

SRI SAI RAM ENGINEERING COLLEGE
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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Name: Mr.K.RAJKUMAR.	
Designation:	Associate Professor
Qualification:	M.E(pursuing Ph.D.)
Area of Specialization:	Applied Electronics
Experience:	Teaching-15 yrs
	Industry/Polytechnic: 3 yrs
Number of Workshops/Conferences/ FDP Attended:	Workshop/STTP/Seminar/FDP-13 National conference-3. International Conference- 18
Publication:	Journal: National:2 International:-2
Patent	Published - 3
Proposals	Grant - 2- Submitted
Research Guidance:	Guided 20 UG projects till date

Total Teaching Experience-16 years

PROFESSIONAL EXPERIENCE:

Sl No.	Name of the college	Position held	Period	
			From	To
1.	Sri Adhisankarar Polytechnic College	Lecturer	June 2007	May 2008
2.	St. Joseph's College Of Engineering And Technology	Assistant Professor	June 2010	May 2013
3.	Shivani engineering college	Assistant Professor	June 2013	May 2015
4.	Sri Sai Ram Engineering College	Assistant Professor	15th June 2015	Till date

AREAS OF INTEREST

- ❖ Analog Electronics
 - ❖ Power Electronics and Drives
 - ❖ Renewable Energy Systems
 - ❖ Distribution Generation and Micro grid
 - ❖ Machine Learning in Power Systems
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AWARDS

1. **InSc Award 2023**-Certified for the Project Titled with “Walk Assistance for Outwardly Challenged People” under **Student Project Programme 2023 (SPP)**

PATENT

1. **Published a patent based on " : CONVERSION OF FOOD WASTE TO MANURE BY BIO-CHAR VESSEL ", Appln no. 202341036137, dated: 16/06/2023**
2. **Published a patent on “AI BASED HYBRID LEG WHEEL TRACK THE GROUND MOBILE ROBOT Application No. 202141047297, dated:Nov 2021**
3. **Published a patent on “ A Smart Bill Generator in Digitalized Super Market, Application No. 202041045439 dated: Dec 2020**

INTERNATIONAL JOURNAL

1. Kasi, R., Nayanatara, C., & Baskaran, J. (2024). Deployment of GRN-PBIL Framework With Integrated DG-DRM in Electric Vehicle Charge Scheduling for Welfare Maximisation. *IET Generation, Transmission & Distribution*, 19(1), e70148. <https://doi.org/10.1049/gtd2.70148>.
2. K Rajkumar, K Thejaswini R Srinithi Published a paper titled “Ghosting Based Verge Heedful System Using Arduino” *INTERNATIONAL JOURNAL OF ENGINEERING AND ADVANCED TECHNOLOGY*, Volume 8 Issue-6 ,2905-2911, ISSN: 2249-8958 (on-line version).

INTERNATIONAL CONFERENCE

1. Hermetia illucens (Black soldier fly) Larvae as a Sustainable Effective Feed Ingredient in Catla catla: Nutritional, Immunological and Gut microbe outlook- a Review", IJEDR - INTERNATIONAL JOURNAL OF ENGINEERING DEVELOPMENT AND RESEARCH (www.IJEDR.org), ISSN:2321-9939, Vol.14, Issue 1, page no.608-615, February-2026, Available :<https://rjwave.org/IJEDR/papers/IJEDR2601327.pdf>
2. Baskaran, J., Rajkumar, K., Nayanatara, C., Ambika, K. (2026). Intelligent Energy Management for EV Charging Stations: Integrating Renewable Energy and Energy Storage System. In: Srinivasan, K., Jeevarathinam, B., Rangasamy, R., Padmanaban, S. (eds) Smart System for Integrated Computing and Communication. ICSSICC 2024. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 643. Springer, Cham. https://doi.org/10.1007/978-3-031-99939-0_29.
3. K. Rajkumar, C. Nayanathara, M. Hemalatha, P. T, M. W. J and B. M M, "Comprehensive Analysis and Performance Comparison of Anti-Lock Braking Controllers: Mechanisms, Variants, and Simulation Results," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-8, doi: 10.1109/ICPECTS62210.2024.10780165.
4. K. Rajkumar, C. Nayanathara, M. Hemalatha, P. T, M. W. J and B. M M, "Comprehensive Analysis and Performance Comparison of Anti-Lock Braking Controllers: Mechanisms, Variants, and Simulation Results," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-8, doi: 10.1109/ICPECTS62210.2024.10780165.
5. K. Rajkumar, C. Nayanathara, K. Ambika, N. S, S. B. S and S. K. P, "Smart Energy Management for Electric Vehicle Charging Stations with Renewable and Storage Integration," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ICPECTS62210.2024.10780237.
6. Baskaran, J., Rajkumar, K., Nayanatara, C., Ambika, K. (2026). Intelligent Energy Management for EV Charging Stations: Integrating Renewable Energy and Energy Storage System. In: Srinivasan, K., Jeevarathinam, B., Rangasamy, R., Padmanaban, S. (eds) Smart System for Integrated Computing and Communication. ICSSICC 2024. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 643. Springer, Cham. https://doi.org/10.1007/978-3-031-99939-0_29.
7. Baskaran, J., Rajkumar, K., Nayanatara, C., Ambika, K. (2026). Intelligent Energy Management for EV Charging Stations: Integrating Renewable Energy and Energy Storage System. In: Srinivasan, K., Jeevarathinam, B., Rangasamy, R., Padmanaban, S. (eds) Smart System for Integrated Computing and Communication. ICSSICC 2024.
8. K. Rajkumar, C. Nayanathara, M. Hemalatha, P. T, M. W. J and B. M M, "Comprehensive Analysis and Performance Comparison of Anti-Lock Braking Controllers: Mechanisms, Variants, and Simulation Results," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-8, doi: 10.1109/ICPECTS62210.2024.10780165...
9. K. Rajkumar, C. Nayanathara, K. Ambika, N. S, S. B. S and S. K. P, "Smart Energy Management for Electric Vehicle Charging Stations with Renewable and Storage Integration," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ICPECTS62210.2024.10780237.
10. K. Rajkumar, M. Hemalatha, J. ShaliniPriya, Arunprasath. R, Shivashankari. A. M, Jeyashri R " IOT ENABLED AIR POLLUTION METER WITH DIGITAL DASHBOARD ON SMARTPHONE" 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ICPECTS62210.2024.10780237.

11. K. Rajkumar, K. Ambika, K. Abhinaya, A. Nafeeza Begum, K. Teena and U. Viveka, "Hybrid Solar and Wind Power Generation System Using ANFIS Algorithm," *2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)*, Chennai, India, 2023, pp. 1-6, doi: 10.1109/ICCEBS58601.2023.10448824.
12. K. Rajkumar, M. S, G. M, Y. S and Y. N, "Emerging Trends in Hybrid Solar and Wind Power Sharing V2C and C2V Power Exchange with Integrated Charging Systems," *2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)*, Chennai, India, 2023, pp. 1-4, doi: 10.1109/ICCEBS58601.2023.10448848.
13. K. Rajkumar S. D, N. C, A. S and A. A, "An Electric Vehicle Solar PV Case Studies Based Demand Response Modernization," *2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)*, Chennai, India, 2023, pp. 1-7, doi: 10.1109/ICCEBS58601.2023.10448759.
14. Srimathi, R., Rajkumar, K., Kanthimathi, M. (2023). High Performance-Based Deep Neural Networks for Efficient Tomato Leaf Disease Detection. In: Kumar, S., Hiranwal, S., Purohit, S., Prasad, M. (eds) Proceedings of International Conference on Communication and Computational Technologies. ICCCT 2023. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-99-3485-0_16.
15. K. Suresh, P. J, J. C, R. K, K. K and A. R, "Smart Assistive Stick for Visually Impaired Person with Image Recognition," *2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)*, Chennai, India, 2022, pp. 1-5, doi: 10.1109/ICPECTS56089.2022.10047699.
16. K. Rajkumar, S. Mohan, A. N. Begum, T. K and V. U, "Electronic Wheelchair With Eye Motion Control For Physically Hectic People," *2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)*, Chennai, India, 2022, pp. 1-6, doi: 10.1109/ICPECTS56089.2022.10047183.
17. K. Rajkumar, S. Mohan, Y. S, Y. N and G. M, "Gas Leakage Detection And Refilling System With Automated Fault Clearness," *2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)*, Chennai, India, 2022, pp. 1-5, doi: 10.1109/ICPECTS56089.2022.10047478.
18. K. Rajkumar, S. R, R. S and M. G. Suwathi, "Voice-Activated Wireless Control System for Home Automation Using 2.4GHZ WiFi," *2022 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)*, Chennai, India, 2022, pp. 1-6, doi: 10.1109/ICPECTS56089.2022.10046931.
19. K. Rajkumar, S. Vasuhi, S. Mohan and K. Suresh, "IOT Based Battery Thermal Monitoring in E-Vehicle System," *2022 International Conference on Communication, Computing and Internet of Things (IC3IoT)*, Chennai, India, 2022, pp. 01-05, doi: 10.1109/IC3IOT53935.2022.9767896.
20. M. S, K. Rajkumar, K. Suresh and J. Harinarayanan, "Photovoltaic Fed Flyback Converters using Improved Perturb and Observe Algorithm," *2021 4th International Conference on Computing and Communications Technologies (ICCCT)*, Chennai, India, 2021, pp. 434-437, doi: 10.1109/ICCCT53315.2021.9711760.
21. K Rajkumar, K Thejaswini, S Subarna and P Yuvashri” Walk Assistance For Outwardly Challenged People “Journal of Physics: Conference Series, Volume 1979, International Conference on Recent Trends in Computing (ICRTCE-2021) 20-22 May 2021, Maharashtra,India *Conf. Ser.* **1979** 012065DOI 10.1088/1742-6596/1979/1/012065.
22. K Rajkumar, K Thejaswini, P Yuvashri” Automation of Sustainable Industrial Machine using PLC“Journal of Physics: Conference Series, Volume 1979, International Conference on Recent Trends in Computing (ICRTCE-2021) 20-22 May 2021, Maharashtra,India *Conf. Ser.* **1979** 012049DOI 10.1088/1742-6596/1979/1/012049.
23. Rajkumar, K., Nayanatara, C., Baskaran, J., & Sanjeevikumar, D. P. Comprehensive Integration and Optimization of Scheduling and Energy Management Systems for Electric

NATIONAL CONFERENCE

1. K Rajkumar,, presented and published a paper titled A low power and low area multiplier Shift and Add Architecture in the proceedings of 4th national conference on RECENT TRENDS IN ENGINEERING AND TECHNOLOGY-2010 organized by Department of Electrical and Electronics Engineering Senguthanar college of during February 23-24.2010.
2. R Srimathi, K Rajkumar, M Kanthimathi, presented a paper titled“High Performance-Based Deep Neural”in the national level conference on advance in Electrical and Electronics Engineering NCAEEE-2019organized by the department of Electrical and Electronics Engineering, Sri Venkateswara College of Engineering, Pennalur Sriperumbudhur on 29th March 2019.
3. National conference “A Cascade hybrid three phase seven level multi-level Inverter using wind energy application” at Kings College Engineering in Thanjavur.

FDP/STTP

1. Faculty development programme“Neustic II”at Annauniversity and Technology in Trichy.
2. Faculty Development Training Programme on' Microprocessor Based System design 'at Sri Sairam Institute of Technology. JUNE 20-27, 2016.
3. Short Term Training Programme on “MATLAB simulation of Power Electronics Circuits” at Sri Sai Ram Engineering College. April 21-23, 2015.
4. Faculty Development Training Programme on“Program on Electrical Simulation Software” at Sri Sai Ram Engineering College. November 6- 10 2017 .
5. Faculty Development Training Programme on “Design and Mitigation of Issues in Micro-grids using HOMER and PV syst” at Easwari Engineering College.November13–29, 2017.
6. FDP on “Electrical Simulation Software’s” organized by the Department of Electrical and Electronics Engineering, Sri SaiRam Engineering College.
7. FDP on “Outcome Based Education” at Sri Sairam Engineering College on 05.04.2019.
8. Faculty Development Training Programme on “power system transients” at Loyola-Icam College Of Engineering And Technology (LICET). November 17 – 30, 2019
9. Attended one day work shop on “Intellectual Property Rights and Innovations” held at Sri Sairam Engineering College, Chennai on 20th July 2019.
10. Attended the ISTE Sponsored Faculty Development Programme on “Renewable Energy Systems ”held from 22nd to 26th July 2019 at Sri Sairam Engineering College, Chennai.
11. Faculty Development Training Programme on “Multi Disciplinary Research Innovation In

Engineering Science And Technology For Sustainable Development“at BPIN Tripathi Kuman On Institute Of Technology on 26/10/2020 to 07/11/2020.

12. Faculty Development Training Programme on“ Modeling and Simulation of Renewable Energy Systems using MATLAB” from 02.11.2020 to 07.11.2020” at Misrimal Navajee Munoth Jain Engineering College.
13. Creative Methods And Tools For Effective Research Disseminatiion” 10-16 December 2022 Organized by Advanced Signal and Image Processing Lab, Department of Electronics and Communication Engineering. Indian Institute of Information Technology. Design and Manufacturing. Kaneheepuram, Chennai.

NPTELCOURSES/NITTTMODULES

1. Completed the Six months Course Artificial Intelligence and Edge Computing from 11th December 2024 to 22nd May 2025 through IITM Pravartak Technology Foundation (Technology Innovation Hub of IIT Madras)& L&T Edutech
2. Completed NPTEL Online Certification Course in “Computer Networks And Internet Protocol” during Jan 2025- April 2025
3. Completed NPTEL Online Certification Course in “Power System Engineering” duringJan 2025- April 2025
4. Completed NPTEL Online Certification CourseinBasicElectricalCircuitswithEliteduring July-Oct 2024.
5. Completed NPTEL Online Certification Courseand Faculty Development Programme Successfully in Design of Power Electronics Converters with Elite + SilverduringFeb- Apr 2024.
6. Completed NPTEL Online Certification Courseand Faculty Development Programme Successfully in Phyton for Data ScienceduringJan 2024 - Feb 2024
7. Completed NPTEL Online Certification Courseand Faculty Development Programme Successfully in DC Microgrid and Control System with Elite +SilverduringJuly 2023-Sep2023
8. Completed NPTEL Online Certification Courseand Faculty Development Programme Successfully in Introduction to Machine Learning (Tamil). duringJan- Mar 2023
9. CompletedonlinecoursewithEliteplusSilveronAnalogCircuitswithElite+Silver conductedbyNPTEL-SWAYAMduringJan–March2021
10. Completed online course with Elite on Fundamentals of Electric Drives conducted by NPTEL-SWAYAM during July – Sep 2019
11. Successfully Completed 8 Modules in NITTT (National Initiative for Technical Teachers Training and Certified by AICTE.

INDUSTRY COLLABORATION

1. Undergone an Internship at Madras Electroplater at Thirumudivakkam, for 10 days
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PROFESSIONAL BODIES

1. IEEE Member since 2021
 2. ISTE member since 2020
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ACADEMIC RESPONSIBILITIES

1. One of the SCOPE member in GATE - CAPTAIN
2. One of the member in sports coordinator
3. One of the Scope member in UBA -ORGANIZER
4. Department Criteria In charge for NAAC 5
5. Department Criteria 8 Member for NBA
6. Department Coordinator for ICT Academy.(2022-2023)
7. ISO Auditor for Internal Audit
8. Department Coordinator for Class Coordinator(2023-2027)
9. Department Coordinator for Value Added Course.
10. Department Coordinator for Media Coordinator
11. Lab-In Charge for Electrical Machines Lab