



NEWS LETTER ELECTRICAL GNOSYS

VOLUME 14 ISSUE 1
FEBRUARY 2024

VISION

To evolve as a centre of excellence, to train students in contemporary technologies, to meet the needs of global industry and to develop them into skillful engineers instilled with human values and professional ethics.

MISSION

To produce competent and disciplined Electrical & Electronics Engineers through delivery of quality education to meet the ongoing global challenges in alignment with technical education system and society.

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HOD'S DESK PROF. LALY JAMES

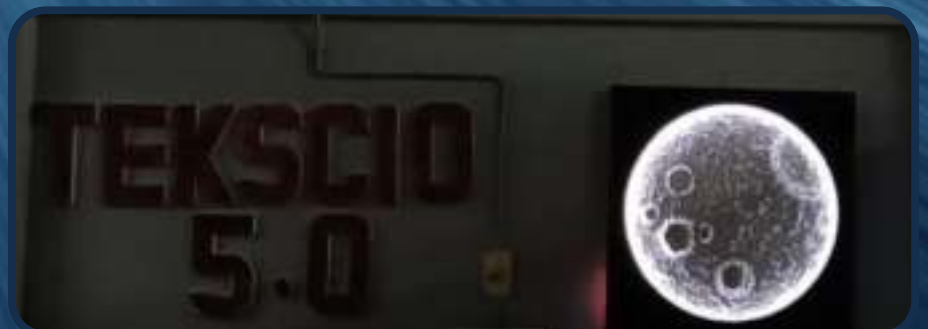
I am glad to note that the Department of Electrical and Electronics Engineering is ready to release another edition of Newsletter "ELECTRICAL GNOSYS". I appreciate the efforts of staff's and student's for past month and here are some of the highlights of events in past month. The Technical festival of Dept. TEKSCIO 5.0 conducted in a grant way. I congratulate the entire department faculties, staff and students for their contribution to department activities and look forward for future developments. We celebrated Christmas and New year also.

Wish you all a very happy new year 2024 ahead.

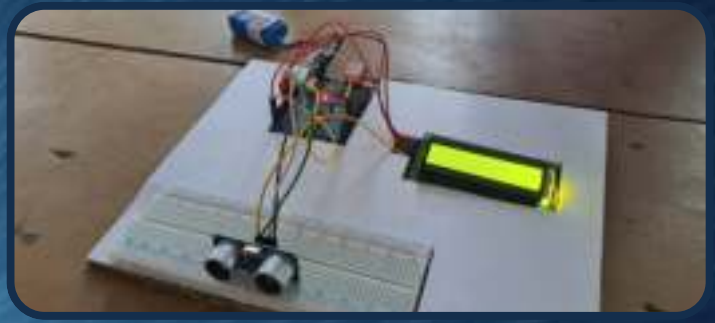
"Education is the ability to listen to almost anything without losing your temper or your self-confidence."

— Robert Frost

TECH FEST-TEKSCIO 5.0



TECH FEST-TEKSCIO 5.0



TECH FEST-TEKSCIO 5.0



TECH FEST-TEKSCIO 5.0



TECH FEST-TEKSCIO 5.0-PRIZE DISTRIBUTION



TECH FEST-TEKSCIO 5.0-PRIZE DISTRIBUTION



EEE ALUMNI MEET



EEE ALUMNI MEET



EEE ALUMNI MEET



ARDUINO WORKSHOP



VIMAL JYOTHI ENGINEERING COLLEGE
INSTITUTES INNOVATION COUNCIL
IEEE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
PITCH YOUR SPARK 2
ARDUINO WORKSHOP
ON
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GPS Map Camera

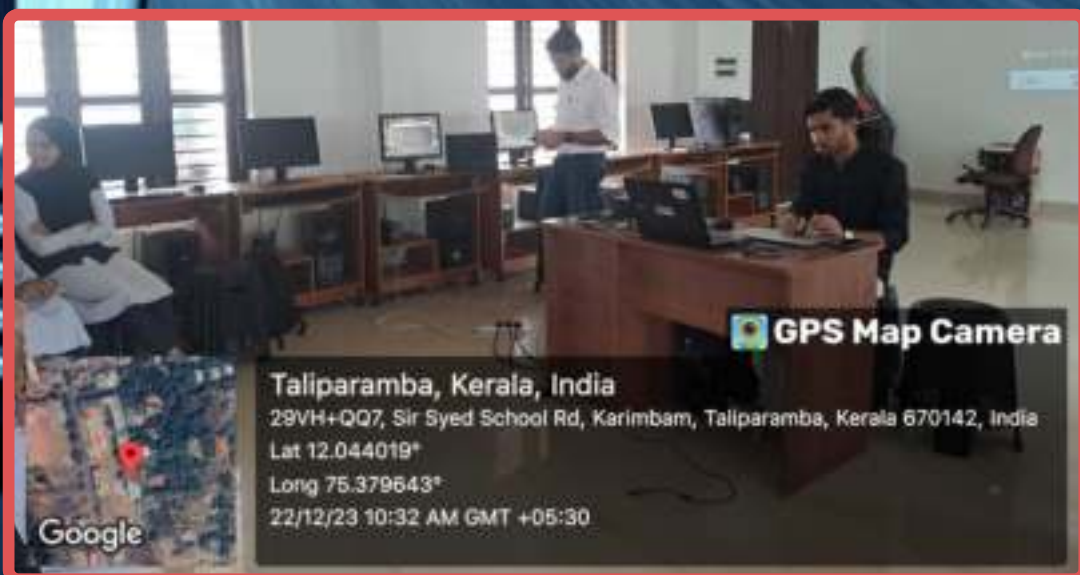
Panniyoor, Kerala, India
29WQ+R7C, ETC - Poomangalam- Mazhooor - Panniyoor- Kalikkadvu- Padappangad- Madakkad Rd, Karimbam, Panniyoor, Kerala 670142, India



GPS Map Camera

Panniyoor, Kerala, India
29WQ+R7C, ETC - Poomangalam- Mazhooor - Panniyoor- Kalikkadvu- Padappangad- Madakkad Rd, Karimbam, Panniyoor, Kerala 670142, India
Lat 12.045449°

ARDUINO WORKSHOP



X'MAS CELEBRATION



DEPT X'MAS CELEBRATION



DEPT X'MAS CELEBRATION



ALUMNI CORNER



PRAVANV T V, 2019-23BATCH



SRADHA ALEX, 2019-23 BATCH



FACULTY ACHIVEMENTS

1) Prof. Laly James and Asst Prof Athira M Thomas attended five days offline FDP on recent trends in Electric vehicle and renewable energy integration from 11-15 Dec 2023 at Govt Engg College, Wayanad

2) Asst. Prof. Prabin James is selected as Secretary, IEEE Education Society- Kerala Chapter- 2024

3) Assoc. Prof. Tintu George was awarded a certificate of appreciation in recognition of the outstanding dedication and support being the ambassador of the IEEE PES DAY 2023

4) The Patents filed through Allinnov R&D of the projects guided by the following faculty members have been published.

Prof. Laly James

Dr. Justin Sunil Dhas

Dr. Senthil Kumar

Dr. Teena George

Assoc Prof Tintu George

Asst. Prof Prabin James

Asst. Prof Tinu Francis

Asst. Prof Shelma George

Asst. Prof Athira M Thomas

Asst. Prof Rojith K

THE ROLE OF IOT IN THE ELECTRIC VEHICLE (EV) INDUSTRY

In a global context marked by environmental anxieties and the dwindling reservoirs of fossil fuels, the pursuit of feasible substitutes for internal combustion engines (ICEs) has heightened. Electric vehicles (EVs) have surfaced as a hopeful resolution, providing eco-conscious transportation while striving to uphold cost-effectiveness, dependability, and effectiveness.

Nevertheless, hurdles persist regarding the range and charging duration of EVs. In contrast to conventional ICE vehicles, EVs often exhibit lengthier charging times and restricted driving distances. To address these challenges, manufacturers have embraced the Internet of Things (IoT) as a strategic tool.

People are switching to EVs for cleaner transportation as environmental worries and the shortage of fossil fuels increase. The EV market is changing as a result of IoT-boosted services and charging. Due to environmental concerns and the depletion of fossil fuel resources, there is a growing hunt for environmentally acceptable alternatives to conventional internal combustion engines (ICEs). While they are more cost-effective, dependable, and efficient than internal combustion engines (ICEs), electric vehicles (EVs) have drawbacks in terms of range and charging time. IoT is being used by manufacturers to address these problems.

Governments, decision-makers, and consumers alike are realising how critical it is to cut carbon emissions and promote the use of electric vehicles (EVs), with IoT-enabled EV battery management improving cost, energy density, and range. Electric vehicles (EVs) reduce air pollution and carbon emissions by running on electricity instead of burning fossil fuels, which is a major way to combat climate change. Additionally, they have better energy-to-motion conversion efficiency, which means that less energy is used and fuel is used more effectively. Because they are less expensive to operate than petrol or diesel, electric vehicles (EVs) have reduced operating costs. EVs have fewer moving parts, which could result in long-term cost savings and make them a more desirable choice from an economic standpoint.

Despite their advantages, electric cars face challenges such as high initial investment, limited driving range and lack of charging infrastructure. Public and home charging facilities are crucial for widespread adoption, while the high cost of electric cars makes them prohibitive for many buyers.

According to a Netscribes industry research report, the global automotive IoT industry will reach \$106.32 billion by 2023. Governments everywhere want to switch from gasoline or diesel cars to electric vehicles; But for this to happen, the automotive industry must adhere to international standards. Today, consumers expect their cars to become a complete software platform with self-driving capabilities, easy management, and low operating and maintenance costs. Electric car manufacturers can use IoT technologies to improve their production processes and optimize after-sales support systems. The use of IoT technology in electric vehicles has several advantages if widely adopted. These include lower battery prices, safer and more secure driving, less air pollution, easier maintenance, job opportunities, lower manufacturing costs and more. All in all, it looks like IoT has a very bright future in the automotive and electric vehicle industry!

As we all know, IoT can change the entire electric vehicle industry and lead to a healthier environment. With IoT, electric vehicles have become more efficient and convenient for electric car owners and service providers. They can get all information about their vehicles in seconds, such as maintenance time, nearby charging stations, battery status, error message and much more.

In short, the role of the Internet of Things in the electric car industry is crucial for the development and success of electric cars. IoT technology enables real-time monitoring, data collection and analysis, improving efficiency, performance and user experience. It also facilitates remote diagnostics, predictive maintenance and smart charging solutions, ultimately helping to promote sustainable transport. As the electric vehicle industry continues to grow, the Internet of Things will play an increasingly important role in driving innovation and shaping the future of electric mobility.

Shanat K S

2021-25 BATCH

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- GRADUATES WILL ACHIEVE BROAD AND IN-DEPTH KNOWLEDGE OF ELECTRICAL & ELECTRONICS ENGINEERING RELATING TO INDUSTRIAL PRACTICES AND RESEARCH TO ANALYZE THE PRACTICAL PROBLEMS AND THINK CREATIVELY TO GENERATE INNOVATIVE SOLUTIONS USING APPROPRIATE TECHNOLOGIES.**
- GRADUATES WILL MAKE VALID JUDGMENT, SYNTHESIZE INFORMATION FROM A RANGE OF SOURCES AND COMMUNICATE THEM IN SOUND WAYS APPROPRIATE TO THE DISCIPLINE.**
- GRADUATES WILL SUSTAIN INTELLECTUAL CURIOSITY AND PURSUE LIFELONG LEARNING NOT ONLY IN AREAS THAT ARE RELEVANT TO ELECTRICAL & ELECTRONICS ENGINEERING, BUT ALSO THAT ARE IMPORTANT TO SOCIETY**
- GRADUATES WILL ADAPT TO DIFFERENT ROLES AND DEMONSTRATE LEADERSHIPS IN GLOBAL WORKING ENVIRONMENT BY RESPECTING DIVERSITY, PROFESSIONALISM AND ETHICAL PRACTICES**

PROGRAM SPECIFIC OUTCOMES (PSOS)

APPLY THE KNOWLEDGE OF ELECTRICAL FUNDAMENTALS , CIRCUIT DESIGN, CONTROL ENGINEERING, ANALOG & DIGITAL ELECTRONICS TO THE FIELD OF ELECTRICAL & ELECTRONICS SYSTEMS IN INDUSTRY.

DEVELOP TECHNICAL KNOWLEDGE, SKILL, AND COMPETENCE TO IDENTIFY COMPREHEND AND SOLVE PROBLEMS IN RESEARCH AND ACADEMIC RELATED TO POWER SYSTEM ENGINEERING, INDUSTRIAL DRIVES & CONTROL.

PROGRAM OUTCOMES (POS)

1.ENGINEERING KNOWLEDGE

2.PROBLEM ANALYSIS

3.DESIGN/ DEVELOPMENT OF SOLUTIONS

4.CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS

5.MODERN TOOL USAGE

6.THE ENGINEER AND SOCIETY

7.ENVIRONMENT AND SUSTAINABILITY

8.ETHICS

9.INDIVIDUAL AND TEAM WORK

10.COMMUNICATION

11.PROJECT MANAGEMENT AND FINANCE

12.LIFE-LONG LEARNING



HAPPY NEW YEAR

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STUDENT EDITOR-MR. ROHAN KV, STUDENT-S7 EEE**