

Vel Tech Multi Tech

Dr.Rangarajan Dr.Sakunthala Engineering College An Autonomous Institution

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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Student Editors

1. M.NAVEEN -IV Year / EEE

2. PANEERSELVAM - IV Year / EE

3. VENKATESWARAN- III Year / EEE 4. CHANDRU - III Year / EEE

ELECTRON

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Department of EEE

ELECTRON

VISION OF THE INSTITUTION

Elevating Well Being of Humanity by Augmenting Human Resource Potential Through Quality Technical Education and Training

MISSION OF THE INSTITUTION

- To effectuate supremacy in technical education through articulation of research and industry practices for social relevance.
- To inculcate the habit of lifelong learning
- To exhibit professional ethics, commitment and leadership qualities

VISION OF THE DEPARTMENT

To emerge as a centre of academic excellence in Electrical and Electronics Engineering and related fields through knowledge acquisition and propagation meeting global practices

MISSION OF THE DEPARTMENT

- To nurture the talent and to facilitate the students with research ambience in Electrical and Electronics Engineering
- To propagate lifelong learning
- To impart the right proportion of knowledge, attitudes and ethics in students, to enable them take up positions of responsibility in the society and make significant contributions









PEO

To prepare graduates to have successful and flourishing career in Electrical and Electronics Industry.

. To make students able to excel in their career with ethical values and managerial skills to solve real life technical problems.

To make students capable of solving problems in Electrical and Electronics Engineering which are found in utilities and industries

To help students to engage in quest for self-learning and life-long learning



Department of EEE

About Nikola Tesla



Nikola Tesla (10 July 1856 – 7 January 1943) was a Serbian-American inventor, electrical engineer, mechanical engineer, and futurist best known for his contributions to the design of the modern alternating current (AC) electricity supply system.^[8]

Born and raised in the Austrian Empire, Tesla studied engineering and physics in the 1870s without receiving a degree, gaining practical experience in the early 1880s working in telephony and at Continental Edison in the new electric power industry. In 1884, he emigrated to the United States, where he became a naturalized citizen. He worked for a short time at the Edison Machine Works in New York City before he struck out on his own. With the help of partners to finance and market his ideas, Tesla set up laboratories and companies in New York to develop a range of electrical and mechanical devices. His alternating

current induction motor and related polyphase AC patents, licensed by Westinghouse Electric in 1888, earned him a considerable amount of money and became the cornerstone of the polyphase system which that company eventually marketed.

Attempting to develop inventions he could patent and market, Tesla conducted a range of experiments with mechanical oscillators/generators, electrical discharge tubes, and early X-ray imaging. He also built a wireless-controlled boat, one of the first-ever exhibited. Tesla became well known as an inventor and demonstrated his achievements to celebrities and wealthy patrons at his lab and was noted for his showmanship at public lectures. Throughout the 1890s, Tesla pursued his ideas for wireless lighting and worldwide wireless electric power distribution in his high-voltage, high-frequency power experiments in New York and Colorado Springs. In 1893, he made pronouncements on the possibility of wireless communication with his devices. Tesla tried to put these ideas to practical use in his unfinished Wardenclyffe Tower project, an intercontinental wireless communication and power transmitter, but ran out of funding before he could complete it.

After Wardenclyffe, Tesla experimented with a series of inventions in the 1910s and 1920s with varying degrees of success. Having spent most of his money, Tesla lived in a series of New York hotels, leaving behind unpaid bills. He died in New York City in January 1943. Tesla's work fell into relative obscurity following his death, until 1960, when the General Conference on Weights and Measures named the SI unit of magnetic flux density the tesla in his honor. There has been a resurgence in popular interest in Tesla since the 1990s.

M Naveen IV -EEE

TOUGH AND TRICKY QUESTIONS MICROSOFT ASKED IN INTERVIEWS



1. Role: Marketing team

"What are your favourite Microsoft products ?"

2. Role: Software engineer

"Given a large rectangle and a set of smaller rectangles, find if there exists a subset of the small rectangles that can perfectly fill the large rectangle."

3. Role: Graduate Scheme

"How would you describe cloud computing to a 7-year-old?"

4. Role: Summer intern

"Devise a way to make sure there is always milk in my fridge."

- 5. Role: Senior business development manager "Why would you not join Google?"
- 6. Role: Senior business planner "What did you think about Microsoft's decision to launch Office products on the iPhone?"

7. Role: Software development engineer

"Why are manholes round?"

-Dharaniya IV-EEE

PUZZLES

Which number replaces the question mark?



Answer : 9

Explanation : The number at the centre of each triangle equals the sum of the lower two numbers minus the top number.

-Nandhitha S, II-EEE

RIDDLES

Two camels were facing in opposite directions. One was facing due East and one was facing due West. They were in the desert so there was no reflection. How can they manage to see each other without walking around or turning around or moving their heads?

Answer : The two camels were facing each other the entire time. Hence facing in opposite directions.

Alive as you but without breath, As cold in my life as in my death; Never a thirst though I always drink, Dressed in a mail but never a clink.

Answer: Fish

A barrel of water weighs 60 pounds. What must you put in it for it to weigh 40 pounds?

Answer: A hole

➤ Where can you find rivers without water?

Answer: A map

At a four-legged table, there is one grandma, two mothers, two daughters and a granddaughter. How many legs are under the table?

Answer: There are 10 legs under the table in total. We have a grandmother (a mother), her daughter (both a mother and a daughter) and her granddaughter (a daughter and granddaughter) hence how we have the number of mothers and daughters sat around the table.

> What can point in every direction but can't reach the destination by itself?

Answer: Your Finger

-Priya Bharathi S, IV-EEE

WRITE UP

IOT Based ICU Patient Monitoring System

Intensive Care Unit or ICU is where the patients who are critically ill are admitted for treatment. For such critical conditions the Doctors need to have an all-time update patient's health related parameters like their blood pressure, heart pulse and temperature. To do manually, this is too tedious a task and also for multiple patients it becomes close to impossible. For this type of situations this IOT based system can bring about an automation that can keep the Doctors updated all time over internet.



Venkateshwaran, III-EEE

Automatic Light Intensity Controller By External Light Sensing

Nowadays highways are lightened by using High Intensity Lamps. The disadvantage of this High Intensity Lamps is that it consumes a lot of energy and another disadvantage of this is that the intensity cannot be varied according to the requirement. To overcome this limitation, this system "Automatic Light Intensity Controller by External Light Sensing Project" is developed.



Chandhru , III-EEE

WRITE UP

Advanced Footstep Power Generation System using RFID for Charging

Day by day, the population of the country is increasing and the requirement of the power is also increasing. At the same time the wastage of energy is also increasing in many ways. So, reforming this energy back to usable form is the major solution. In this footstep power generation project, we are generating power with the help of human's footsteps; this power is then used to charge battery. The power is stored in a battery that can be used to charge a mobile phone using RFID card. This system is powered by Atmega 328 microcontroller, it consists of Arduino IDE, RFID sensor, USB cable and LCD.



Naveen . M, IV-EEE

Hybrid Inverter With Solar Battery Charging

Inverters are widely used in the domestic as well as industrial environments to serve as second line of source in case of power cut form the electricity utility grids. However, due to low capacity of the battery the inverter dies out with the use of heavy load appliances. This project is designed in such a way that it overcomes this limitation by the use of solar energy. Hybrid Inverter with Solar Battery Charging System consists of an inverter powered by a 12V Battery. This inverter generates up to 110V AC with the help of driver circuitry and a heavy load transformer.



Pannerselvam ,IV-EEE