

ILLUMINARIES

Volume 13, issue 1, June, 2022



SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN (AUTONOMOUS) VISHNUPUR, BHIMAVARAM, WEST GODAVARI DISTRICT, ANDHRA PRADESH-534202 WWW.SVECW.EDU.IN

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

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EDITOR'S MESSAGE

It gives me great pleasure to congratulate students, teachers, and the electrical and electronics department staff on the publication of the 13th edition of the newsletter. This edition of the newsletter focuses on the inside activities, i.e., academics, student and faculty achievement, and innovation occurring in the department during the last six months.

FDP ON HYBRID VEHICLES AND BATTERY MANAGEMENT SYSTEM

The department of Electrical and Electronics Engineering has organized a Ten Day Faculty and Development Program on Hybrid Vehicles and Battery Management Systems (HVBMS) from 7th to 16th March 2022 in association with the Department of Electrical Engineering, NITWarangal, and E&ICT, NIT Warangal. This FDP aims at exploring opportunities for conducting research on:

- 1. Introduction to Electric Vehicles
- 2. VSI and CSI schemes for EV
- 3. Simulation Studies on Electric Vehicles 4. Braking for Electric Vehicles
- 5. Battery Modelling Methods
- 6. EV Charging Methods and its Challenges
- 7. Thermal Management for Batteries
- 8. Hybrid Energy Storage System.





STUDENT ACTIVITIES

STUDENT ARTICLES

Title: FOOD SERVING ROBO

Objective: Remote control / Bluetooth based Food serving platform for isolation

in Covid ward.

Authors: B. Mayukha

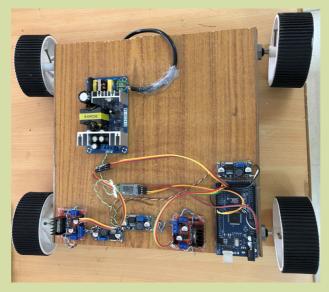
G. Tejasri

P. Amulya

Y. Jasmitha

Technical Description:

Food serving Robo contains an Arduino microcontroller with basic mobility features. An Arduino program contains instructions mediating between the android controller and an Arduino car. Android mobile controller uses different mobile sensors to supervise motion. The interface is easy to use and provides feedback from the Arduino microprocessor through Bluetooth after giving instructions to Arduino for various actions through the interface via the Bluetooth module. The android application is to create with the help of android studio which provide us with more capability, stability.



STUDENT ACTIVITIES



TRAINING/WORKSHOPS ATTENDED

- Ch. Sailaja and K. Devisri of II EEE attended a workshop on Arduino boot camp organized by the JNTU-GV College of Engineering, Vizianagaram, from 21/04/2022 to 22/04/2022.
- Ch. Kavya Sri and B. Durga of II EEE attended a workshop on Cloud Computing organized by the JNTU-GV College of Engineering, Vizianagaram, from 21/04/2022 to 22/04/2022.
- K Vyshanavi and D Sai Nandini of II EEE completed the online program "Boot Camp On Electric Vehicle Battery Management System" on 19-02-2022.



INDUSTRIAL VISITS

III EEE students visited the Dr. Narla Tata Rao Thermal Power Station (NTTPS), Vijayawada, A.P on 23-04-2022. It was developed under 4 stages, with the project cost of Rs 193 Crores and Rs 511 Crores respectively. Also, with an investment of RS 840 Crores 2 units were commissioned under III Stage. The assistant engineer explained in detail each and every part of the plant and its construction and operation. There the students have seen boilers, coal handling units, Alternators, turbines, and switchgear units. At last, the students visited the UCB Room (Unit control Board), where the whole process is monitored by control board members and at the time of emergency, they will inform the authority's concern.





FACULTY ACTIVITIES



WORKSHOPS /FDPSATTENDED

- Mr. K V S Prasadarao and Mr. B Mahendra Chand attended a One Week Short Term Training Program on Digital Signal Processors, organized by SVNIT, Surat from 14-04-2020 to 16-04-2022 and 23-04-2022 to 24-04-2020.
- Ms. Y T R Palleswari and A. Siva attended a short-term program on "Electric Vehicle Integration Into Modern Power Networks- Challenges and solution Approaches, from 04-04-2022 to 08-04-2022.
- Mr. K V S Prasadarao attended a 39 hours online course "Industrial Technologies For Renewable And Electric Transportation Systems" organized by MNIT, Jaipur from 28-01-2022 to 18-03-2022.



JOURNALS:



• V S Prasadarao K, and P. Sankar, "A New Fault-Tolerant MLI - Investigating Its Skipped Level Performance," in IEEE Transactions on Industrial Electronics, Vol 69, No. 2, Feb- 2022, pp: 1432- 1442.

CONFERENCES:

- Saravanan S., Kalaiyarasi M., Karunanithi K., Karthi S., Pragaspathy S., Kadali K.S., "IoT Based Healthcare System for Patient Monitoring, IoT and Analytics for Sensor Networks", Lecture Notes in Networks and Systems, Vol 244, 2022, Springer, Singapore.
- Durga Prasad Garapati, Multilevel Inverter Fed 1-Φ Asynchronous Motor Based Water Pumping System, IEEE International Conference on Computing, Communication and Power Technology (IC3P-2022), 07-08 January 2022.
- Durga Prasad Garapati, SM Padmaja, R Sudheer Kumar, and N Praveen Kumar, Fish Feeding Boat using BLDC Motor for Aqua Applications, IEEE International Conference on Computing, Communication and Power Technology (IC3P-2022), 07-08 January 2022.

VEDIC ACTIVITIES

- Mr. S. D. K. Varma and Mr.J. Venkatesh attended the "Faculty Teaching & Learning Conclave" at VEDIC, Hyderabad on 07/05/2022.
- Mr. K V S Prasadarao attended the Program on "Mentoring Students Effectively" at VEDIC, Chinchinada on 09/06/2022.
- Dr. B Suresh Babu attended the "Faculty Teaching & Learning Conclave" at VEDIC, Chinchinada on 10/06/2022.







Department Vision

To establish a knowledge hub in the field of Electrical & Electronics Engineering to meet the needs of society

Department Mission

- To produce quality Electrical and Electronics Engineers
- To inculcate discipline and ethical values among the students
- To empower students to succeed in higher education and research

PEOs (UG Programme)		(PEOs of PG Programme)	
PEO1: Demonstrate employability skills and leadership qualities to serve the society. PEO2: Achieve personal and professional success with awareness and commitment to their ethical and social responsibilities. PEO3: Improve professional competence through life-long learning including higher education and research.		PEO1: Graduates acquire technical knowledge to solve complex real-world problems. PEO2: Graduates will exhibit competencies to excel in academia or industry. PEO3: Graduates acquire ability to practice ethical values. POs (PG Programme)	
POs (UG Programme)			
PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8	An ability to apply knowledge of mathematics, science and engineering. An ability to design and conduct experiments as well as analyze and interpret results to provide valid conclusions. An ability to design system components (or) processes optimally. An ability to contribute individually/ in group(s) representing varied engineering disciplines to accomplish a common goal. An ability to identify, formulate and solve complex engineering problems. An understanding of professional and ethical responsibilities. An ability to use written and oral communication skills effectively An ability to understand the impact of engineering solutions in a global, economic, environmental and societal context. An ability to engage in independent and life-long	PO 1 PO 2 PO 3 PO 4 PO 5 PO 6 PO 7 PO 8	The graduates have ability to discriminate, evaluate and analyze by acquiring conceptual knowledge base in power electronics. Ability to analyze complex engineering problems critically and synthesize information independently for conducting research in theoretical and practical context. Ability to think originally and arrive at optimal solutions for power electronic systems after considering safety and environmental factors. Ability to identify, formulate research problems individually or in group(s) to the development of technological in the field of power electronics An ability to develop mathematical models to use modern tools for designing power electronic topologies for various applications. An ability to identify the opportunities in multidisciplinary and collaborative research work Ability to manage projects effectively after consideration of technical and financial factors. An ability to develop networking in power electronics community and to make effective presentations and technical reports.
PO10	learning. Knowledge of contemporary issues related to engineering.	PO 9	An ability to engage in life-long learning and an understanding of the needs to meet current trends of developments in the field of power electronics.
PO11	An ability to use appropriate techniques, resources and modern engineering tools for engineering practice. An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team to manage projects.	PO 10	An ability to acquire professional and ethical responsibilities for sustainable development of society. An ability to examine critically the outcomes of one's actions and make corrective measures independently