# **Sri Sai Ram Engineering College Department of Electrical and Electronics Engineering**

| 1. Name: R.Sivaprasad            |   |
|----------------------------------|---|
| 2. Designation:                  | ASSOCIATE PROFESSOR   |
| 3. Qualification :               | M.E   |
| 4. Area of Specialization:       | B.E - EEE   |
|                                  | M.E- ENERGY ENGINEERING   |
| 5. Experience :                  | Teaching:   |
|                                  | UG:-21 Years  |
|                                  | PG: 10 YEARS  |
|                                  | Industry: 1 YEAR  |
| 6.No. of workshop /FDP attended: | 52  |
| 7. Publication:                  | Journal   |
|                                  | National: 3   |
|                                  | International: 5  |
|                                  | Conferences:  |
|                                  | National: 3   |
| 0.54.55 4.1:                     | International :4  |
| 8. Staff Achievements:           | 100% Result in the paper Measurement and Instrumentation, Protection & Switchgear (2017 Batch), EEGUC (2015 Batch), |
|                                  | Electrical Engineering (2014 Batch) and 100% Results for the paper Power Plant Engineering for SIX                  |
|                                  | Consecutive Academic Years and for the 2020   |
|                                  | (V SEM), 2021(III SEM) and 2022(III SEM)  |
|                                  | batches.  |

#### **EXPERIENCE:**

| Name of the Employer        | Position Held                                 | Period         |              |
|-----------------------------|---|----------------|--------------|
|                             |   | From           | To           |
| TAGORE ENGG.COLLEGE         | LECTURER                                      | AUGUST<br>2004 | MAY<br>2008  |
| RAJALAKSHMI<br>ENGG.COLLEGE | LECTURER                                      | JUNE 2008      | JUNE<br>2009 |
| SRI SAIRAM ENGG. COLLEGE    | ASSISTANT PROF GR<br>II TO ASSOCIATE<br>PROF. | JUNE 2009      | TILL<br>DATE |

#### PATENT PUBLICATION:

- 1. Hybrid Solar Cooking System With Solar Thermal And Photovoltaics To Generate Electrical Energy For Household Applications Published in the Official Journal of the. Patent Office on 06/12/2019.
- 2. Motor And Battery Overheat Detection in Electric Vehicles- Published-202341070533
- 3. A Portable Agriculture Monitoring Device-Granted-369500-001

### **PUBLICATION DETAILS:**

- 1. Versa Watt Pioneering a Multi-Output SMPS Solution for Next-Gen Devices International Conference on Computing and Communication Technologies (ICCCT),2025
- 2. Farm Aid Metrix, International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),2024
- 3. Comparative Study of Automatic Driving Assist Systems in Internal Combustion and Electric Vehicles, International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),2024
- 4. Smart Energy Consumption with Theft Detection and load Control, International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),2024
- 5. Real Time Violence Alert System, International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),2024
- 6. Smart Goggles for the Visually Impaired, International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),2024
- 7. Demand Side Management in Rural Water Supply, International WASH Conference, SPM-NIWAS, Kolkata, 2024
- 8. Safecurrent: Arduino Guardian with GSM Defense International Conference on Power, Energy, Control and Transmission Systems (ICPECTS),2024
- 9. Machine Overheating Detection Using Microcontroller in Electric Vehicles, Journal of Propulsion Technology,2024

- 10. Automatic Door Locking System in Households Using IoT, Intelligent Computing and Control for Engineering and Business Systems (ICCEBS),2023
- 11. MoodVue: A Smart Mirror with Emotional Intelligence, Intelligent Computing and Control for Engineering and Business Systems (ICCEBS),2023
- 12. Automated Sensing Cleaner, Intelligent Computing and Control for Engineering and Business Systems (ICCEBS),2023
- 13. Fault Detection and Prevention With Energy Monitoring System, Intelligent Computing and Control for Engineering and Business Systems (ICCEBS),2023
- 14. Heart Disease Prediction and Classification using Machine Learning and Transfer Learning Model, International Conference on Automation, Computing and Renewable Systems, ICACRS 2022 Proceedings, 2022, pp. 595–601
- 15. Optical Flow-based Tracking of Vehicles using Adaptive Particle Filter Target Tracking Algorithm based for Accident Prevention, International Conference on Automation, Computing and Renewable Systems, ICACRS 2022 Proceedings, 2022, pp. 1281–1286
- 16. Smart System for E-VEHICLE Management, International Conference on Power, Energy, Control and Transmission System 2022. (ICPECTS) | 978-1-6654-6275-4/22/\$31.00 ©2022 IEEE | DOI: 10.1109/ICPECTS56089.2022.10047669
- 17. Modified Bridgeless Landsman Converter Fed EV Battery Charger Power Factor Improvement, International Conference on Power, Energy, Control and Transmission System 2022.
- 18. Aegis Surtout, International Conference on Power, Energy, Control and Transmission System 2022.
- 19. An Astute Rescue System for Enhanced Security using Facial Recognition, International Conference on Power, Energy, Control and Transmission System 2022.
- 20. Smart Railcar Immobilizer and Accident Alert System, International Conference on Power, Energy, Control and Transmission System 2022.
- 21. Intelligent Wireless Charging Station for EVs with Integrated PV Power Grid System, International Conference on Power, Energy, Control and Transmission System 2022.
- 22. Automatic Object and Crack Detecting System Using IoT, International Conference on Power, Energy, Control and Transmission System 2022.
- 23. Hand Gesture Controlled Wheelchair, International Conference on Power, Energy, Control and Transmission System 2022.
- 24. Voice Based Motile Video Surveillance System with Violence Detection, International Conference on Power, Energy, Control and Transmission System 2022.

- 25. Design And Analysis of Fifteen Level Inverter for Renewable Applications, International Conference on Power, Energy, Control and Transmission System 2022.
- 26. Augmented Reality-Based Restaurants, International Conference on Power, Energy, Control and Transmission System 2022.
- 27. Grid connected single-stage multiport inverter with two independent source, International Conference on Power, Energy, Control and Transmission System 2022.
- 28. Design and Development of Pipe inspection Snake Locomotion Robot, International Conference on Power, Energy, Control and Transmission System 2022.
- 29. Designing and Commissioning of Heat Pumps for Hybrid Heating and Cleaning of Coaching Equipment Using Solar Panels,2022 International Conference on Communication, Computing and Internet of Things, IC3IoT 2022 Proceedings, 2022
- 30. Study on nano particles of aluminium oxide and magnesium oxide used counter flow, Materials Today: Proceedings, Science Direct, Vol.33, Issue 7, Date: 10/09/2020, Pages 4586-4591
- 31. Design of fully autonomous energy harvesting system for treadmill application, Studies in Indian Place Names, Vol.40, Issue S1, March 2020, Pages 341-348.
- 32. Gas Leakage Alert System, Journal of the Gujarat Research Society, Vol.24, Issue 17, 30/12/2019, Pages 1722-1725.
- 33. Artificial Intelligent Tracing for Inherent Potential Leakage Observance and Control System, Test Engineering and Management, May June 2020 ISSN: 0193-4120 Page No. 7696 7701.
- 34. Mechanical and material properties of Areca/ Epoxy composite, International Journal of Innovative Technology and Exploring Engineering, Vol.9, Issue 2, December 2019.
- 35. Presented a paper titled, "Smart Genuine Accident Detector & Locator" at ICPECTS 2018, International Conference conducted by Sri Sairam Engineering College on 22<sup>nd</sup> February 2018.
- 36. DTC of ZSI Fed Induction Motor Drive paper published in Journal of Computational and theoretical Nano science, Volume 14, Issue 8, and March 2017.
- 37. Dual Stator Induction Motor Drive presented at international conference Conducted by Arunachala College of Engineering for Women. Dec. 2016.

- 38. Induction Motor Fed by  $\Gamma$  Z- Source Inverter, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 3 Issue IV, April 2015 IC Value: 13.98 ISSN: 2321-9653
- 39. VSI- Fed Induction Motor Drive for Photovoltaic Pumping Published in Applied Mechanics & Materials. 2014, Issue 622, p199-204.
- 40. Performance Enhancement of Induction Motor Using E-Z Source Inverter Published in International Journal of Scientific & Engineering Research, Volume 4, Issue 4, April-2013 514 ISSN 2229-5518 IJSER © 2013 http://www.ijser.org

# **NPTEL CERTIFICATE COURSES:**

- 1. Effective Engineering Teaching in Practice Elite Certificate- (2018)
- 2. Non Conventional Energy Resources- Elite Certificate with Silver Medal- (2019)
- 3. Accreditation and Outcome based Learning Elite Certificate with Silver Medal- (2019)
- 4. Renewable Energy Engineering: Solar, Wind and Biomass Energy Systems–Elite Certificate (2021)
- 5. Introduction To Industry 4.0 And Industrial Internet Of Things- Elite Certificate with Silver Medal-(2022)
- 6. Python for Data Science–Elite Certificate (2024)
- 7. Data Science for Engineers–Elite Certificate (2024)
- 8. Soft Skills- Elite Certificate with Silver Medal and Top 5% Topper-(2024)
- 9. Learning Analytics Tools-Elite Certificate (2024)
- 10. Innovation by Design Elite Certificate with Silver Medal and Top 2% Topper-(2025)
- 11. Enhancing Soft Skills and Personality- Elite Certificate with Silver Medal- (2025)

### **Latest FDP Attended:**

Attended And Completed three days Faculty Development Program (FDP) On "How teachers can make a difference" From 07.02.2023 to 09.02.2023 conducted by Teaching Learning Center (TLC) Indian Institute of Technology Madras Chennai 600036 India.

Attended 5-days online FDP on the theme "Inculcating Universal Human Values in Technical Education-PART II" organized by All India Council for Technical Education(AICTE) from 13.02.2023 to 18.02.2023.

Two Week AICTE Training and Learning (ATAL) Academy Blended/Hybrid FDP on "Power Electronics Applications to Renewable Energy Systems, Electric Vehicles, and Intelligent Control" at SRI SAI RAM INSTITUTE OF TECHNOLOGY from 10.10.2022 to 15.10.2022 and 17.10.2022 to 21.10.2022

One Week ATAL FDP on "Data Sciences" conducted by NATIONAL POWER TRAINING INSTITUTE (SOUTHERN REGION) from 09/08/2021 to 13/08/2021

One Week ATAL FDP on "AI Enabled IoT Networks" conducted by Adi Shankara Institute of Engineering and Technology from 13/09/2021 to 17/09/2021

One Week ATAL FDP on "Secrets of Human Bio-Energy fields and Subconscious

Mind"conducted by Sona College of Technology from 12/07/2021 to 16/07/2021

One Week ATAL FDP on "Global Warming and Impacts of Power Electronics towards Green Technology" conducted by Valliammai Engineering College from 24/05/2021 to 28/05/2021

Two Weeks FDP on "Trends and Challenges in Power Converters and Control", AICTE Sponsored and Conducted by EEE Department, College of Engineering, Guindy, Anna University.

One Week FDP on "Thermal Power and Energy Engineering" conducted by Mechanical Engineering Department, NITTTR, Chennai from 08/03/2021 to 12/03/2021

Two Weeks FDP on "MATLAB & LabVIEW Programming" conducted by Electrical Engineering Department, NITTTR, Chennai from 22/02/2021 to 05/03/2021

One Week FDP on "Managing Your Ego and Emotions at Workplace" conducted by Electrical Engineering Department, NITTTR, Chandigarh from 11/01/2021 to 15/01/2021.

One Week FDP on "Solar, Wind and Bio Energy Applications" conducted by Mechanical Engineering Department, NITTTR, Chennai from 04/01/2021 to 08/01/2021.

One Week ATAL FDP on "Sustainability Engineering" conducted by St.Joseph's College of Engineering from 14/12/2020 to 18/12/2020.

One Week ATAL FDP on "Robotics" conducted by KCG College of Technology, Chennai from 08/12/2020 to 12/12/2020.

Five days online FDP on "Universal Human Values for DEEKSHARAMBH" organized by NIT Patna from 23-27, November, 2020.

One Week ATAL FDP on "Ethics, Moral Values, Behavioral Science & Attitude" conducted by College of Engineering, Trivandrum from 12/10/2020 to 16/10/2020.

One Week ATAL FDP on "Emotional Intelligence" conducted by Indian Institute of Information Technology, Allahabad from 13/09/2020 to 17/19/2020.

One Week FDP on "Artificial Neural Networks and Fuzzy Logic" conducted by Electrical Engineering Department, NITTTR, Chandigarh from 22/06/2020 to 26/06/2020

One Week FDP on "8051 and its Applications" conducted by Electrical Engineering Department NITTTR, Chandigarh from 18/05/2020 to 22/05/2020

Three Days FDP on "eSIM" conducted by School of Computer Science and Engineering Department Conducted by VIT, Chennai from 14/05/2020 to 16/05/2020

One Week FDP on "Linux Applications in Engineering Education" conducted by computer Science and Engineering Department, NITTTR, Chandigarh from 27/04/2020 to 01/05/2020

One Week FDP on "Internet of Things" conducted by computer Science and Engineering Department, NITTTR, Chandigarh from 15/04/2020 to 19/04/2020.

Eight Weeks FDP on "ACCREDITATION AND OUTCOME BASED LEARNING", jointly Conducted by NPTEL – IITM, AUG-OCT 2019.

# **Training Programmes Undergone:**

- 1. Introduction to Cyber security Certificate of Achievement offered by Simplilearn successfully completed on 05/04/2020.
- 2. Introduction to Artificial Intelligence Certificate of Achievement offered by Simplilearn successfully completed on 28/03/2020.
- 3. Introduction to Project Management Certificate of Achievement offered by Simplificant successfully completed on 01/04/2020.
- 4. Introduction to IoT Certificate of Achievement offered by Simplilearn successfully completed on 30/03/2020.
- 5. IBM Data Science with Scala Certificate issued by Future Skills Nasscom completed on 29/03/2020.
- IoT for Beginners Smart Certificate issued by Jigsaw Academy successfully completed in April 2020.
- 7. Big Data Foundation Course Certificate of Completion issued by DIGITAL VIDYA in April 2020.
- 8. Foundational Artificial Intelligence an Industry recommended & validated course aligned to SSC NASSCOM and issued by SkillUp Online completed in April 2020.
- 9. MATLAB Onramp Course completion Certificate issued by Math Works training on successfully completing 100 % of Self-Paced training course on 13th April 2020.
- 10. Machine Learning Onramp Course completion Certificate issued by Math Works training on successfully completing 100 % of Self-Paced training course on 22<sup>nd</sup> April 2020.
- 11. SIMULINK Onramp— Course completion Certificate issued by Math Works training on successfully completing 100 % of Self-Paced training course on 26<sup>th</sup> April 2020.
- 12. Deep Learning Onramp Course completion Certificate issued by Math Works training on successfully completing 100 % of Self-Paced training course on 03rd May 2020.

# **Coursera Certifications:**

# (More than 300 Courses completed –few are mentioned below)

- 1. COVID 19: What You Need to Know (CME Eligible)
- 2. Introduction to Google Docs
- 3. Electric Power Systems
- 4. Introduction to Psychology

- 5. Creative Information Presentations with Google
- 6. Air Pollution a Global threat to our Health
- 7. AI for everyone
- 8. Wind Energy
- 9. Electrical Utilities Fundamentals and Future
- 10. Renewable Energy and Green Building Entrepreneurship
- 11. Digital Manufacturing & Design
- 12. Introduction to Thermodynamics Transferring Energy from Here to There
- 13. The Sustainable Development Goals A global, Transdisciplinary vision for the future
- 14. Learning How to Learn: Powerful mental tools to help you master tough subjects
- 15. Solar Energy Basics (Peer reviewed Project)
- 16. Intellectual Humility: Science
- 17. Getting started with Google Sheets
- 18. Vector Calculus for Engineers
- 19. Introduction to Programming with MATLAB
- 20. Block chain Basics
- 21. Programming for Everybody (Getting Started with Python)
- 22. Leadership and Emotional Intelligence
- 23. Electrodynamics: Analysis of Electric Fields
- 24. Spreadsheets for Beginners using Google Sheets
- 25. Create a Resume and Cover Letter with Google Docs
- 26. Introduction to Virtual Reality
- 27. Create Your First Python Program
- 28. Create and Format a Basic Document with Libre Office Writer
- 29. Python Data Structures
- 30. Project Management: The Basics for Success
- 31. Gmail: The Foundation To Accessing Google Apps
- 32. How Things Work: An Introduction to Physics
- 33. Linear Regression with Numpy and Python
- 34. Develop a Company Site with Wix
- 35. Predicting House Prices with Regression using TensorFlow
- 36. Introduction to Project Management with Click Up

- 37. Build a Simple App in Android Studio with Java
- 38. Building a Calculator using C# in Visual Studio
- 39. Build a Data Science Web App with Streamlit and Python
- 40. Image Classification with CNNs using Keras
- 41. Build a Deep Learning Based Image Classifier With R
- 42. Neural Network Visualizer Web App With Python
- 43. Computer Vision-Object Tracking With Open CV And Python
- 44. Image Data Augmentation With Keras
- 45. Image Super Resolution Using Autoencoders In Keras
- 46. Building a Text-Based Bank In Java
- 47. Compare Stock Returns With Google Sheets
- 48. Use Wordpress to Create a Blog for your Business
- 49. Build An Ecommerce Dashboard With Figma
- 50. Create Customer Support Data With Google Sheets
- 51. Support Vector Machines With Sky Kit-Learn
- 52. Basic Image Classification with TensorFlow
- 53. Object-Oriented Programming with Java
- 54. Beginning SQL Server
- 55. Predict Future Product Prices Using Facebook Prophet
- 56. Custom Prediction Routine On Google AI Platform
- 57. Clustering Geo Location Data Intelligently In Python
- 58. Build Your Portfolio Website with HTML and CSS
- 59. Advanced Features with Relational Database Tables Using SQLite Studio
- 60. Intro to Time Series Analysis In R
- 61. Neural Network From Scratch in Tensor Flow
- 62. Linear Regression with Python
- 63. Builder Relative Layout Tab in Android Studio
- 64. Improve Business Performance with Google Forms
- 65. Motors and Motor Control Circuits
- 66. Natural Gas
- 67. Electric Utilities Fundamentals and Future
- 68. Practical Introduction to the Command Line

- 69. Introduction to Solar Cells
- 70. Safety in the Utility Industry
- 71. Energy: The Enterprise
- 72. The Science of Well-Being
- 73. Python Basics
- 74. Feminism and Social Justice
- 75. Data Visualisation with Plotly Express
- 76. Using Shiny to Plot Differential Gene Expression
- 77. Traffic Sign Classification Using Deep Learning in Python / Keras

# FDP / PROGRAMME ORGANISED:

- AU sponsored Physical mode FDTP on Energy Storage technologies, Feb. 2024
- Session Chair for IEEE Technically Sponsored International Conference on Power, Energy, Control and Transmission System 2024.
- Session Chair for IEEE Technically Sponsored International Conference organized ny EIE Department, 2024.
- Publication Chair for IEEE Technically Sponsored International Conference on Power, Energy, Control and Transmission System 2022.
- Coordinator for Seminar on Special Electrical Machines for Third Yr UG and First Yr PG students on 08.04.2021
- Coordinator for the ALUMNI TALK Programme on "A Peek into Customer Analytics" held on 01.08.2020.
- Coordinator for the ISTE Sponsored Faculty Development Programme on Renewable Energy held from 22<sup>nd</sup> July 2019 to 26<sup>th</sup> July 2019.
- Coordinator for ICTACT Project Expo 2019 held on 26th August 2019.
- Coordinator for the ISTE Sponsored Faculty Development Programme on Artificial Intelligence held from 05<sup>th</sup> December 2019 to 11<sup>th</sup> December 2019

# **EXPERT TALK:**

| Valliammai Engineering<br>College | Electrical Machines II - Special Electrical<br>Machines       | 27.11.2020 |
|-----------------------------------|---|------------|
| Valliammai Engineering<br>College | Circuit Theory – Network Reduction and Theorems for DC and AC | 18.05.2021 |
| Valliammai Engineering<br>College | Electric Energy Generation, Utilization and Conservation      | 23.11.2021 |

# **BOOKS / CHAPTER PUBLISHED:**

- 1. Emerging Technologies in Engineering Research Chapter 28: Combustion and Energy Systems, Technical Research Publications, ISBN:978-93-5419-211-1 (Online), December 2020.
- 2. Reviewer for the Text book titled Power Plant Engineering, Oxford University Press.
- 3. Reconfigurable Intelligent System (RIS): Introduction- Reconfigurable Intelligent Surface for mm Waves and Multi-Antenna Systems: Design Challenges and Applications, April 2025.