer, June 2024.

#### National Journal

- 1. **B Meenakshi**, P Anandhakumar, "A Novel Energy Efficient Surface water Wireless Sensor Network Algorithm" IndJCSE, vol.3,Issue 3, pp 494-505,2012.
- 2. **B Meenakshi**, P Anandhakumar, "Optimization of Energy Consumption by Fuzzy Based Routing In Wireless Sensor Network", IOSRJECE, ISSN: 2278-2834 Volume 2, Issue 1 (July-Aug 2012), PP.31-35.
- 3. Anjana, V., Amodini, A.T., Sowmiya, S. and **Meenakshi, B.** "Brain Wave Based Authentication System Using Self Powered Sensors", Proc. Of 6th International Academy Conference on Electrical, Electronics and Computer Engineering, (IACEEC-2013), pp. 43-47. ISBN:978-93-82702-31-3.
- 4. **Meenakshi, B.** and Anandhakumar, P."An Overview of Energy Efficiency in Wireless Sensor Network for Surface Water Applications", SSEC-Tech Journal, ISSN 0975- 2846,Vol.10, pp. 26- 32,2012.
- 5. P.NagalakshmiKanna, **Dr.B.Meenakshi**, "Design and Implementation of DC- DC/AC Non-Inverting Cuk Converter using Sliding Mode Control", International Journal of Scientific & Engineering Research, Vol. 5, No. 12, pp. 65-71, ISSN 2229-5518, December- 2014
- 6. **Dr. B Meenakshi**, C AnuPriya and P Anusundari, "A Novel Energy Management System In An Electric -Electric Hybrid Vehicle By Utilisation Of Back Emf Of Dc Motor", IJISET International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 7, July2015.
- 7. **Dr. B Meenakshi,** Rahul Kumar and R.Ramprakash, "Twenty Five Level Inverter by Cascading Of Two Transformers for AC Drives", IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE), Volume 11, Issue 4, PP 44-49,2016.

- 8. N. Pranau, T. Raghuraman, S. V. Vishnuguhan and **Dr. B. Meenakshi**, "Load Monitoring and Detection of Tampering in Power Lines Using Internet of Things (Iot) ", IOSRJournalofElectricalandElectronicsEngineering(IOSR-JEEE)e-ISSN:2278-1676,p-ISSN: 2320-3331, Volume 12, Issue 2 Ver. II (Mar. Apr. 2017), PP 42-45.
- 9. Dr.B.Meenakshi, Pavithraa.R, RengaPreethi.N.S ,Afreen.S and Nivetha.C, "Microcontroller Based Automatic Control Of Generating Transformer 250 Mva Cooling System", ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-5, ISSUE-4,2018.
- 10. T Porselvi, **B Meenakshi**and S Sairam,"Comparison of THD values of seven level CHB invertor with single DC sourcefor various multi carrier PWM techiniques", JETIR, ISSN-2349-5162, Vol.6, No.5, pp. 509- 515, May2019.
- 11. **Dr B Meenakshi**, Dr T Porselvi, C R RajaVignesh, S Venkataraju and S Swaminathan, "Artificial Intelligence- Smart Energy Distribution and Management system for small autonomous photo voltaic systems", IJERCSE, Vol.6,No. 7, ISSN(online)-2394-2320, pp.162-170,2019.
- 12. **B Meenakshi**, R Sivaprasad, R Sowndarya, R Srinithi and K Thejeswini, "Tetrapod Automaton in the shamble's Management with the Fish Eye Lens Pi Cam", IJRTE, Vol. 8, No.5, pp. 3461-3464, Jan 2020.
- 13. **B Meenakshi**, S Shrividhyaa, R Vallikannu and Anukumari, "Design of Safety Control for Gas Turbine Using PLC and SCADA", Test Engineering & Management, ISSN 0193-4120, Vol.83, pp, 12653-12662, Mar-Apr2020.
- 14. Dr. T. Porselvi, K. Shivani Gopika, R. Oviya, **Dr. B. Meenakshi**, K. Priyadarshini, "Analysis and Simulation of Four Quadrant Chopper Fed DC Motor Drive", Studies in Indian Place Names, ISSN: 2394-3114 Vol 40 issue 3 (s1) February 2020.
- 15. **Dr B Meenakshi**, Dr T Porselvi, R Sivaprasad and Vaishnavi.J, "Design Of Fully Autonomous Energy Harvesting System For Treadmill Application", ISSN: 2394-3114, Vol 40 issue 40 (s1) March 2020.
- 16. R. Sivaprasad, **Dr. B. Meenakshi**, S. Sai Ganesh Ram, S. Sivachidambaram and S. Veeramani, "Automated Hand Sanitizer Dispenser Integrated with Contactless Temperature Gun and Pulse Oximeter", Turkish Journal of Computer and Mathematics Education, Vol.12, no. 11(2021), pp. 3306-3316

- **1. B Meenakshi**, P Anandhakumar, "Lifetime extension of Wireless Sensor Network by selecting two Cluster Heads and hierarchical routing", Proceedings of the International Conference on Advances in Computing, Communications and Informatics (ICACCI'2012), ACM Digital Library, ISBN:978-1- 4503-1196-0, doi:10.1145/2345396.2345598, Aug 2012.
- **2. B** Meenakshi, P Anandhakumar, "Double Cluster Head analogy for wireless sensor network", proceedings of International conference organized by Prathyusha Institute Technology and Management, Date: 24th, 25th Jan2012.
- **3.** KannaP.Nagalakshmi, **B.Meenakshi**, "Analysis and design of DC-DC/AC non isolated cuk converter using sliding mode controller", International Conference on Circuit, Power and Computing Technologies, vol., no., pp.1,8, 19-20 March 2015, doi: 10.1109/ICCPCT.2015.7159294.
- **4. Dr. B Meenakshi**and M Yamuna, "Design And Analysis Of Standard Structure Converter For Solar Photovoltaic Applications", presented paper in IEEE sponsored FIFTH International Conference on Computing of Power ,Energy & Communication, ICCPEIC -2016, on April 20<sup>th</sup> and 21<sup>th</sup> 2016 Organized by Adhiparasakthi Engineering College, Melmaruvathur,kanchipuramdistrict.(<a href="http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7557265&isnumber=7557193">http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7557265&isnumber=7557193</a>)
- **5.** Reni Clenitiaa.F, Preetha.G.S ,Ilakya.E and **Dr.B.Meenakshi**," Enhanced Digital Energy Meter" , International Conference on Computation of Power,Energy, Information and Communication (ICCPEIC), 978-1-5090-4324-8/17/\$31.00 ©2017 IEEE,2017.
- **6.** K.Keerthana and **Dr.B.Meenakshi**," A Novel Technique Of Buck And Boost Operation Combined Grid-Tied Inverter With Pi Controller", International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC) , 978-1-5090-4324-8/17/\$31.00 ©2017 IEEE,2017.
- **7. Dr B Meenakshi**, C.Singaravel and E.Vignesh, "Development Of Prototype Spectacles For The Blind With Digital To Voice Conversion Device", International Conference On Power, Energy, Control And Transmisson Systems 2018 (ICPECTS). 978-1-5386-3817-0/18/\$31.00 ©2018IEEE
- **8. Dr B Meenakshi**, RengaPreethi.N.S, Pavithraa.R, Nivetha.C and Afreen.S, "Solid And Liquid Waste Management Using Solar Powered MANET And GIS", International

- **9. Dr B Meenakshi**, Afreen.S, Nivetha.C, Pavithraa.R, and RengaPreethi.N.S, "Solar Charging For Inverter By Tracking And Monitoring The Solar Cell Parameters" International Conference On Power, Energy, Control And Transmisson Systems 2018 (ICPECTS).
- **10.** A.Mohamed Abbas, S. Vimal, U. Maheswaran, T. Porselvi, **B. Meenakshi**, "Application of IoT for Counterfeit Prevention in Fast Moving Consumer Goods", I3CAC 2021, June 07-08, Chennai, India Copyright © 2021 EAI DOI 10.4108/eai.7-6-2021.2308794.
- 11. K Sureshkumar, Murugananth Gopal Raj, M Selvi, D Karunkuzhali, **B Meenakshi**, "Storage Capabilities in Underwater Wireless Sensor Networks for Energy Balancing and Channel Alignment", I3CAC 2021, June 07-08, Bharath University, Chennai, India, DOI 10.4108/eai.7-6-2021.2308763
  - **12. Dr B Meenakshi**, G Jayaprakash, N Logeswari, "PV System based Zeta Converter with Three-Phase Inverter For High-Speed BLDC Motor Applications", I3CAC 2021, June 07-08, Bharath University, Chennai, India, DOI 10.4108/eai.7-6-2021.2308856
  - **13.** R Vallikannu, **B Meenakshi**, Venkata Subash, Basha and Chandrakiran Kumar, "Automated Rocker Rover for Terrain Surface Surveillance", MicroElectronics and Telecommunication Engineering, Proceedings of 4<sup>th</sup> ICMETE 2020, Springer conference, <a href="https://doi.org/10.1007/978-981-33-4687-1">https://doi.org/10.1007/978-981-33-4687-1</a> 22, Jan 2021.
  - **14. Dr B Meenakshi**, Balaganesh .S.G., Naveeth Suraj Ahammed.A, Sunandhaa V, Sathish Kumar.P presented paper , "Designing And Commissioning Of Heat Pumps For Hybrid Heating And Cleaning Of Coaching Equipments Using Solar Panels", in the International conference conducted by SRM Institute of Science and Technology, ITDECC-21 from 17 to 18 May, 2021.
  - 15. Dr T Porselvi, J Shalinipriya, Jeyshree and **Dr B Meenakshi,** "PV based Multilevel Inverter with 15 Levels using Pod Control Method", International Conference on Communication, Computing & Internet of Things (IC3 IoT 2022) held on 10 & 11 of March 2022.
  - 16. **Dr B Meenakshi,** R Sivaprasad, Dr T Porselvi, V Sunandha and T Janani, "Designing And Commisioning Of Heat Pumps For Hybrid Heating And Cleaning Of Coaching Equipments Using Solar Panels", International Conference on Communication, Computing & Internet of Things (IC3 IoT 2022) held on 10 & 11 of March 2022.
  - **17. B.Meenakshi**, Deepa M, L.Kurinjimalar, T.Porselvi, R.SivaPrasad, and Selvapriya V, "Grid connected single-stage multiport inverter with two independent source", ICPECTS Conference Proceedings, Dec, 2022.

- **18. B Meenakshi**, Aouthithiye Barathwaj SR Y, Haariharan N C, Krishnakanth L and Abishek J, "Animal Intrusion Detection and Ranging system using YOLOv4 and LoRa", ICPECTS Conference Proceedings, Dec, 2022.
- 19. L.Kurinjimalar, S.Pooja, R.Sivaprasad, **B.Meenakshi** J.Shalini Priya and T.Porselvi, "Design and Analysis of Fifteen Level Inverter for Renewable Applications", ICPECTS Conference Proceedings, Dec, 2022.
- 20. J.Shalini Priya, M.Karthikeyan, S. Thennarasu, **B.Meenakshi**, M.Hemalatha and R.Sivaprasad, "Voice Based Motile Video Surveillance System With Violence Detection", ICPECTS Conference Proceedings, Dec, 2022.
- 21. R.Sivaprasad, T.Mahalakshmi, **B.Meenakshi,** T.Porselvi, L Kurinjimalar and J.R Manasa, "Modified Bridgeless Landsman Converter Fed EV Battery Charger Power Factor Improvement", ICPECTS Conference Proceedings, Dec, 2022.
- 22. Sivaprasad R, K Prathiba Nandhi , Shriranjani. J, **B.Meenakshi**, Abinaya. R and Shalinipriya J, "Aegis Surtout", ICPECTS Conference Proceedings, Dec, 2022.
- **23. B** Meenakshi, R Sivaprasad, Abishek J, Soumya M, Eniyan S, Harish M," Automatic Object And Crack Detecting System Using IoT", ICPECTS Conference Proceedings, Dec, 2022
- 24. T.Porselvi, Srividhya S, Kurinjimalar L, **Meenakshi B**, Sivaprasad R and Sai Ganesh CS, "Intelligent Wireless Charging Station for EVs with Integrated PV Power Grid System", ICPECTS Conference Proceedings, Dec, 2022
  - 25. K.Prathibanandhi, **B.Meenakshi**, T.Porselvi, R.Azhagumurugan, V.Chithra and V.Malini, "Design and Development of PV Powered Integrated DC DC Converter Fed Multilevel Inverter for Standalone Application ", International Conference on Future Trends in Smart Communities (ICFTSC2022), ESTCON 2022, Dec 1-2, Held at Universiti teknologi, Petronas.
  - 26. **Dr B Meenakshi**, Dr B Gopi, Dr L Ramalingam, Dr A Vananthi, Dr S Sangeetha and S Murugan, "Wireless Sensor Networks for Disaster Management and Emergency response using SVM Classifier", International Conference on Smart Technologies for Smart Nations, Conducted by AMITY Global Institute, Singapore, pp 647-651, Aug 18-19, 2023.https://doi.org/10.1109/SmartTechCon57526.2023.10391435
  - 27. **Dr. B.Meenakshi,** Ms N Logeswari, Mr R Sivaprasad, Brindha J, Janani N and Gokula Subashree N, "Automated Sensing Cleaner", First International Conference on Intelligent Computing and Control for Engineering & Business Systems, 2023 held at Sri Sairam Engineering College. https://doi.org/10.1109/ICCEBS58601.2023.10448676
  - 28. **Dr. B.Meenakshi,** Dr B Sumathy, Aouthithiye Barathwaj SR Y, Haariharan N C, Krishnakanth L and M Soumya `` Artificial Intelligence Enhanced Plant and Soil Monitoring Systems", First International Conference on Intelligent Computing and Control for Engineering & Business Systems, 2023 held at Sri Sairam Engineering College. https://doi.org/10.1109/ICCEBS58601.2023.10449202 29. VG Sivakumar, C Balakrishnan, Dr N Arunfred, **Dr B Meenakshi,** Dr Anusha N and S Sujatha " A gradient Boosting Algorithm to predict Energy Consumption for Home Appliancess", in 2nd

- International IEEE Conference on Computer, Communication and Control, during Feb 8-10, 2024, conducted by Medicaps University, Indore. https://doi.org/10.1109/IC457434.2024.10486226
- 30. Hanumaji Kantari, M. Vadivel, Pavithra Jagadeesan, Dr. T. J. Nagalakshmi, **Dr B Meenakshi** and Dr. S. Velmurugan" Speed and Torque Optimization of Motor Drive Through Intelligent Control Approaches", in the International Conference on Automation and computation (AUTOCOM-2024) during 14th to 16th March 2024, conducted by Graphic Era Hill University, Dehradun. https://doi.org/10.1109/AUTOCOM60220.2024.10486185
- 31. Ramakrishnan Raman, Hanumaji Kantari, Atul A Gokhale, K. Elangovan, **B. Meenakshi** and S. Srinivasan, "Agriculture Yield Estimation Using Machine Learning Algorithms", in the International Conference on Automation and computation (AUTOCOM-2024) during 14th to 16th March 2024, conducted by Graphic Era Hill University, Dehradun.
- 32. Dr. V. Vidya lakshmi, Giriprasad. S , S P Vimal, Hanumaji Kantari, **Dr. B Meenakshi** and Dr. S. Srinivasan, "Wind Power Forecasting with Support Vector Machines using Sparrow Search Algorithm", in 2nd International Conference on Computer, Communication and Control (IC4), conducted by Medi Caps Universoty, Indore, Feb 8-10, 2024. https://doi.org/10.1109/IC457434.2024.10486697
- 33. V Dhayalan, Ramakrishnan Raman, N Kalaivani, Ankit Shrivastava, Ramireddy sasidhar Reddy, **B Meenakshi**, "Smart Renewable Energy Management Using Internet of Things and Reinforcement Learning", in 2nd International Conference on Computer, Communication and Control (IC4), conducted by Medi Caps University, Indore, Feb 8-10, 2024.https://doi.org/10.1109/IC457434.2024.10486637
- 34. A. Kathija Nasreen, Dr. M. Shenbagapriya, Senthil Kumar Seeni, Dr. Parthiban Veda, **Dr. B. Meenakshi** and S. Murugan, "Robotic Restroom Hygiene Solutions with IoT and Recurrent Neural Networks for Clean Facilities", in International Conference on Inventive Computational Technologies 2024. https://doi.org/10.1109/ICICT60155.2024.10544900
- 35. P. Santhuja, C. Selvi, Dr. C. Jehan, Dr. S. Aghalya, **Dr. B Meenakshi** and Mathivanan K, "Automotive CAN-Based Intelligent Collision Avoidance System using Machine Learning and Cloud Computing ", in International Conference on Inventive Computational Technologies 2024. https://doi.org/10.1109/ICCSP60870.2024.10543544
- 36. E.Sudhakar, J.Thamilselvi, Logeswari.N,B.Meenakshi and K.Subhashini, "Leakage Detection Monitoring in Underground Pipes Using ZigBee in Wireless Sensor Networks", in International Conference on Communication, Computing and Internet of Things (IC3IoT-2024) conducted by Department of ECE, Sri Sairam Engineering College.https://doi.org/10.1109/IC3IoT60841.2024.10550316.
- **37.** M. Shafiya Banu, Arshadh Ariff Mohamed Abuthahir Riazulhameed, R. Mohandas, D. Antony Joseph Rajan, B. Meenakshi, and Dr. N. Mohankumar," Cloud based Intelligent Nutrient Management System for Precision Agriculture using CNN", in 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS 2024), conducted by The Northcap University, Gurugram, Aug 21, 2024. <a href="https://doi.org/10.1109/ICSCSS60660.2024.10624911">https://doi.org/10.1109/ICSCSS60660.2024.10624911</a>
- 38. D. Chandrakala, Chitra Sabapathy Ranganathan, E. Swarnalatha, Dr. R. C. Karpagalakshmi, B. Meenakshi, and Dr. S. Srinivasan," Enhancing Data Security in Cloud-Based Soil Carbon Sequestration Monitoring Systems Using Random Forest Regression", in 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS 2024), conducted by The Northcap University, Gurugram, Aug 21, 2024. https://doi.org/10.1109/ISCS61804.2024.10581090

- 39. P. Santhuja, C. Selvi, Dr. C. Jehan, Dr. S. Aghalya, Dr. B Meenakshi, and Mathivanan K, "Automotive CAN-Based Intelligent Collision Avoidance System using Machine Learning and Cloud Computing", 10th International Conference on Communication and Signal Processing (ICCSP), June 8th, 2024, by SRM University. https://doi.org/10.1109/ICCSP60870.2024.10543544
- 40. A. Kathija Nasreen, Dr. M. Shenbagapriya, Senthil Kumar Seeni, Dr. Parthiban Veda, Dr. B Meenakshi, and S. Murugan, "Robotic Restroom Hygiene Solutions with IoT and Recurrent Neural Networks for Clean Facilities", 10th International Conference on Communication and Signal Processing (ICCSP), June 8th, 2024, by SRM University. https://doi.org/10.1109/ICICT60155.2024.10544900
- 41. U. Kavitha, M. Pattnaik, S. Jayaprakash, Y. S, G. Ponnaian and B. Meenakshi, "Data-Driven IoT Smart Refrigerators for Medication Storage with Deep Learning Analytics," *2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI)*, Coimbatore, India, 2024, pp. 467-472, doi: 10.1109/ICoICI62503.2024.10696129.
- 42. A. S. Anselin Nisha, N. Venkatesvara Rao, G. Venkatesh, S. S. S. S. Murugan and B. Meenakshi, "Efficient Congestion Management Through IoT Driven Road User Charging Systems with Reinforcement Learning," 2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI), Coimbatore, India, 2024, pp. 431-436, doi: 10.1109/ICoICI62503.2024.10696785.
- 43. C. Raghuram, S. Roychoudri, C. Viswanathan, C. Chandru Vignesh, G. Ponnaian and B. Meenakshi, "Automated Detection and Prediction of Hospital-Acquired Infections Using IoT and Linear Regression," 2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI), Coimbatore, India, 2024, pp. 486-491, doi: 10.1109/ICoICI62503.2024.10696003.
- 44. K. Lalitha, M. X. Suresh, R. Selvakumar, P. A, J. M. Sunitha and B. Meenakshi, "Sustainable Crop Protection Using IoT-Enabled Drone Spraying with Support Vector Machine Analysis," *2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI)*, Coimbatore, India, 2024, pp. 412-418, doi: 10.1109/ICoICI62503.2024.10696038.
- 45. M Tamilselvi; S. Edson Nirmal Christopher; S. Priyadarshini; R. Lumina Julie; B. Meenakshi; P. Anitha, "Decision Trees for Eco-Friendly Green Supply Chains IoT-Enabled Environmental Footprint Reduction", 10th International Conference on Smart Computing and Communication (ICSCC), 2024. <a href="http://dx.doi.org/10.1109/ICSCC62041.2024.10690831">http://dx.doi.org/10.1109/ICSCC62041.2024.10690831</a>
- 46. S. M. Kumar, R. Thenmozhi, T. S. Balaji Damodhar, P. Epsiba, N. Malathi and B. Meenakshi, "Data-Driven with IoT Sensing and Deep Learning Model for Dynamic Skin Cancer Diagnosis," 2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), Erode, India, 2024, pp. 1034-1039, doi: 10.1109/ICSSAS64001.2024.10760605.

- 47. M. Karthikeyan, S. Sekar, H. A. Basha, P. Epsiba, E. N. Ganesh and B. Meenakshi, "Dijkstra's Algorithm with Bellman-Ford for Shortest Path Discovery in Big Data," 2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), Erode, India, 2024, pp. 1348-1354, doi: 10.1109/ICSSAS64001.2024.10760521.
- 48. D. Sethuraman, D. V. N. Bharathi, A. S.T, B. K, M. Rajmohan and B. Meenakshi, "Optimizing Hospital Stay Duration Prediction using IoT and Linear Regression Techniques," 2024 4th International Conference on Sustainable Expert Systems (ICSES), Kaski, Nepal, 2024, pp. 266-272, doi: 10.1109/ICSES63445.2024.10763114.
- 49. A. Sairam, R. N. Amarnath, P. Veda, R. Priyadharshini, T. R. GaneshBabu and B. Meenakshi, "Efficient Remote Rehabilitation and Physical Therapy Management using Decision Trees and IoT Technology," 2024 First International Conference on Innovations in Communications, Electrical and Computer Engineering (ICICEC), Davangere, India, 2024, pp. 1-6, doi: 10.1109/ICICEC62498.2024.10808682.
- 50. V. L. Vinya, K. K. Manivannan, S. K. Manivannan, C. Sathiyamoorthy, M. Jagadeeswaran and B. Meenakshi, "Cloud-Enabled Predictive Vehicle Health Monitoring and Maintenance with LSTM Networks for Time-Series Analysis," 2024 First International Conference on Innovations in Communications, Electrical and Computer Engineering (ICICEC), Davangere, India, 2024, pp. 1-6, doi: 10.1109/ICICEC62498.2024.10808613.

# **National Conference:**

- 1.**B. Meenakshi**, "Blood Chemistry Analysis Automated with microcontroller", Proc. Of National conference organized by Department of ECE, ArulmiguKalasalingam College of Engineering, Krishnan Koil 626 190, dated 12,13th May 2005.
- 2. Paper presented in the National conference on Signal Processing and Communications organized by St. Peter's College of Engineering and Technology, Avadi– 600054. Paper Title: Optimal Design of Brushless Permanent Magnet motor for Automotive Application. Date: 01st,02nd Mar2012.
- 3. Paper presented in the National conference on "Innovative technologies on Electrical and Electronics Engineering" Conducted by EEE department, Sri Sairam Engineering College—600044. Paper Title: Analysis of Permanent Magnet Brushless DC motor with effect of skewing. Date: 06th Mar 2012.

## FACULTY DEVELOPMENT PROGRAM ATTENDED

1. Completed FDP on "Power flow solutions &demo on CYME power engineering software"

held at Sri Sai Ram Engineering College on 27th Jan2011.

- 2. Completed FDP on "Recent trends in Wireless Information Networks and Systems" conducted by Sriram Engineering college, dated07.07.2010.
- 3. Completed FDP on "VHDL Programming" held at Sri Sairam Engineering college, dated 06.03.2010.
- 4. Completed Faculty Enablement Program on "A Step to Outcome Based Accreditation" conducted by Sri Sai Ram Institute of Technology on April 4,2015.
- 5. Completed FDP on "Electrical Simulation Software", held at Sri Sairam Engineering college, dated 6.11.17 to 10.11.17.
- 6. Completed Two days FDP on creative thinking conducted by ICT Academy from 27.03.2019 to 28.03.2019.
- 7. Completed Internal Auditor ISO 9001-2015 training held on 8.6.2018.
- 8. Completed One day workshop on Intellectual property rights and Innovations conducted by SriSairam engineering college in association with centre of IPR, Anna university on 20 July2019.
- 9. Completed One day faculty orientation program on "study abroad opportunities" conducted by education matters on 26.08.2019.
- 10. Completed Six days FDP on Analog IC design organized by ECE department, Sri Sai RamEngineering College sponsored by Anna university on 25.11.2019 to30.11.2019.
- 11. Completed One week FDP on IoT organized by NITTTR, Chandigarh from 15.4.2020 to19.04.2020.
- 12. Completed Two days FDP on Effective project proposal writing organized by CSE department in association with Computer Society of India, Velammal Engineering College on 08.05.2020and 09.05.2020.
- 13. Completed One Week FDP on ANN and Fuzzy logic organized by NITTTR, Chandigarh from 22.6.2020 to 26.6.2020.
- 14. Completed days National FDP on Emerging Technologies for sustainable Universe organized by SEEK, from 27.7.2020 to 31.7.2020.
- 15. Completed One week FDP on 8051 and its applications organized by NITTTR, Chandigarh from 18.5.2020 to 22.05.2020.
- 16. Completed ATAL Online FDP on "Emotional Intelligence" conducted by Indian Institute of

Information Technology, Allahabad, from 13.09.2020 to 17.09.2020.

- 17. Completed ATAL Online FDP on "Artificial Intelligence" conducted by Indian Institute of Information Technology, Sricity, Chithoor from 02.11.2020 to 06.11.2020.
- 18. Completed 5 days online FDP on "Universal Human Values" conducted by National Institute of Technology, Patna, from 23.11.2020 to 27.11.2020.
- 19. Completed ATAL Online FDP on "Human Centre Computing" conducted by CMR Institute of Technology, from 01.02.2021 to 05.02.2021.
- 20. Completed ATAL Online FDP on "Learning Management System" conducted by National Technical Teachers Training Institute, Chennai, from 15.03.2021 to 19.03.2021.
- 21. Completed FDP on "Interactive Approaches in handling Renewable Energy Systems Laboratory for the New Normal " from June 29 to July 2, 2021 conducted by SSN college of Engineering, Chennai.
- 22. Completed ATAL Online FDP on "Sensor Technology on Lifestyle Enrichment" conducted by Easwari Engineering College, Chennai, from 02.08.2021 to 06.08.2021.
- 23. Completed FDP on "Circuit Design using AutoCAD Electrical (Online Live FDP)" from 16/08/2021 to 20/08/2021, conducted by ICT academy.
- 24. Completed ATAL Online FDP on "Design and Optimization of EV Charging Technology in smart grid platform" conducted by Puducherry Technological University, from 13.09.2021 to 17.09.2021.
- 25. Completed ATAL Online FDP on "Augmented Reality/ Virtual Reality and its Applications" conducted by Sri Sairam Engineering College, from 04.10.2021 to 08.10.2021.
- 26. Completed FDP on VIRTUAL LABS held from 6th to 9th Sept 2021 conducted as a part of PALS, by NITK, Surathkal.
- 27. Completed FDP on "MATLAB and SIMULINK basics for Hardware Projects", held from Aug 1st to Aug 5th, 2022 by NITTTR, Chandigarh.
- 28. Completed Faculty Development workshop on "Product Engineering for Real Life Problems", conducted by LEAP, at IIT Madras research Park, Chennai from 28.09.2022 to 30.09.2022.
- 29. Participated in Naan Mudhalvan Train the trainers program for Augmented Reality, Virtual Reality & Metaverse Development held between 19-22 of Sept, 2022.
- 30. Completed Short term course on Energy Harvesting and Storage materials and devices conducted by NITTTR, Chandigarh, from 12.09.2022 to 16.09.2022.
- 31. Completed Two Weeks ATAL FDP on "Power Electronics Applications to Renewable Energy Systems, Electric Vehicles, and Intelligent Control" from 10th Oct 2022 to 15th Oct 2022 (Online) and 17th Oct 2022 to 21st Oct 2022(Offline) conducted by Sri Sai Ram Institute of Technology, Chennai.

- 32. Completed FDP in NPTEL course "physics of renewable energy Systems" during July-Oct-2022.
- 33. Completed FDP in NPTEL course "Fuzzy Logic and Neural Networks" during Feb-Apr-2023.
- 34. Completed FDP on Research tools conducted by Easwari Engineering College from 3rd July 2023 to 14th July 2023.
- 35. Completed FDP on Idea Generation Methods conducted by ICT academy at Annai Veilankanni College for Women from 7th August 2023 to 9th August 2023.
- 36. Completed FDP in NPTEL Course (4 Weeks) "Design Thinking-A Primer", Nov-Dec 2023.
- 37. Completed FDP in NPTEL Course (12 Weeks) "Fundamentals of Artificial Intelligence", Nov-Dec 2023.
- 38. Completed FDP in NPTEL Course (8 Weeks)"Accreditation and outcome based learning", Nov-Dec 2023.
- 39. Completed FDP in "Inculcating Universal human value in Technical Education", conducted by AICTE from Sept 18th, 2023 to Sept 22nd, 2023. [F.No. AICTE/FDP-SI/OnlineWorkshop/229/201000].
- 40. Completed Anna university sponsored 6 days FDP in "Energy Storage Systems", conducted by Sri Sai Ram Engineering College from February 5th, 2024 to February 10th, 2024.
- 41. Completed FDP in NPTEL Course (4 Weeks)"Python For Data Science", Jan-Feb 2024.
- 42. Completed FDP in NPTEL Course (12 Weeks) "Computer networks and Internet Protocol", Mar-Apr 2024.
- 43. Completed professional development program on AI applications in Electrical and Electronics Engineering conducted by NITTTR, Chennai from June 10th to June 14, 2024.
- 44. Completed FDP in NPTEL Course (8 Weeks) "Data Science for Engineers", Sep-Oct 2024.
- 45. Completed FDP in NPTEL Course (12 Weeks) "Introduction to Internet of Things", Oct-Nov 2024.
- 46. Completed FDP in NPTEL Course (12 Weeks) "Introduction to Industry 4.0 and Industrial Internet of Things", Oct-Nov 2024.
- 47. Completed FDP in NPTEL Course (12 Weeks) "Introduction to Machine Learning", Oct-Nov 2024.

#### WORKSHOP ATTENDED

- 1. Two days Workshop on "Sensor networks and wireless security" conducted by Department of ECE, Saveetha School of Engineering, Saveetha University Dated 6th and 7th of Sep2012.
- 2. One day Workshop on "Art of Journal and Thesis writing" conducted by Department of Research & Development, Sri Sairam Engineering College, Dated 19.01.2012
- 3. National workshop on "Wireless sensor networks- Applications & Challenges" conducted by IETE, Chennai at Prathyusha Institute of Technology and Management on 11th and 12th, November 2011
- 4. National workshop on "wireless communication and radiating systems" held at Sri Sairam Engineering college on 21st and 22nd March2011
- 5. BRNS sponsored workshop on "Embedded secured wireless Sensor Networks" conducted at Sriram Engineering college on 22nd and 23rd Feb2011
- 6. "Two days workshop on Networking Simulator Tools" conducted by Anna University, Thiruchirapalli, dated 17th and 18th of July2010.
- 7. Completed Online Orientation training program for Mentors from 5th to 9th July 2021 conducted by NITTTR, Chennai.
- 8. Participated in the Two days workshop on "Practical application of Design Thinking Concepts and tools" conducted by Intellect Design Arena, School of Design Thinking, Siruseri, from 12th to 13th May 2023.

#### SKILL DEVELOPMENT COURSES DONE:

- 1. Completed the Module 1\_ Orientation Towards Technical Education and Curriculum Aspects during Aug'2022 conducted by National Initiative for technical Teachers Training.
- 2. Completed the Module 2\_ Professional Ethics & Sustainability during Mar'2023 conducted by National Initiative for technical Teachers Training.
- 3. Completed the Module 3\_ Communication Skills, Modes & Knowledge Dissemination during Aug'2022 conducted by National Initiative for technical Teachers Training.
- 4. Completed the Module 4\_ Instructional Planning and Delivery during Mar'2023 conducted by National Initiative for technical Teachers Training.
- 5. Completed the Module 5\_ Technology Enabled Learning & Life Long Self Learning during Aug'2022 conducted by National Initiative for technical Teachers Training.
- 6. Completed the Module 6\_ Student Assessment and Evaluation during Mar'2023 conducted by National Initiative for technical Teachers Training.
- 7. Completed the Module 7\_ Creative Problem Solving, Innovation and Meaningful R & D during Oct'2021 conducted by National Initiative for technical Teachers Training.
- 8. Completed the Module 8\_ Institutional Management & Administrative Procedures during Mar'2023 conducted by National Initiative for technical Teachers Training.
- **9.** Completed the AICTE PG program on IoT conducted by IIITDM, Kurnul from July 2024 to Dec 2024.

#### PROGRAM ORGANIZED:

- 1. Organized ISTE sponsored FDP on "Renewable Energy Systems" from 22.07.2019 to 26.07.2019.
- 2. Organized ISTE sponsored five days FDP on "Artificial Intelligence" from 05.12.2019 to 11.12.2019.
- 3. Organized MHRD sponsored Two Weeks refresher course on "Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy" from 18.05.2020 to 30.05.2020.
- 4. Organized ISTE sponsored five days FDP on "Renewable energy System" from 08.02.2021 to 12.02.2021.
- 5. Coordinated NAAC sponsored Two days National Level Seminar on "Revised Accreditation Framework for Quality Enhancement in Higher Educational Institutes" from 14.07.2021 to 15.07.2021.
- 6. Coordinated Accelerator Program on "Are you innovating or InnoWaiting?" Program under Sairam research Group, Student project team on 10. 08.2021.
- 7. Coordinated Solveathon 1.0 conducted for sairam institutions, second year students, 20, 21 Apr, 2022.
- 8. Coordinated Ideathon 2.0 conducted for sairam institutions , first year students, 12&13 May, 2022.
- 9. Organized Innovathon 1.0 conducted for third year students of Sairam Group of Institutions on 10th Aug 2022.
- 10. Organized Solveathon 2.0 for 2nd year students of Sairam Group of Institutions on 20 &21st Apr 2023.

# **Society Activities:**

- **1.** Advisor for IEEE, WIE affinity group.
- 2. Organized Hands on training on Deep learning for IEEE, WIE affinity group, Sri SAiram Engineering College on 7/08/2021.

- 3. Conducted "Quiz on The Great Indian Women Leaders" program under IEEE, WIE affinity group, on 26th Jan 2022.
- 4. Conducted "Women of Royal and Noble status Part-1" program under IEEE- WIE affinity group on 9th March 2022.
- 5. Conducted a seminar on "IPR in focus with patent drafting and filing tips" on 27th April, 2022 under the IEEE, WIE Affinity Group banner.
- 6. Conducted "Women of Royal and Noble status Part-2" program under IEEE- WIE affinity group on 25th May 2022.
- 7. Conducted a webinar on "IoT" on 4th June, 2022 under the IEEE, WIE Affinity Group along with IEEE PELS.
- 8. Conducted Webinar on "Benefits of IEEE" on 7/7/2022 under IEEE, WIE affinity group along with PELS, EDS and PES societies.
- 9. Worked as Technical committee member for IEI sponsored seminar on "Application of Artificial Intelligence and Machine Learning in Electrical Engineering" from 27.07.2022 to 28.07.2022 conducted by department of EEE, Sri Sairam engineering college.
- 10. Conducted and was the resource person for a brainstorming session on Technical paper writing on behalf of IEEE-WIE affinity group, Sri Sairam engineering college on 10th Aug, 2022.
- 11. Attended International Leadership summit at Hyderabad from 26-27 Aug 2022.
- 12. Received certificate of appreciation from IEEE, for proctoring in the IEEE Xtreme coding competition held on 22nd Oct 2022.
- 13. Conducted Hands on training in Origin on behalf of IEEE-WIE affinity group , Sri Sairam engineering College on 14th Feb, 2023
- 14. Conducted Hands on Training in AI and IoT workshop on 20th Feb 2023 as a part of venue partner program Engineers week celebration for IEEE-WIE affinity group Madras section.
- 15 Organized 'Women of Royal and Noble status Part-3' program under IEEE-WIE affinity group, Sri Sairam engineering College on 8th Mar, 2023.
- 16. Conducted Poster/ design making contest in regards with world environmental day on 5th June 2023.
- 17. Organized IEEE WIE day celebration on 29th June 2023. Seminar conducted through online, guest speaker Dr Ramalatha Marimuthu.
- 18. Bagged 2nd place in SB presentation, from the connecting the dots event conducted by IEEE-WIE, Madras section at ANNA university on 1st July 2023.
- 19. Organised IEEE Madras Section Leadership Conclave 2023 on 19th August 2023 at Sri Sairam Engineering College as venue partner.
- 20. Served as IEEE-WIE day 2023 ambassador.
- 21. Received IEEE Code of ethics champion badge R-10, Aug 2023.
- 22. Received IEEE-R10 WIE Pre-University Championship, 2023
- 23. Attended IEEE-VOLT 2023 volunteer training program.
- 24. Received certificate of appreciation from IEEE, for proctoring in the IEEEXtreme coding competition held on Oct 2023.
- 25. Conducted a STEM grant event "FUN WITH ELECTRONICS" on Oct 5th, 2023 in Government High School, Nandambakkam.
- 26. Conducted expert talk on Facilities Maintenance, Electrical Testing and commissioning at sri Sairam Engineering college on 22nd Jan 2024.
- 27. Organised Women's day 2024 on behalf of IEEE-WIE, SEC on 7th March, 2024. Conducted debate on: Technology and Innovation: Women in the Digital Age 21st century vs 20th century
- 28. Received Outstanding IEEE-WIE AG Award from IEEE Madras section on 8th March 2024.
- 29. Celebrated IEEE Education week on 13th April 2024 at Good Life centre; Event name: Get

Wired! Lights, Sounds, Circuits and Games.

- 30. Organized 'Women of Royal and Noble status Part-4' program under IEEE-WIE affinity group, Sri Sairam engineering College on 30th Aug, 2024.
- 31. Attended International Leadership Summit conducted by IEEE-WIE Madras section from 3-5 Oct 2024. Also Served as Jury for Idea presentation.

## **ONLINE COURSES ATTENDED:**

- 1. Received **Elite certificate** in NPTEL online certification course for Digital circuits-12 week course, Jul-Oct-2018.
- 2. Received **Elite certificate** in NPTEL online certification course for Effective Engineering Teaching in practice-4 week course,Feb-Mar-2018.
- 3. Completed Python for Data science and Machine Learning Bootcamp on line course, in Udemy, duration 22.5 hrs on Nov 5,2019.
- 4. Completed Machine Learning A-Z: Hands on Python & R in Data science course, in Udemy, duration 41.5 hrs on Mar 30,2020.
- 5. Completed SQL and Relational Databases 101 course, in Future Skills Cognitive Class, powered by IBM developer skills network on Mar 08,2020.
- 6. Completed Introduction to Artificial Intelligence, in Simplilearn, on Apr 13,2020.
- 7. Completed Introduction to IoT, in Simplilearn, on Apr 28,2020.
- 8. Completed e learning course on Transformers conducted by Tata Steel on 1.5.2020.
- 9. Completed on line non credit course on Introduction to Google docs in Coursera on 6.5.2020.
- 10. Completed e learning course on Power system Protection conducted by Tata Steel on 7.5.2020.
- 11. Completed e learning course on Natural gas conducted by coursera in association with Buffalo University and the University of New York on 22.05.2020.
- 12. Completed e learning course on Electric Power system conducted by coursera in association with Buffalo University and the University of New York on 20.05.2020.
- 13. Completed e learning course on Safety in the Utility Industry conducted by coursera in association with Buffalo University and the University of New York on 24.05.2020.
- 14. Completed e learning course on Energy the Enterprise conducted by coursera in association with Buffalo University and the University of New York on 23.05.2020.
- 15. Energy Production, Distribution & Safety by The State University of New York & University at Buffalo on Coursera. Certificate earned at 24/05/2020
- 16. Completed e learning course on Introduction to Big Data conducted by coursera in association with Buffalo University and the University of New York on 22.05.2020.
- 17. Completed e learning course on Getting Started with Google sheet conducted by coursera in association with Google Cloud on 08.06.2020.
- 18. Completed e learning course on Introduction to Psychology conducted by coursera in

association with Yale University on 03.07.2020.

- 19. Completed e learning course on Beyond the Sustainable Development Goals (SDG): Addressing sustainability and development conducted by coursera in association with Michigan University on 03.07.2020.
- 20. Completed SWAYAM online course "Accreditation for undergraduate Engineering Programmes" 3 credit courses on Aug-2021.
- 21. Completed SWAYAM online course on "Electricity and Safety Measures" conducted by Indira Gandhi open university on Aug 2021.
- 22. Received **Elite certificate & Top 5%** in NPTEL online certification course for Physics of renewable energy-12 week course,Nov-Dec-2022.
- 23. Completed online course on Awareness program on solar water pumping system in IGNOU university in the month Aug 2022.
- 24. Received **Elite certificate** in NPTEL online certification course for Fuzzy Logic and Neural Networks-08 week course, Feb-Apr-2023.
- 25. Received **Elite certificate** in NPTEL online certification course for Fundamentals of Artificial Intelligence -12 week course, Nov-Dec-2023.
- 26. Received **Elite certificate** in NPTEL online certification course for A Design Thinking -A Primer-04 week course.Nov-Dec-2023.
- 27. Received **Elite certificate and Silver medal** in NPTEL online certification course for Accreditation and Outcome Based learning- 08 week course, Nov-Dec-2023.
- 28. Received **Elite certificate and Silver medal** in NPTEL online certification course for Python for Data Science- 04 week course, Jan-Feb-2024.
- 29. Received **Gold Medal and Topper Certificate** in NPTEL online certification Course for Computer networks and Internet protocol- 12 weeks course, Apr-May 2024.
- 30. Completed the "Blended Learning" Course in SCOUTS", June 13th, 2024.
- 31. Received **Elite certificate** in NPTEL online certification course for Data Science for Engineers- 08 week course, Sep-Oct-2024.
- 32. Received **Gold Medal and Topper Certificate** in NPTEL online certification Course for Introduction to Internet of Things 12 weeks course, Oct-Nov 2024.
- 33. Received **Silver Medal and Topper Certificate** in NPTEL online certification Course for Introduction to Industry 4.0 and Industrial Internet of Things 12 weeks course, Oct-Nov 2024.
- 34. Received **Elite certificate** in NPTEL online certification course on Introduction to Machine Learning 12 week course, Oct-Nov 2024.

## WEBINARS ATTENDED:

5.

- 1. Attended webinar from 11.05.2020 to 15.05.2020 conducted by ICT academy on the Future of the skills –Education, Employment & Entrepreneurship.
- 1. Attended webinar on "R&D Proposal writing for faculties" on 12.06.2020 conducted by Mechanical Department, Sri Sairam Engineering College in association with Research and Development.
- 2. Attended webinar on "Beat the stress" on 27.06.2020 conducted by St Peters Institute of Higher Education in association with Centre for Human values.
- 3. Attended webinar on NAAC sponsored two days National level Webinar on "Quality Sustenance through online mode on education" conducted by Hindustan College of Engineering and Technology, Coimbatore from 8.4.2021 to 9.04.2021.
- 4. Attended NAAC sponsored webinar "Understanding of PO, PSO and CO" conducted by S.T Co. Op Education Society's Ltd Science Senior College, Nadurbar on 9.06.2021.
- 6. Attended NAAC sponsored Two days National Level Seminar on "Revised Accreditation Framework for Quality Enhancement in Higher Educational Institutes" from 14.07.2021 to 15.07.2021.