

Siddhartha Academy of Higher Education-Deemed to be University

(formerly Velagapudi Ramakrishna Siddhartha Engineering College)

Department of Electrical and Electronics Engineering

Student Publications for the Academic Year: 2024-25

International Journals (01)

SCI/SCIE: 01 Q2: 01 UG: 1

| Sl. No. | Name of the Faculty/ Students | Name of the Paper | Name of the Journal | Volume No., Issue etc. | SCI/ SCIE/ ESCI/ SCOPUS | Impact Factor | Q- Index | UG/ PG |
|---------|---|---|-----------------------------------|---|-------------------------|---------------|----------|--------|
| 1 | Subhojit Dawn, S. Manideep, S. S. Rekha, C. R. Rao, K D Rao, A Al Mansur, and T S Ustun | Advancing Renewable Energy Integration in Deregulated Markets: The Role of Energy Storage, EVs, and Policy Frameworks | Energy Exploration & Exploitation | Vol. 2025, June 2025. DOI: 10.1177/01445987251348052. | SCIE | 1.9 | Q2 | UG |

International Conferences (41)

SCOPUS: 41 IEEE Conference: 39

UG: 40 PG: 01

| Sl. No. | Name of the Faculty/ Students | Name of the Paper | Name of the Conference | DOI | SCOPUS | IEEE/ Others | UG / PG |
|---------|--|--|--|-----------------------------------|--------|--------------|---------|
| 1 | C. Jahnavi, S. R. Gummadi, U. Gunteiah, J. Tulluri and D. Niharika | Enhancing matrix converter output voltage control through fuzzy logic controller | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717585 | SCOPUS | IEEE | UG |
| 2 | G. N. Nikhita, N. Sunny, S. P. Teja and G. S. Rao | MilkEase-Simplifying Daily Dairy Needs with a User-Friendly App | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), | 10.1109/ICIGST60741.2024.10717544 | SCOPUS | IEEE | UG |

| | | | Vijayawada, India | | | | |
|----|---|---|--|-------------------------------------|--------|------|----|
| 3 | Cherukumpalem Mohiddin Khan, S.V.R Lakshmi Kumari , Chundi Vinay Kumar, Mekala Hema and Rayipudi Angel | Performance Analysis of Solar MPPT Methods under Varied Shaded Conditions | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717526 | SCOPUS | IEEE | UG |
| 4 | N. Eedara, N. V. S. K. Chaitanya Sela , P. Veeranalala and J. Pedakapu | Machine Learning for Intelligent EV Charging Slot Booking During Low-Cost Grid Periods | 2024 IEEE 9th International Conference for Convergence in Technology (I2CT), Pune, India | 10.1109/I2CT61223.2024.10543694 | SCOPUS | IEEE | UG |
| 5 | P. Veeranalala, S. N. V. S. K. Chaitanya , N. Eedara and J. Pedakapu | Smart Trolley for Supermarkets Using IoT | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717557 | SCOPUS | IEEE | UG |
| 6 | M. Sumanth, S. N. V. S. K. Chaithanya , N. B. Nouluri, J. Kokkiligadda and P. N. Puthi | Solar Water Pumping System with BLDC Motor and ANN-based MPPT Technique | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717503 | SCOPUS | IEEE | UG |
| 7 | D. Tatababu, M. R. Ranga , D. Satyanarayana, Y. Jyothe and A. R. Devi | Smart Fuel Monitoring System For Diesel Generator | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717583 | SCOPUS | IEEE | UG |
| 8 | S. Narava, V. R. Aduru , A. Pujitha, T. R. Gemini and B. Sumanth | Brain Tumor Segmentation using Spatial Fuzzy C-means(SFCM) and CNN Fusion | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717595 | SCOPUS | IEEE | UG |
| 9 | L. Mane, V. R. Aduru , V. Siliveru, H. Kollu and H. V. Gogulamudi | Comparative Analysis of Machine Learning Algorithms and Neural Networks in Early Detection of Breast Cancer | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717586 | SCOPUS | IEEE | UG |
| 10 | V. S. Pavan M, Ravindranadh. V , I. S. MD, | Optimizing Microgrid Performance Using | 2024 IEEE International Conference on Information | 10.1109/ICITEICS61368.2024.10625432 | SCOPUS | IEEE | UG |

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|----|---|---|---|-------------------------------------|--------|------|----|
| | V. S. Sathish D and P. S. Sankar J | Transient Droop Control | Technology, Electronics and Intelligent Communication Systems (ICITEICS), Bangalore, India | | | | |
| 11 | N. N. Prabhas, V. K. Jonnalagadda , A. S. Babu, V. M. Kanth and N. Sadhvik | Inertia Enhancement With Grid-Connected Renewable Energy Sources Using K-NN Control Technique | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717542 | SCOPUS | IEEE | UG |
| 12 | R. Jampana, I. Damarla , P. R. Manikanta, V. Pradyumna and R. Aravind | Implementation of a Power Converter for Battery Cell Equalization in EV Applications | 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICIGST), Vijayawada, India | 10.1109/ICIGST60741.2024.10717573 | SCOPUS | IEEE | UG |
| 13 | P. Moti begum , G. S. Rao , G. Brahmeswari, Y. Sailakshmi, B. Hemanth Kumar, and D. Yaswanth | Lung Cancer Detection Using Machine Learning | 6th International Conference on Innovative Product design and Intelligent Manufacturing Systems (IPDIMS), Rourkela, India, 2024 | - | SCOPUS | - | UG |
| 14 | A. G. Mohana Prasada Rao, B. Vadlamudi and V. R. Bathina | Simulation and Testing of D60 for Under Voltage, over Voltage and Instantaneous over Current faults | 2024 IEEE Silchar Subsection Conference (SILCON 2024), India | 10.1109/SILCON63976.2024.10910718 | SCOPUS | IEEE | UG |
| 15 | A. F. Mohammad, V. K. J, S. Katam and V. R. Bathina | Petal Copter Used to Drop Flowers on Honoured Guests During Formal Occasions | 2024 IEEE Silchar Subsection Conference (SILCON 2024), India | 10.1109/SILCON63976.2024.10910586 | SCOPUS | IEEE | UG |
| 16 | C. L. P. Chaitanya, M. L. N. Vital , P. Tejaswi, M. Ankitha and P. N. S. SriLatha | A Cognitive Approach to Generate Electrical Energy from Acoustic Medium | 2024 IEEE Third International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), Delhi, India | 10.1109/ICPEICES62430.2024.10719322 | SCOPUS | IEEE | UG |
| 17 | G. N. Nikhita, P. S. Varma, S. P. Teja and G. S. Rao | Obesity level prediction using ML based on eating habits and physical condition | 2024 9th International Conference on Communication and Electronics Systems (ICES), Coimbatore, India | 10.1109/ICES63552.2024.10860098 | SCOPUS | IEEE | UG |
| 18 | B. Tejaswi, M. R. Ranga, V. | Parameter Extraction | 2024 OITS International | 10.1109/OCIT65031.2024. | SCOPUS | IEEE | PG |

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|-----------|--|--|--|-----------------------------------|--------|------|----|
| | R. Bathina and S. Kotni | of Solar Photo Voltaic Module by Using IGWO | Conference on Information Technology (OCIT), Vijayawada, December | 00134 | | | |
| 19 | A. G. M. P. Rao, B. Vadlamani and V. R. Bathina | Design of Mho Type Distance Relay Scheme for Protection of Transmission Line Using EnerVista Software for D60 Relays | 2024 OITS International Conference on Information Technology (OCIT), Vijayawada, India | 10.1109/OCIT65031.2024.00129 | SCOPUS | IEEE | UG |
| 20 | M. R. Sri Ratna Sai Ramya, V. K. J, Y. Moulika and V. R. Bathina | Unmanned Aerial Vehicles to Transport Healthcare Equipment Under Emergency | 2024 OITS International Conference on Information Technology (OCIT), Vijayawada, India | 10.1109/OCIT65031.2024.00133 | SCOPUS | IEEE | UG |
| 21 | P. K. Durga, K. Lalitha , E. Nishanth, C. D. Prakash, R. Aravind and B. V. Rao | Economic Load Dispatch Problem Using Different Metaheuristic Algorithms | 2024 International BIT Conference (BITCON), Dhanbad, India | 10.1109/BITCON63716.2024.10984671 | SCOPUS | IEEE | UG |
| 22 | K. V. Kasimalla, S. Tummapudi , K. H. Neelima, S. Kauluri, R. S. N. Harsha Thota and G. Sushma | A Portable Solar Charging System for Electric Bicycles and Batteries | 2024 International BIT Conference (BITCON), Dhanbad, India | 10.1109/BITCON63716.2024.10984594 | SCOPUS | IEEE | UG |
| 23 | Abhishek, Ankeswara Rao, Geethika Sravanthi, M. L. N. Vital and M. Sai Praveen | Machine Learning Approaches for Detection and Classification of Power Quality Disturbances | International Conference on Emerging Technologies in Engineering Applications (ICETEA), ICETEA 2025 | - | SCOPUS | IEEE | UG |
| 24 | G. B. Menti, V. R. Chowdary , N. L. P. Nagasarapu, G. K. Godugunuri, P. Abburi and J. Yerramsetty | Semi-Autonomous Teleoperated Robot for Enhanced Human-Machine Interaction | 2025 International Conference on Multi-Agent Systems for Collaborative Intelligence (ICMSCI), Erode, India | - | SCOPUS | IEEE | UG |
| 25 | V. R. Chowdary , E. Nishanth, C. Hemanth, M. H. Ganesh, C. Charan Raju and | Improved Virtual Impedance Droop for Different Loads | 2024 International BIT Conference (BITCON), Dhanbad, India | 10.1109/BITCON63716.2024.10984915 | SCOPUS | IEEE | UG |

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|----|--|---|---|-----------------------------------|--------|------|----|
| | P. K. Durga | | | | | | |
| 26 | K. V. Kasimalla, N. Kumar Tadikonda, V. R. Chowdary , G. Babu Menti, V. K. Pamula and G. Kavya Godugunuri | Enhancing Mobility in Autonomous Robotics with a Four-Wheel and Four-Steering System Controlled Remotely via Ubuntu | 2024 International BIT Conference (BITCON), Dhanbad, India | 10.1109/BITCON63716.2024.10984934 | SCOPUS | IEEE | UG |
| 27 | N. Vasudha, B. S. Rani , S. T. Bhanu, B. H. Kumar, S. M. Khizar and V. Bharathi | Advanced Hybrid Energy Storage System with Integrated Battery and Supercapacitor Technology | 2024 International BIT Conference (BITCON), Dhanbad, India | 10.1109/BITCON63716.2024.10985033 | SCOPUS | IEEE | UG |
| 28 | N. Vasudha, K. Lalitha , Thahesin Bhanu Sk, PV .Hemanth Reddy, Charan Rajuch, and R. Abhiram | An analysis of India's Power Consumption by Machine learning With Smart Energy meters For Optimal Power Generation | 2024 International BIT Conference (BITCON), Dhanbad, India | 10.1109/BITCON63716.2024.10985226 | SCOPUS | IEEE | UG |
| 29 | S. Kauluri, I. Damarla , G. Swathi, P. S. S. R. Kumari, M. Karthik and S. Imran | Implementation of Bi-Directional Converter for V2G and G2V Hybrid EV Chargers | 2024 2nd International Conference on Cyber Physical Systems, Power Electronics and Electric Vehicles (ICPEEV), Hyderabad, India | 10.1109/ICPEEV63032.2024.10932060 | SCOPUS | IEEE | UG |
| 30 | Vadlamudi Bindu , V Voodi and J Kaliseti | Power quality enhancement utilizing Dstatcom and Dvr with pI controller in distributive generation system | 2024 International Conference on Sustainable Power & Energy (ICSPE) | 10.1109/ICSPE62629.2024.10924387 | SCOPUS | IEEE | UG |
| 31 | Bindu Vadlamudi , Bora Rakesh, Nakka Ajay Kumar | A Practical Power Theft Detection System with Simulation and Hardware Implementation | 2024 IEEE Flagship International BIT Conference (BITCON-24) | 10.1109/BITCON63716.2024.10985156 | SCOPUS | IEEE | UG |
| 32 | K. Kurapati, N. Tadikonda , P. Kolapalli, and S. K. Nagiseti | An IoT Based Smart Eco-Meter with Real-Time Energy Monitoring System | 2024 International Conference on Sustainable Power & Energy (ICSPE) | 10.1109/ICSPE62629.2024.10924347 | SCOPUS | IEEE | UG |

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|----|--|--|--|------------------------------------|--------|------|----|
| 33 | K. L. S. Mohitha, N. Tadikonda , T. Kiran, P. Sravani, and K. Nikhil | Efficient battery management using cell balancing techniques | 2024 International BIT Conference (BITCON) | 10.1109/BITCON63716.2024.10985522 | SCOPUS | IEEE | UG |
| 34 | K. V. Kasimalla, N. K. Tadikonda , S. Kalakonda, R. M. Penumudi, V. K. Pamula, and V. R. Murala | Chilli Harvesting with Robot Operating System 2 and Reinforcement Learning | 2024 International BIT Conference (BITCON) | 10.1109/BITCON63716.2024.10984602 | SCOPUS | IEEE | UG |
| 35 | V. V. Nadakuditi, S. Dawn , P. K. Veluguri, N. V. Dara and N. R. Kasu | Comparative Studies of Wind Power Forecasting Using Random Forest and LSTM Models | 2025 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSSES), Tumakuru, India | 10.1109/ICSSSES64899.2025.11009935 | SCOPUS | IEEE | UG |
| 36 | R.S., Lanka, Ram Sai, S.V.R., Lakshmi Kumari , S. V.R., R.K., Desavathu, Revanth Kumar, S., Podiyam, Sravani, K.S., Jonnalagadda, Komal Sai | PV and Battery Driven Electric Vehicle with SEPIC/ZETA Bidirectional Converter | 2025 Fourth International Conference on Power, Control and Computing Technologies (ICPC2T) | 10.1109/ICPC2T63847.2025.10958752 | SCOPUS | IEEE | UG |
| 37 | P. Joel Augustine, S. V. R. Lakshmi Kumari , L. Ram Sai, M. Yaswitha | Advancements in Highway Navigation System Using Light Based Technology | 2024 IEEE Flagship International BIT Conference (BITCON-24), India | 10.1109/BITCON63716.2024.10985382 | SCOPUS | IEEE | UG |
| 38 | R. S. Lanka, A. Rama Devi , R. R. Baratam, S. Kondaveeti and J. Kaliseti | Real-Time IoT Driven Energy Monitoring System for Eight Meter Gear Hobbing Machine | 2025 Fourth International Conference on Power, Control and Computing Technologies (ICPC2T), Raipur, India | 10.1109/ICPC2T63847.2025.10958690 | SCOPUS | IEEE | UG |
| 39 | Ayisha Firdos Mohammad, Venkatesh P , Chandrika Chaganti, Dhanush Jampana and Jhansi Vulli | Improved Skin Care Diagnosis Using CNN Architecture | International Conference on Advancement in Science, Technology And Management (ICASTM-2025), S. B. Jain Institute of Technology, Management and Research, Nagpur | - | SCOPUS | IEEE | UG |
| 40 | H. V. Valluru , S. Neyyala, I. Shaik, S. M. Boggavarapu and R. Shaik | Real-Time Image Processing in Autonomous UAVs for Enhanced Rescue Operations | 2025 International Conference on Computational Innovations and Engineering Sustainability (ICCIES), Coimbatore, Tamilnadu, India | 10.1109/ICCIES63851.2025.11032347 | SCOPUS | IEEE | UG |
| 41 | Hari Vamsi Valluru , Deva Harshini Satha, Gopi Boina, | Smart power optimization in level shifting: A focus on | AIP Conf. Proc. 3237, 040019, 2025 | 10.1063/5.0247115 | SCOPUS | - | UG |

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| | Muralidhar Ambaravalli, Mounika Duriseti | ultra-efficiency | | | | |
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Book Chapters (10)

SCOPUS: 10

UG: 08 PG: 02

| Sl. No. | Nmae of the Faculty/ Students | Name of the Paper | Name of the Book | DOI | SCOPUS | IEEE/ Springer | UG / PG |
|---------|--|--|---|------------------------------|--------|----------------|---------|
| 1 | Yamini D., Rao G.S. , Tejaswi M., Vishal M.G. and Vennela, M | Enhancement of Solar Panel Efficiency | In: Pal, M., Guerrero, J.M., Siano, P., Das, D., Chowdhuri, S. (eds) Innovations in Energy Management and Renewable Resources. IEMRE 2023. Lecture Notes in Electrical Engineering, vol. 1239. 2024 | 10.1007/978-981-97-6390-0_24 | SCOPUS | Springer | UG |
| 2 | Devasahayam B. and Venkateswara Rao B. | Multi-objective Optimal Power Flow Using Krill Herd Algorithm | Recent Advancements in Product Design and Manufacturing Systems, Lecture Notes in Mechanical Engineering, Springer Nature Singapore Pte Ltd., November 2024 | 10.1007/978-981-97-6732-8_37 | SCOPUS | Springer | PG |
| 3 | K. Bhaskara Sandhya, S. N. V. S. K. Chaitanya, B. Venkateswara Rao and R. Ashok Bakkiyara | Optimal Reactive Power Dispatch Using Improved Grey Wolf Algorithm | Recent Advancements in Product Design and Manufacturing Systems, Lecture Notes in Mechanical Engineering, Springer Nature Singapore Pte Ltd., November 2024 | 10.1007/978-981-97-6732-8_38 | SCOPUS | Springer | PG |
| 4 | Bavisetty A., K. Dhananjay Rao , Reddy, K.M.M.K., Pallanti, K. and Leelamadhavi | A Smart EV-Based Micro Mobility System | In: Pal, M., Guerrero, J.M., Siano, P., Das, D., Chowdhuri, S. (eds) Innovations in Energy Management and Renewable Resources. IEMRE 2023. Lecture Notes in Electrical Engineering, vol 1239. Springer, Singapore | 10.1007/978-981-97-6390-0_12 | SCOPUS | Springer | UG |
| 5 | Guru Charan Duvvada, A. Rama Devi , S. Vangapati, A.S. Darivemula, A.S. and S.K. Avula | Wireless Night-Vision Camera-Equipped Spy Robot for Surveillance in War Zones (an Unmanned Ground Vehicle) | International Conference on Signal, Machines, Automation, and Algorithm. SIGMAA 2023. Advances in Intelligent Systems and Computing, vol. 1461, Springer, Singapore, 2024 | 10.1007/978-981-97-6352-8_31 | SCOPUS | Springer | UG |

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|----|--|---|---|------------------------------|--------|----------|----|
| 6 | Jahnvi, O, Venkateswara Rao, B. , Dhathri Sree, M., Praveen Venkat, P. and Sai Narendra, M. | A Novel Approach to Design a Multi-featured Smart TV Using Raspberry PI | In: Malik, H., Mishra, S., Sood, Y.R., García Márquez, F.P., Ustun, T.S. (eds) International Conference on Signal, Machines, Automation, and Algorithm. SIGMAA 2023. Advances in Intelligent Systems and Computing, vol 1461, 2024. Springer, Singapore | 10.1007/978-981-97-6352-8_19 | SCOPUS | Springer | UG |
| 7 | Parimi, S.R.K., Dawn, S. , Polavarapu, A., Karri, H. and Yakasiri, R. | Profit Maximization Approaches in Wind-Integrated Systems within Deregulated Environments | In: Panda, G., Basu, M., Siano, P., Affijulla, S. (eds) Proceedings of Third International Symposium on Sustainable Energy and Technological Advancements. ISSETA 2024. Lecture Notes in Electrical Engineering, vol. 1251. Springer, Singapore, 2024 | 10.1007/978-981-97-6976-6_13 | SCOPUS | Springer | UG |
| 8 | G.S. Rao, A. Ramadevi and P.S.R. Krishna | Smart Mobility and Health Monitoring System: Revolutionizing Wheelchair and Bed | In: Kumar, S., Mary Anita, E.A., Kim, J.H., Nagar, A. (eds) Fifth Congress on Intelligent Systems. CIS 2024. Lecture Notes in Networks and Systems, vol. 1276. Springer, Singapore, 2025 | 10.1007/978-981-96-2697-7_25 | SCOPUS | Springer | UG |
| 9 | Valluru, H.V., Harshini, D., Gopi, Muralidhar and Mounika | Advancing Solar Still Efficiency–Pioneering Sustainable Water Solutions | In: Manoharan, S., Tugui, A., Baig, Z. (eds) Proceedings of 4th International Conference on Artificial Intelligence and Smart Energy, ICAIS 2024, Information Systems Engineering and Management, vol. 4. Springer, 2024 | 10.1007/978-3-031-61475-0_3 | SCOPUS | Springer | UG |
| 10 | Akhil, S.S., Rao, K.D. , Mansa, T., Tharun, S., Dilip, B. | A Brief Review of Cyber Attacks on Electric Vehicle Battery Management System | In: Pal, M., Guerrero, J.M., Siano, P., Das, D., Chowdhuri, S. (eds) Innovations in Energy Management and Renewable Resources, IEMRE 2023. Lecture Notes in Electrical Engineering, vol. 1239. Springer, 2024 | 10.1007/978-981-97-6390-0_8 | SCOPUS | Springer | UG |