BEST PRACTICE-I

1. Title of the Practice:

Bodana-Sadhana-Nipuna-Programme **(BSNP)**

2. Objective:

Narasaraopeta Engineering College believes in giving students every opportunity to go beyond the regular curriculum, broaden their learning experiences and expand their future options. Within the four-year graduation programme, the institution offers all students an additional learning opportunity to develop their practical laboratory abilities. It encourages students to pursue careers in research and development. They learn to use their knowledge and talents to identify and address societal and industrial problems. They are attempting to incubate the ideas and later turn those into prototypes further moulding them into commercial models that will lead to the development of entrepreneurship.

3. The context:

Innovation and creativity are critical characteristics for the creation of cutting-edge technologies which can tackle the difficulties of globalization. The transformation of Science, Engineering, and Technology has shifted the focus of a student's success from theoretical to applied knowledge. These factors encourage technical
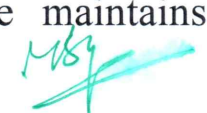
institutes to broaden their teaching and learning processes to include more practical courses and activities. It is critical to encourage engineering graduates to pursue careers in research and development in order to boost the country's economic development. It is necessary to place a greater emphasis on project-based and situation-based learning, because it allows them to think out of the box and use their imagination to its full potential. Project and model making begins with the selection of a topic from a field of interest and continues with the development of creative solutions to numerous project-related problems and other technical hurdles. Project and model making constantly improves the existing system, allowing graduates to think socially while maintaining technical altitude and ideas.

4. The Practice:

The Institute provides a robust infrastructure across its campus for creating high-quality Models that are up to date. For skill development programmes among teachers and students, the college has MOUs with many reputed national and international organisations such as AWS Academy, Microchip academic programme, Blueprism University, Celonis, Juniper Networks, Paloalto Cyber Security academy, Cloud and Automation academy through EduSkills, Microsoft and Redhat Academy, Dassault Systems- 3D Experience, Applied Robotic Control Lab in association with European Centre for Mechatronics-Germany, Embedded Systems and Robotics Lab under E-Yantra initiative by IIT Bombay . The institute maintains a

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partnership with Bennet University through APSSDC to provide students with additional training and internship opportunities. Many training programmes for faculty are conducted by the ICT Academy in partnership with the institute. Students are offered mini projects from the second year onwards to build or fabricate unique technological models and this is done under the able guidance of the senior academicians. The college hosts idea-churning sessions with industry professionals (Global Business Incubator) and alumni entrepreneurs. Students are encouraged to attend summer projects / internships in the industries/prestigious academic institutions to acquire practical knowledge.

Faculty encourages students to go beyond the syllabus in every laboratory course including Virtual Labs. Students are guided to identify day to day problems encountered by society and are motivated to find enabling solutions through their projects. The instructors and students work together to enhance their knowledge and skills and it is one of the most remarkable aspects of this technique. The professors assist and guide students in developing unique models. The students are encouraged to work in collaboration with the faculty and publish their research work in reputed journals and international conferences. The institute encourages students to join professional student chapters such as IETE, ISTE, IEEE, IEI(I), and CSI. Various events are held under the auspices of these organizations.

The departmental research groups assist students in undertaking mini/major projects to develop working models. College incubation center is established with the necessary facilities. Financially viable Projects are supported for fabrication and testing. There is a provision in the budget proposal for financial support for model making, and the college reimburses 50% of the model cost. A team of faculty members reviews all the completed projects.

5. Evidences

Empowered by spirit of innovation and commitment to societal progress, our students and faculty collaborate seamlessly to tackle real-world challenges. Our students, spearheaded by the unwavering support of their professors, embarked on a project to design and fabricate an electric vehicle.

Their expertise extended to 3D printing, evident in their meticulously crafted models of a rack and pinion steering mechanism, a cam and follower mechanism, a radial engine and various tools and components. Beyond their academic pursuits, our students actively engage in industry-driven competitions, such as TCS – CODEVITA and Hackathons, where they consistently shine, earning accolades and job opportunities that reflect their exceptional skills and boundless potential. During their project work, the students conceptualized and developed a rain-sensing automatic car wiper using Arduino, a testament to their ability to translate theoretical knowledge into practical applications. Their passion for innovation extends to the

development of an IoT-enabled pet feeder, a gesture-controlled robot, and customer segmentation tools using machine learning, all of which underscore their thirst for knowledge and their unwavering dedication to problem-solving.

Our student's dedication to hands-on learning is further exemplified by their participation in projects that involve casting fiber-reinforced concrete cubes, developing a smart energy meter using GSM, designing wireless battery charging for electric vehicles, creating an IoT-based battery monitoring system for electric vehicles, and prototyping an advanced automotive safety system with obstacle avoidance, Bluetooth control, and voice control. These projects seamlessly bridge the gap between classroom theory and real-world applications.

Their dedication to healthcare is evident in the development of various health monitoring apps, including one for lung cancer detection using machine learning and another for thyroid disease prediction. These tangible contributions underscore our students' unwavering commitment towards improving lives and making a positive impact on society.
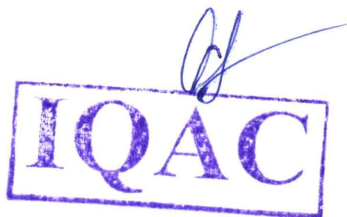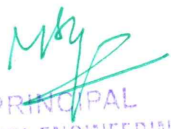
6. Problems Encountered

Learning styles and retention differ widely among students, posing a challenge to classroom deliverables within the given limited time. In advanced fields, there is a lack of expertise. Better departmental collaboration is required, which will lead to the development of interdisciplinary models.

Resources Required

It is necessary to obtain more modern tools and equipment. More training for both faculty and students by Industry experts is required. Industry interaction has to be improved. Paid Internships are to be enhanced. Industry Live Projects are to be exposed to the students. While revising the curriculum, a full semester may be allotted for project/training at the onsite industry.
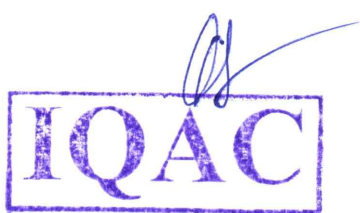
Design and Fabrication of Steering Gear Mechanism for Electric Vehicle

The project aims to describe and design the elements of the steering system for an electric vehicle. The steering system is one of the most critical components of the vehicle, as it is responsible for controlling the car's direction and guiding it along the desired trajectory. The steering action begins with the driver's hands and is transmitted through various elements, each with a specific function, until it ultimately turns the wheels.

Before embarking on the design of the steering system components, it is essential to thoroughly study the various factors that influence its design. This includes a comprehensive understanding of the general characteristics of electric vehicles, enabling a comparison with conventional fuel-powered vehicles. Additionally, a thorough examination of the theoretical foundations and technical fundamentals of steering systems is crucial for gaining a deeper understanding of this system and its application in electric vehicles.

The design of the steering system involves separating the vehicle's elements that influence the steering system's design from the elements themselves. The mechanism is then described, providing a detailed explanation of the function and characteristics of each component. The steering column, rack and pinion, and steering arms receive particular attention due to their significance in the design process. Software such as Fusion 360, SolidWorks, and ANSYS is utilized to design the components and calculate the stresses they can withstand.
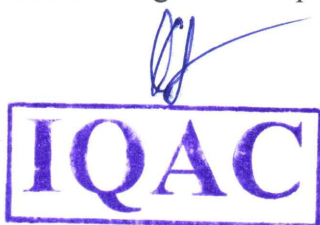
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Design and Fabrication of MIG 29-k Fighter Jet Using 3D Printer

The MiG-29K is derived from the 'basic' MiG-29K airframe, but incorporates a lighter design to meet the Indian Navy's requirements for minimizing dimensions for optimal space utilization on the aircraft carrier INS Vikramaditya (formerly Admiral Gorshkov). The aircraft retains the original MiG-29K airframe but omits the expensive welded aluminum-lithium fuel tanks and forward fuselage. The MiG-29K's fuel tanks are housed in the dorsal spine fairing and wing leading-edge root extensions, reportedly resulting in a 50% fuel capacity increase over the land-based MiG-29.

3D printing technology, a cutting-edge manufacturing process revolutionizing the industry, enables rapid component production and cost reduction. This project involves designing the component using FUSION 360 software and converting the file format to STL for 3D printing. Ultimaker Cura software is employed for slicing the component generated in FUSION 360; it also facilitates adjustments to dimensions, solidification time, material selection, printing speed, and printing time. PLA material is utilized for 3D printing the component. The total time required to print the fighter jet is 13 hours and 21 minutes, while the total material consumption is 82 grams and 10.37 meters.
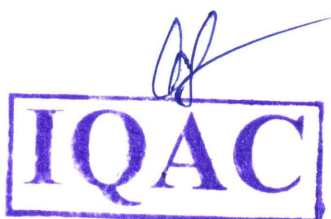
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Fabrication of Hand Controlled Robot Car

Human effort is typically the external force that moves objects. Our project enables the movement of distant physical objects using subtle hand movements. This concept can bring significant comfort, convenience, and cost savings in both daily life and industrial settings by amplifying small motions on a larger scale.

This project involves developing a hand-controlled robotic car that reads data from an accelerometer worn on the human hand. The car's direction can be altered by moving the hand in a specific direction, with each movement generating values corresponding to its respective axis. The accelerometer's output values are transmitted to an Arduino UNO. An HT12E encoder attached to the Arduino encodes the values and sends them to a receiver via an RF433 transmitter.

An HT12D mounted on the car decodes the values and relays them to an L293D motor driver, which controls the motors that move the vehicle. This project can be particularly beneficial for individuals with physical disabilities, enabling them to move objects with minimal physical effort.

Fatigue Characterization of A356-Sic Metal Matrix Nano Composites By Using Stir Casting Method

Modern technological advancements, coupled with consumer demands for more energy-efficient, stronger, lighter, and cost-effective systems and machines, necessitate a continuous pursuit of new and advanced materials. The challenge of designing materials that meet these stringent and often conflicting specifications cannot be overstated. Aluminum metal matrix nanocomposites (Al MMNCs) stand out as a class of materials that has demonstrated success in fulfilling most of these demanding requirements in applications where lightweight, high stiffness, and moderate strength are essential properties. With a diverse range of reinforcement materials and flexibility in their primary processing, Al MMNCs offer immense potential for developing composites with tailor-made properties for specific applications.

In this project, aluminum metal matrix composites were fabricated using the stir casting method, employing A356 as the matrix material and nano SiC particles at 5 wt% as the reinforcing material. T6-heat treatment was applied to the castings to enhance their mechanical properties and eliminate residual stresses. These heat-treated samples were then machined and tested according to ASTM standards for various characterizations, including fatigue, hardness, microstructural analysis, and impact strength. The results revealed that the composites exhibited improved fatigue resistance and hardness compared to the pure alloy, and a uniform distribution of reinforcement particles within the matrix was observed.

The findings demonstrate the potential of Al MMNCs as promising materials for applications demanding lightweight, high stiffness, and moderate strength, with the ability to tailor their properties through reinforcement selection and processing techniques

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IOT ENABLED PET FEEDER

Over half of the world's population chooses to have pets as companions. However, feeding pets can be a stressful task for owners. An automatic pet feeder provides a convenient solution by dispensing a predetermined amount of food or medication at specified times, even when the owner is away or otherwise occupied. This project aims to address the shortcomings of existing feeders by designing an efficient automatic pet feeder that leverages the power of the Internet of Things (IoT).

This Automatic pet feeder utilizes a NODEMCU microcontroller and an interface with relays and other hardware components. A software program is embedded in the microcontroller to control the operation of relays, enabling the feeder to dispense food or medication at pre-programmed intervals. The entire feeder system is managed through a mobile application called Blynk, which allows users to send commands to the microcontroller via the Blynk cloud platform

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RAIN SENSING AUTOMATIC CAR WIPERUSING ARDUINO

Technological advancements are increasingly focused on the development of autonomous vehicles in various applications. A significant portion of road accidents can be attributed to human error, including driver distraction and impaired vision due to adverse weather conditions, such as heavy rainfall. Manually adjusting the windshield wiper system while driving in traffic can lead to driver distraction, potentially increasing the risk of accidents.

An automatic wiper system addresses these concerns by employing a rain sensor to detect the presence of raindrops. Upon detecting rainfall, the sensor triggers the windshield wiper system, ensuring clear visibility for the driver. This proposed method demonstrates effective raindrop detection and promising results in rainfall discernment. The automatic wiper system also adjusts its wiping speed based on the intensity of the rainfall, optimizing performance and preventing unnecessary wear on the wiper blades.

GESTURE CONTROLLED ROBOT
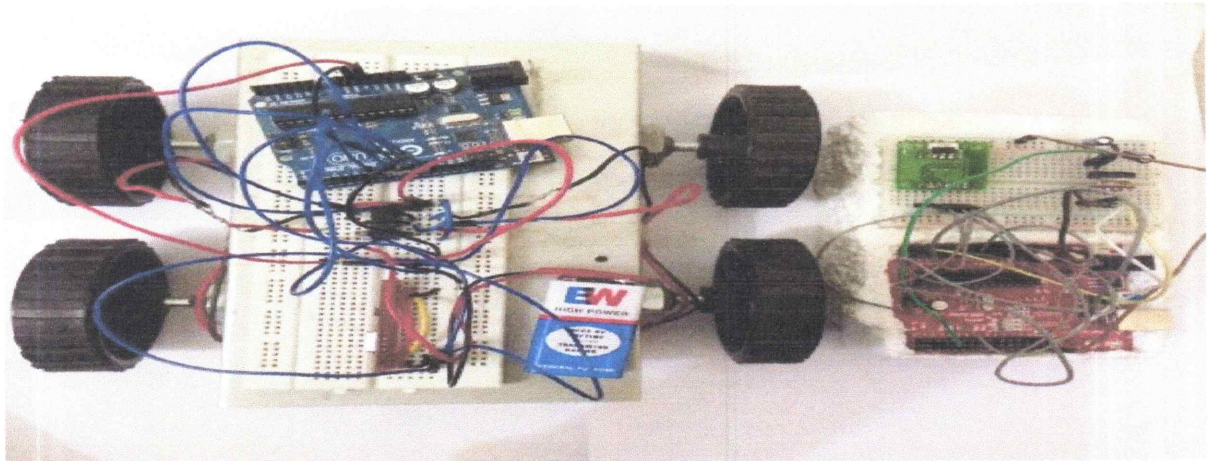
The project is a real-time monitoring system that enables human-robot interaction through gestures. This is an immense aid for individuals with mobility impairments. Speech recognition often fails to effectively control robots due to variations in modulation and frequency, making a vision-based interface a crucial need. This project addresses this challenge by enabling robot navigation through various gestures. As a result, the lives of physically challenged individuals become less challenging. Users simply need to wear a gesture device equipped with a sensor that records the movement of their hand in a specific direction, corresponding to the desired movement of the robot. Wireless communication facilitates more user-friendly interaction with the robot. Accelerometer sensors attached to a hand glove can be used to control the robot's movements.

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BRAIN TUMOR DETECTION SYSTEM
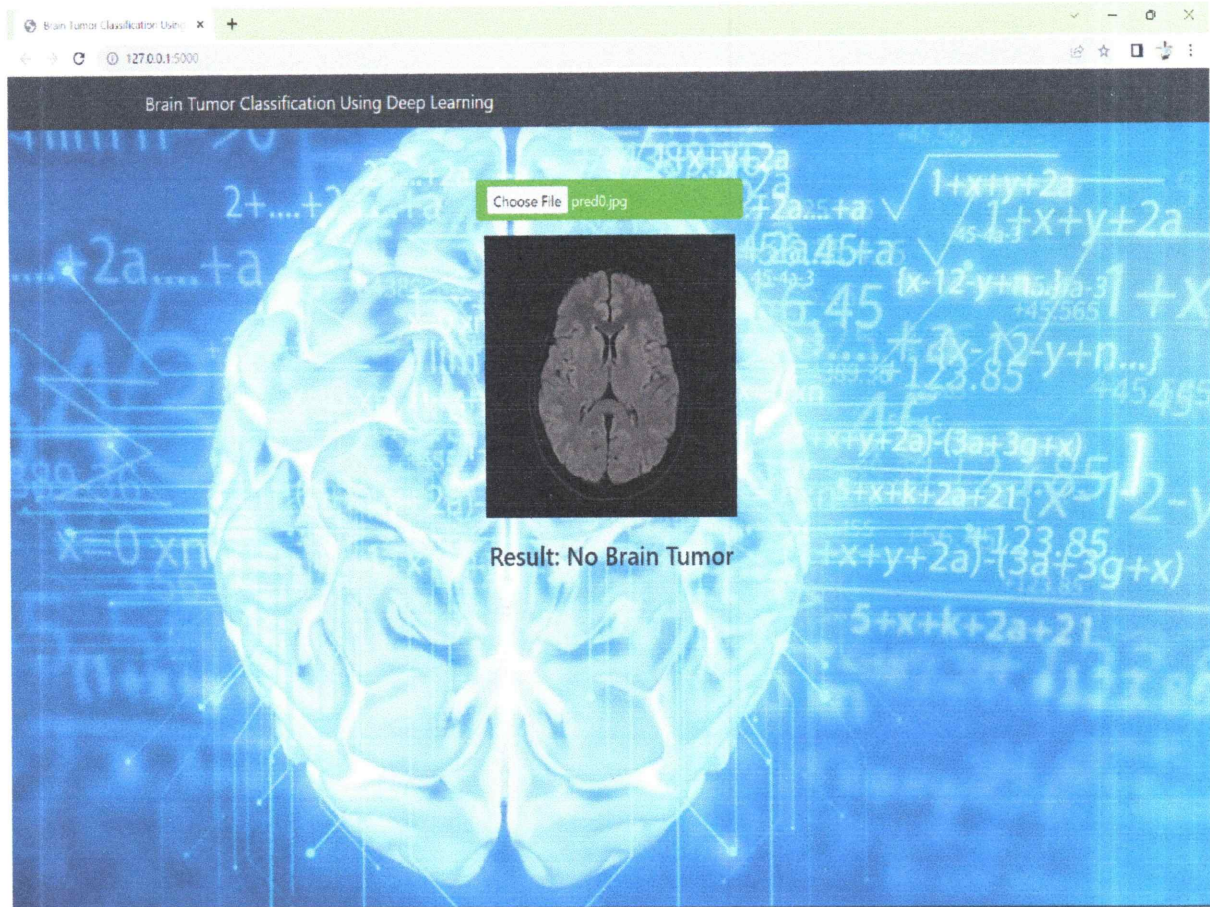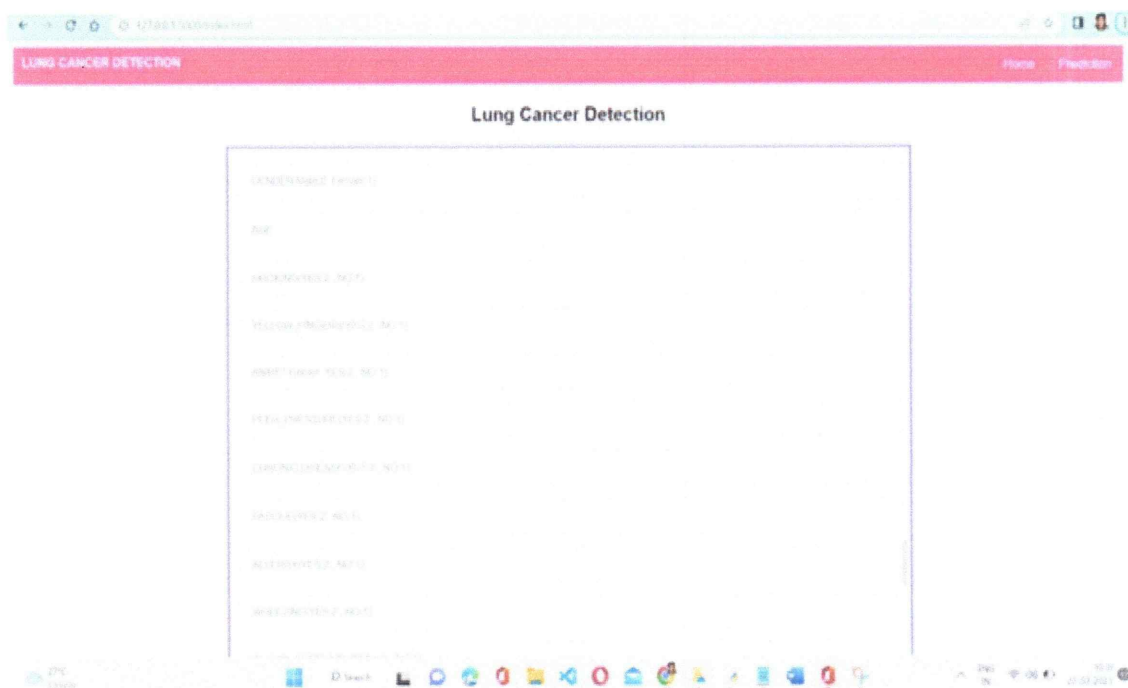
Tumors are currently the second leading cause of cancer death worldwide, posing a significant threat to a large number of patients. The medical field urgently requires a rapid, automated, efficient, and reliable technique for detecting tumors, particularly brain tumors. Early and accurate detection plays a crucial role in successful cancer treatment. If proper tumor detection is possible, doctors can effectively manage the disease and reduce the risk of life-threatening complications. Various image processing techniques, particularly deep learning architectures like convolutional neural networks (CNNs) and transfer learning approaches such as VGG16, have shown immense potential in this domain. These techniques enable the development of automated tumor detection systems that can analyze medical images, such as MRI scans, and accurately identify the presence or absence of tumors. By employing these advanced methods, doctors can provide timely and appropriate treatment, saving the lives of countless cancer patients

Lung Cancer Detection using Machine Learning

One of the most common complaints during the early stages of cancer treatment is lung discomfort, and the most difficult part is waiting for the radiologist's diagnosis. A sophisticated computer-based system would undoubtedly be highly beneficial for radiologists. Several machine learning (ML)-based studies have been conducted for lung cancer detection. A multi-stage approach is used to significantly improve lung cancer prognosis. The threshold and marker-controlled watershed method and binary classifier used in the segmentation system for the bracket system are employed to enhance the data. Lung cancer detection is a delicate process. The dataset is trained using techniques such as support vector machine (SVM), K-nearest neighbors (KNN), decision tree (DT), logistic regression (LR), naïve Bayes (NB), and random forest (RF), and it is demonstrated that these algorithms exhibit enhanced accuracy. With the Random Forest method, an improved performance level of 88.5% accuracy has been achieved.

Prediction page
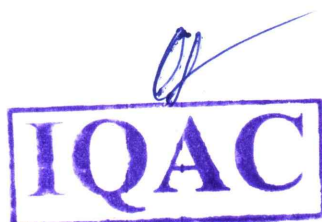
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Customer Segmentation Using Machine Learning

This research focuses on segmenting customers into distinct groups and analyzing their characteristics individually using machine learning techniques. In today's competitive business landscape, understanding and satisfying customer needs is crucial for achieving long-term success. Customer segmentation involves classifying customers based on shared characteristics, such as demographics, purchasing patterns, and preferences. This study employs two different clustering algorithms, K-Means and DBSCAN, to segment customers and compares their performance. K-Means clustering yielded superior results in this context. Additionally, supervised learning algorithms are utilized in customer segmentation to predict the behavior of new customer data points. A decision tree classifier model is developed for this purpose.
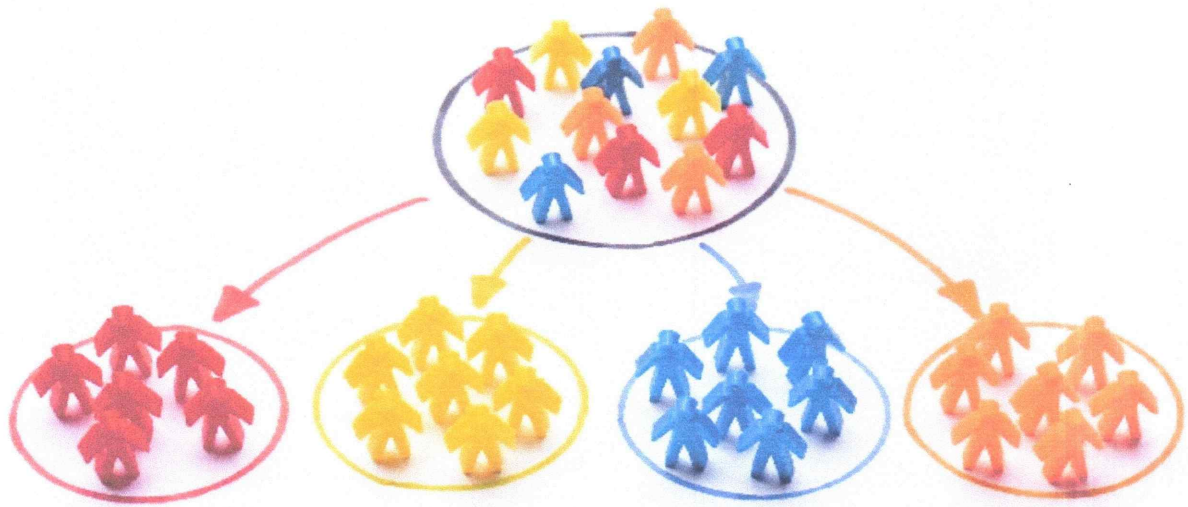
THYROID DISEASE PREDICTION

In the medical field, the crucial and demanding task is to diagnose patients' health conditions and provide proper care and treatment for diseases at the initial stage. Classification-based machine learning plays a significant role in various medical services. Let us consider thyroid disease as an example. The primary goal is to recognize the disease at the early stages with a high level of accuracy. Diagnosing thyroid disease is not a simple task; it involves numerous procedures. The traditional approach includes a thorough medical examination and the collection of multiple blood samples for blood tests.
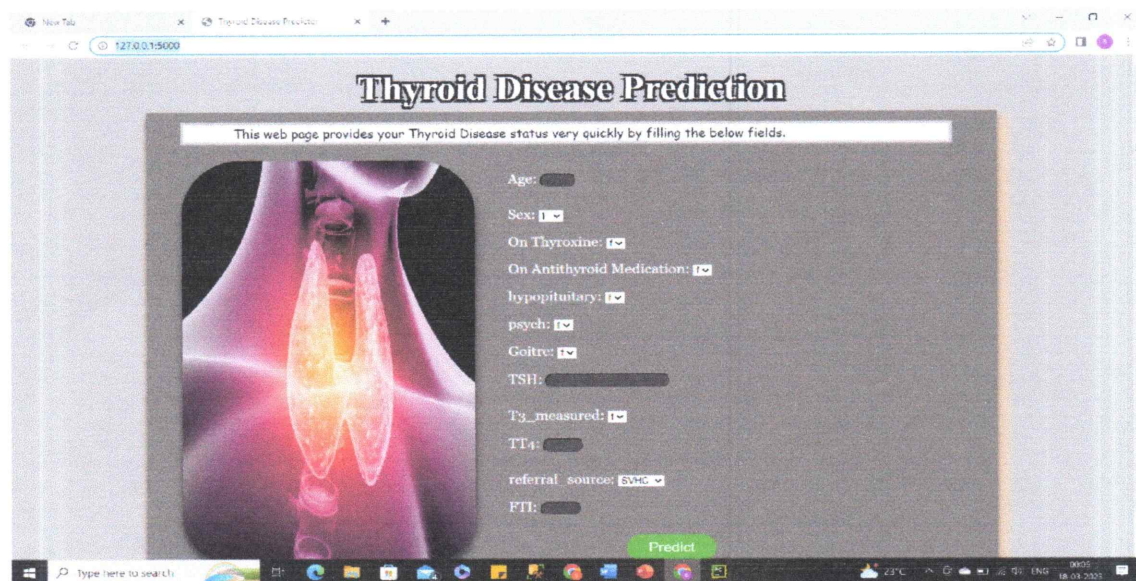
CASTING OF FIBRE REINFORCED CONCRETE CUBES

Fibers possess characteristics that enhance the endurance of concrete, with carbon fiber being one such example. Carbon fibers exhibit outstanding mechanical properties and can be utilized more efficiently. This study demonstrates that incorporating 1% of carbon fiber-reinforced polymer material into a standard concrete mix increases its compressive strength, establishing a comparison with conventional concrete. The compressive strength of carbon fiber concrete is examined at different percentages by volume of the concrete. The resulting data will clearly illustrate the percentage variation in compressive strength for M25 grade concrete at 7 days, 14 days, and 28 days concerning the varying percentages of added carbon fiber.
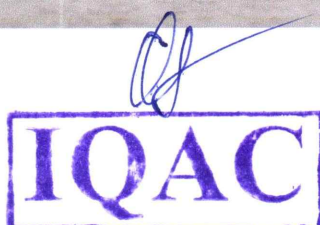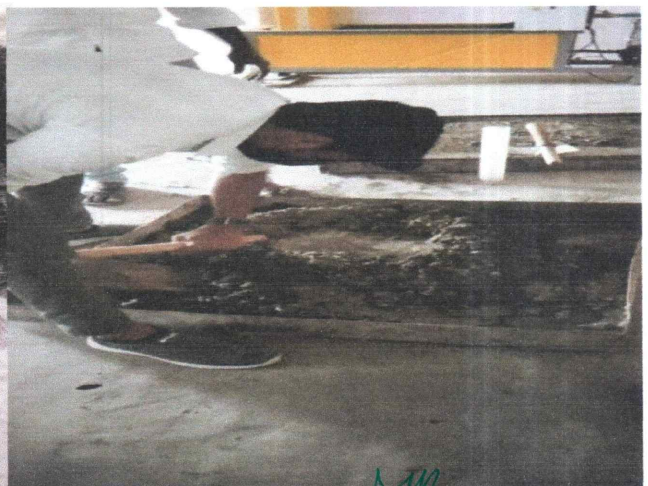
Smart Energy Meter using GSM
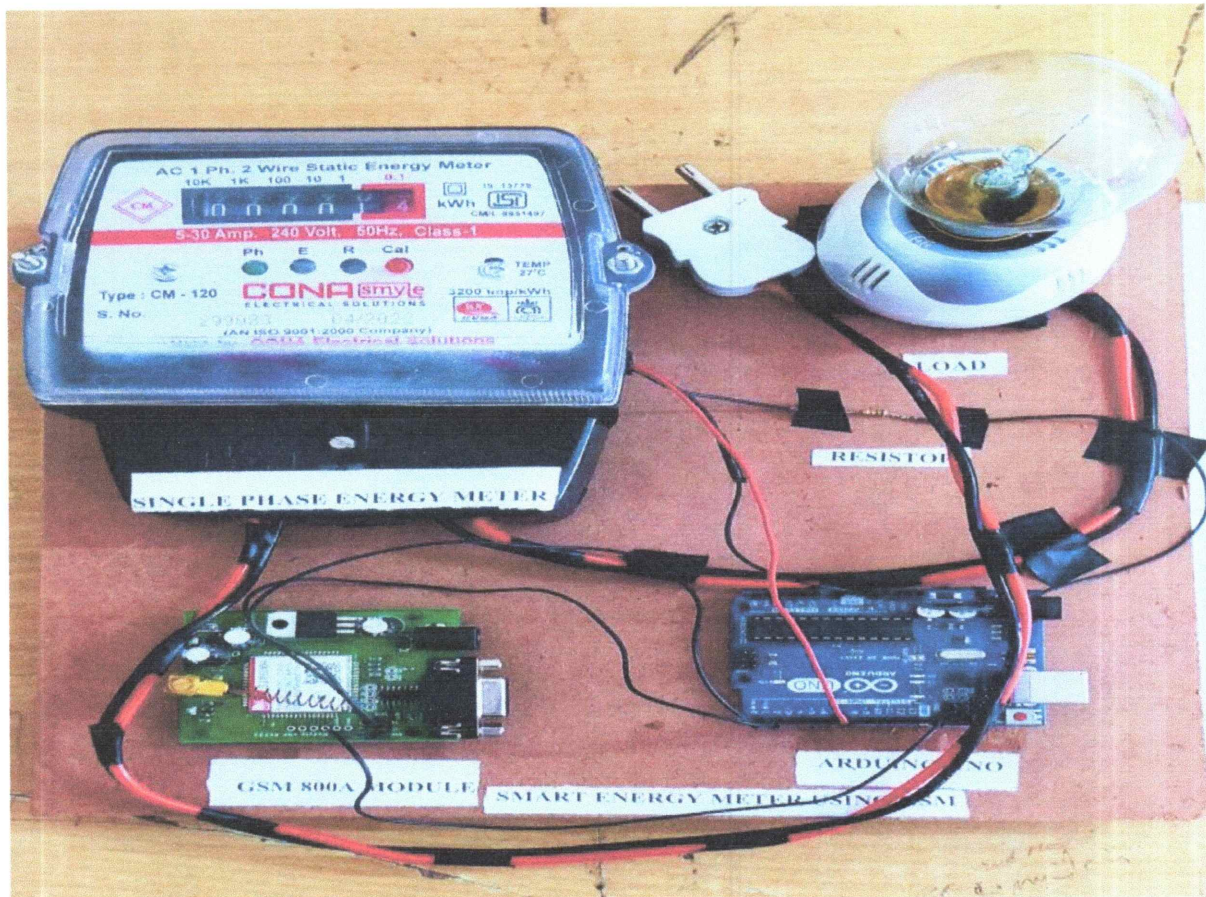
Smart meter is an electronic device that measures the energy consumption by different time intervals, this time interval may be in minutes, hours, days or months. The proposed technology collects the data from meter and transfer that data to central database for storing data, analyzing and also monitoring the safety related issues. Moreover, it also includes the module which has provision of on demand units loading facility from the energy provider company by just sending a request SMS
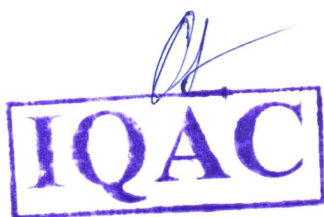
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WIRELESS BATTERY CHARGING FOR ELECTRICAL VEHICLES

While using wireless charging, one must know that a transmitter and a receiver will be there. This receiver generally converts 220v 50Hz AC power into high-frequency AC, which boosts the transmitter coil and thus generates a magnetic field.

The receiver coil then generates the current flowing in it. For effective wireless charging, it is necessary to maintain the resonance frequency for both the transmitter and the receiver.

Here compensation network is added to it to maintain the balanced frequency. Next, the AC power source is converted into DC power and feeds the battery with sufficient power
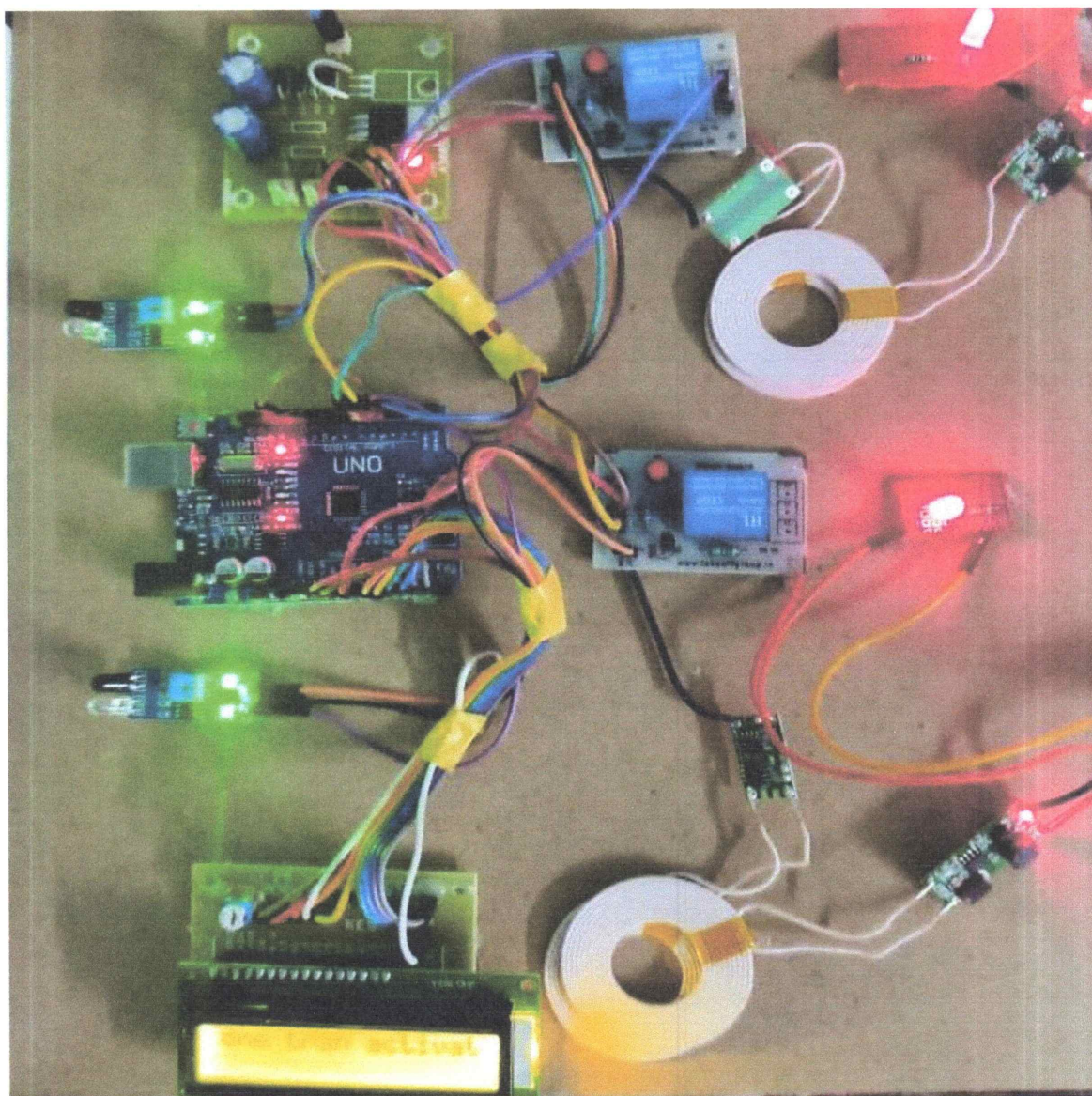
IoT-BASED BATTERY MONITORING SYSTEM FOR ELECTRIC VEHICLE

In this project, we will build a Battery Monitoring System using ESP8266 & Arduino IoT Cloud. Using this system, we can monitor battery voltage and percentage from anywhere in the world. Therefore, this system is useful for monitoring battery charging /discharging status remotely. In this IoT based Battery Monitoring System, we use NodeMCU ESP8266 board to send the battery status data to the Arduino IoT cloud. The IoT Cloud Dashboard will display the battery voltage along with the battery percentage in both the charging and discharging conditions
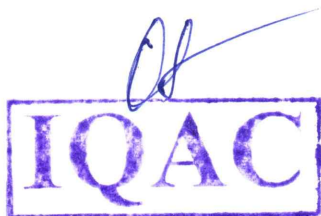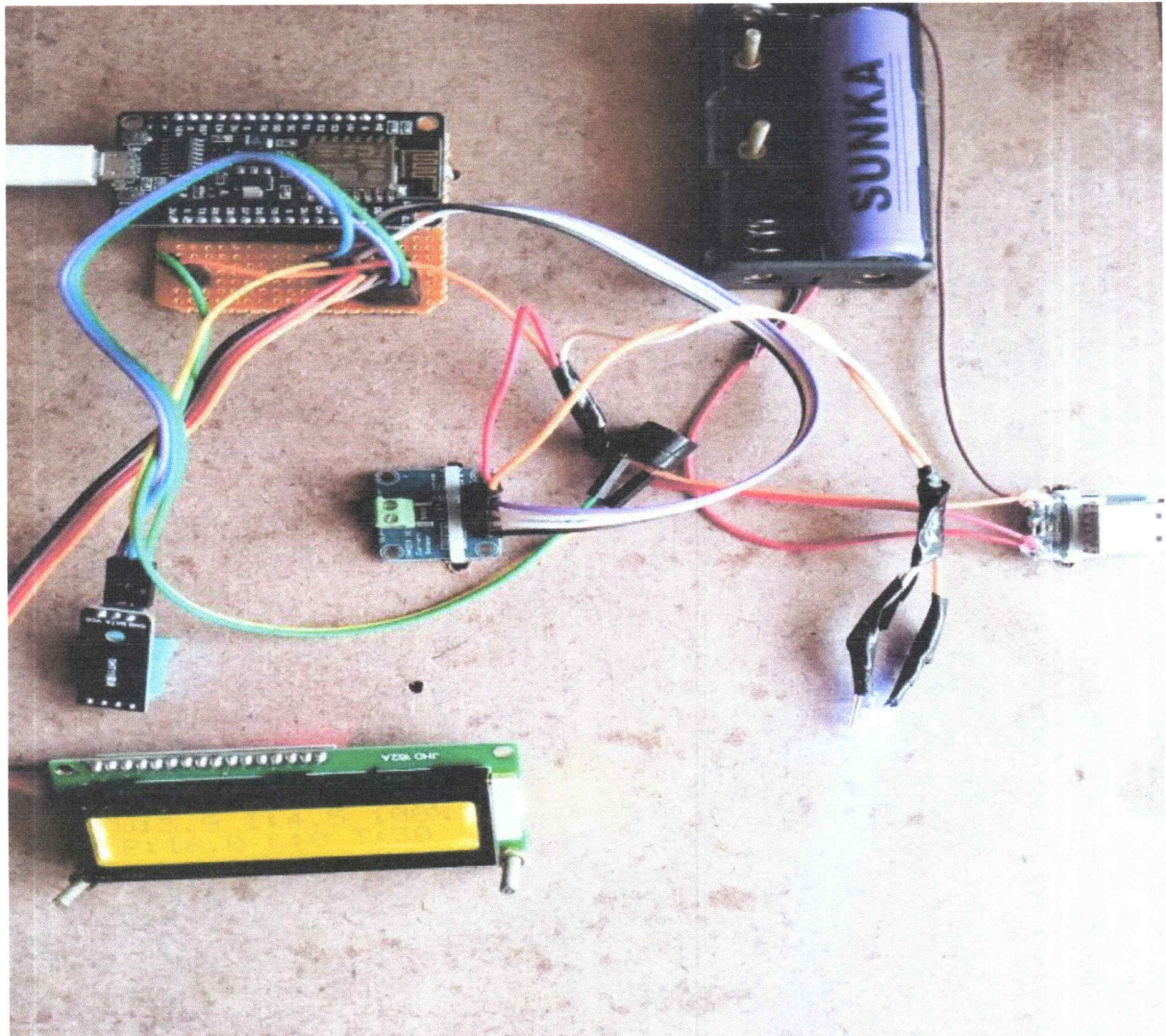
A PROTOTYPE OF ADVANCED AUTOMOTIVE SAFETY SYSTEM WITH OBSTACLE AVOIDING, BLUETOOTH CONTROL AND VOICE CONTROL

Obstacle avoiding is the task of satisfying some control objective subject to non-intersection or non-collision position constraints. Bluetooth control is the automation control system connects with the smart phone or remote devices through Bluetooth. Voice controlling is use a interface that allows hands-free operation of a digital device that means you can control your device with spoken command. In this prototype by using ultra-sonic sensors we can achieve obstacle avoiding technique. With the help of Bluetooth devices it is possible to achieve Bluetooth control by using low power radio waves. With the help of voice recognizing algorithm we can achieve voice controlling
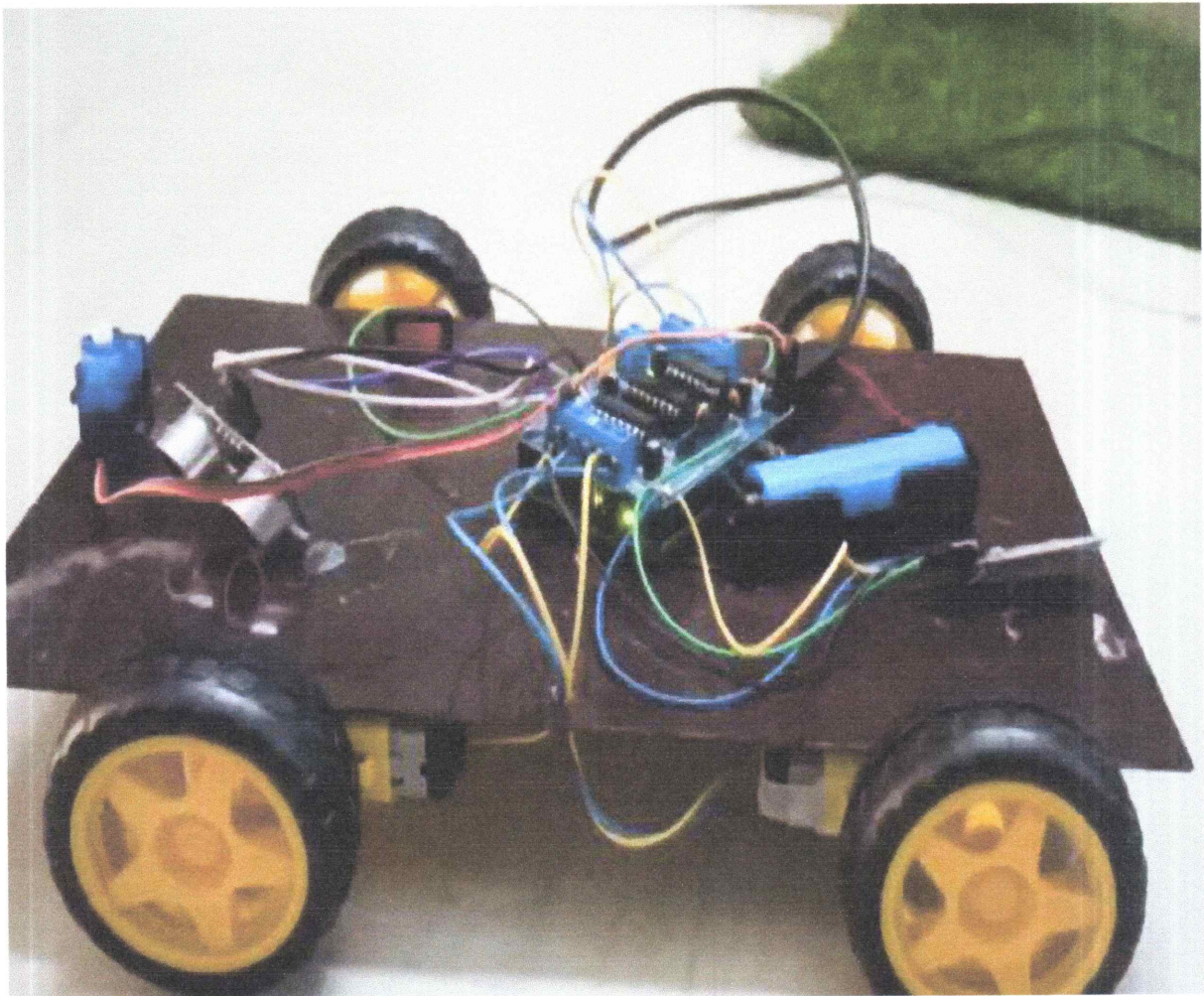
PROTOTYPE OF ADVANCED HIGHWAY POWER GENERATION AND EV'S WIRELESS CHARGING

This project is designed to control the speed of a DC motor using PWM control using 555 IC. The speed of the DC motor is directly proportional to the voltage applied across its terminals. Hence, if the voltage across the motor terminal is varied, then the speed can also be varied.

BEST PRACTICE - II

1. Title of the Practice:

Ekalavya Programme (Encouraging students for self- learning)
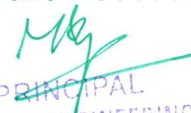
2. Objectives of the Practice:

NEC believes in giving its students every opportunity to advance beyond the traditional curriculum, enhancing their learning experiences and expanding their career options. The graduate will have certain skills and competencies upon completion. The objective behind this practice is to provide an additional learning opportunity to all the students within the four-year graduation programme. Students also get remote access to simulation-based labs in a variety of science and engineering areas. Through remote experimentation, they will be able to acquire fundamental and sophisticated concepts. As a result, the institution strives to live up to its ultimate aim of "Promoting Collaborative and Self-Learning."

3. The Context:

After completing the degree, all engineering students expect to secure a dream career. However, curriculum alone may not be sufficient to achieve the desired outcome. In this context, the university has taken steps to give extra certification or training courses, as well as to prepare students to be industry-ready and equipped with the necessary

engineering skills. For the implementation of skill upgrading and certification programmes, NEC has entered into agreements with organisations, enterprises, and academic institutions sponsored by the federal and state governments. The university has a partnership with certain related programmes that are open to students from all disciplines. As a result, students have the option to increase their awareness and pursue multidisciplinary programmes. Students can save time because many of the programmes are available online. The students can save time as many of the programmes are fast-paced. In the case of online programmes, students can pursue the courses at their own pace.

4. The Practice:

The institute encourages online learning. NEC has NPTEL local Chapter in association with IITM – Chennai. The institution had a tie up with L4G Solutions. This initiative has given an opportunity to both students and faculty to pursue many **Coursera** online courses. Also, the institution has AP CM Skill Excellence center sponsored by APSSDC. Spoken tutorials offered by IIT Bombay are arranged for students. Dassault systems 3D experience lab is set up to enhance the modelling and analysis skills of students on advanced software. Students are motivated to do online certification courses offered by Sololearn, Udemy, AWS, Great learning. Institute has an MoU with ICT academy through which students are given basic training and
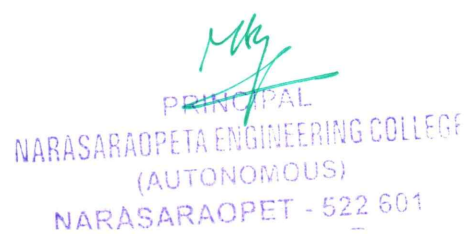
allowed to practice on their own and further exposed to National and International level competitions on cutting edge technologies.

5. Evidence of Success:

The institute's efforts to promote additional certification courses and internships have yielded significant results. During the academic year 2022-23, NPTEL courses enriched the knowledge of over 1,193 students and faculty members. Additionally, more than 481+ students successfully completed MOOCs certification courses.

The completion of these courses undoubtedly provide students with a competitive edge, particularly in the technical rounds of job interviews. Moreover, the knowledge and skills gained from these courses can be directly applied to enhance performance in domain-specific areas at work. The institute's commitment in providing cutting-edge technology training aligns with the government's initiative to empower youth with the skills necessary to advance their careers and expand their professional horizons.

6. Problems Encountered and Resources Required:

1. Additional certification programmes may intimidate students. The completion of these online courses is required of all students. The additional course work may be tough for students to handle.

2. The academic calendar is usually set in stone. The examination timetable is rescheduled in the event of unforeseen circumstances. The NPTEL programme timetable may conflict with examination schedules in certain instances.

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3. Students can pursue additional online courses from the comfort of their own homes. Some students, however, may not have access to the internet or sufficient bandwidth to complete the courses at home.

Resources Required

As a motivational gesture, students who received a gold certificate may be paid for their examination fee. Computer labs may be kept open beyond college hours to help students with internet Band problems they are having at home. Because the institute is autonomous, conflicts between end-of-semester exams and the NPTEL final test may be handled by postponing end-of-semester exams for the students' convenience..
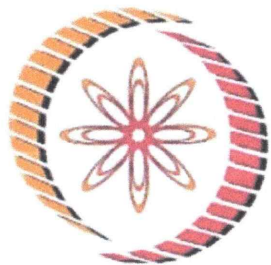
Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

**CHUNDRU MAHESWARI**

for successfully completing the course

Applied Linear Algebra in AI and ML

with a consolidated score of **90** %

Online Assignments	21.88/25	Proctored Exam	68.5/75

Total number of candidates certified in this course: **115**

Jan-Apr 2023

(12 week course)

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Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत
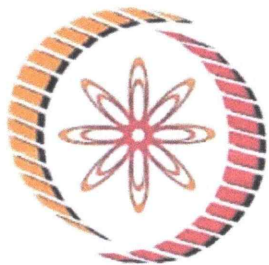
Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

TOPPER

This certificate is awarded to

POLI REDDY VUTA

for successfully completing the course

Experimental Physics - II

with a consolidated score of **91** %

Online Assignments	22.38/25	Proctored Exam	69/75

Total number of candidates certified in this course: **65**
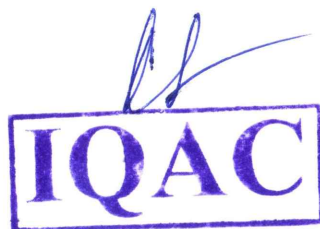
IQAC

Jan-Apr 2023

(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

To validate the certificate

No. of credits recommended: 3 or 4

FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

NITTTR
Chennai

SWAYAM ONLINE COURSE CERTIFICATION

This certificate is awarded to

BATHULA VENKATA SIVA

Roll No: **AP07010215**

for successfully completing the **Three** *credit course*

QUALITY ASSURANCE THROUGH NAAC ACCREDITATION PROCESS

July to November 2022

with the consolidated score of **85 %**

in the proctored examination held on **25.02.2023**

offered by **Dr.E.S.M.SURESH**

NATIONAL COORDINATOR
Director NITTTR, Chennai

IQAC

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601
Guntur (Dist.), A.P.

COURSE COORDINATOR
NITTTR, Chennai
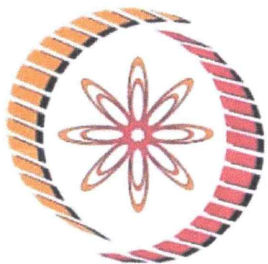
Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SHAIK NAGUL MEERAVALI

for successfully completing the course

The Joy of Computing using Python

with a consolidated score of **83** %

Online Assignments	24.69/25	Programming Assignment	25/25	Proctored Exam	33/50

Total number of candidates certified in this course: **9957**

Prof. Devendra Jalihal
Chairperson,
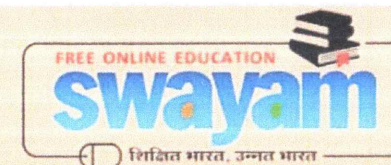Centre for Outreach and Digital Education, IITM

IQAC

Jul-Oct 2022
(12 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras
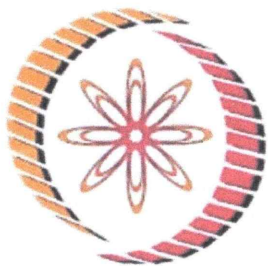
FREE ONLINE EDUCATION
swayam
शिक्षित भारत, उन्नत भारत

To validate the certificate

No. of credits recommended: 3 or 4

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

VENKANNABABU MENDI

for successfully completing the course

Fundamentals of Artificial Intelligence

with a consolidated score of **75** %

Online Assignments	22.6/25	Proctored Exam	51.99/75

Total number of candidates certified in this course: **1193**

Jul-Oct 2022

(12 week course)

Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati

IQAC

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

Indian Institute of Technology Guwahati

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Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

DR SK MD SHAREEF

for successfully completing the course

Digital Protection of Power System

with a consolidated score of **75** %

Online Assignments	19.58/25	Proctored Exam	55.5/75

Total number of candidates certified in this course: **153**

Prof. Sanjeev Manhas
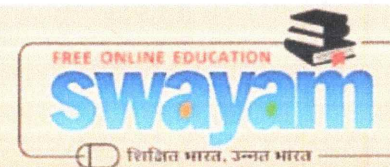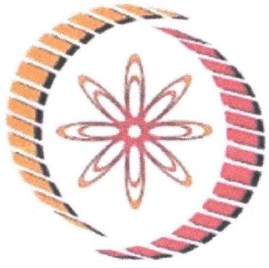Coordinator, Continuing Education Centre
IIT Roorkee

IQAC

Jan-Mar 2023

(8 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee
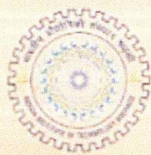
Indian Institute of Technology Roorkee

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शिक्षित भारत, उन्नत भारत

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

DONEPUDI JAGADISH

for successfully completing the course

Fundamentals of Artificial Intelligence

with a consolidated score of **73** %

Online Assignments	21.19/25	Proctored Exam	51.75/75

Total number of candidates certified in this course: **1193**

Jul-Oct 2022

(12 week course)

Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati

IQAC

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

Indian Institute of Technology Guwahati

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NPTEL Online Certification
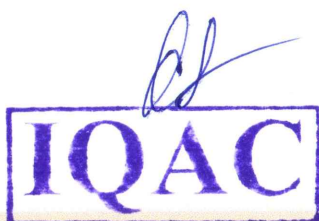
(Funded by the MoE, Govt. of India)

This certificate is awarded to

LAKSHMINADH KURAKULA

for successfully completing the course

Fundamental Algorithms: Design and Analysis

with a consolidated score of **65** %

Online Assignments	22.5/25	Proctored Exam	42/75

Total number of candidates certified in this course: **582**

IQAC

Jan-Feb 2023

(4 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601
Guntur (Dist.), A.P.

Prof. Debjani Chakraborty
Coordinator, NPTEL
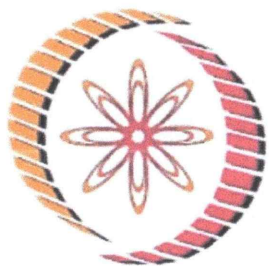IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam

To validate the certificate

No. of credits recommended: 1 or 2

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

JALLEDA BALA ANKARAO

for successfully completing the course

The Joy of Computing using Python

with a consolidated score of **82** %

Online Assignments	24.69/25	Programming Assignment	25/25	Proctored Exam	32/50

Total number of candidates certified in this course: **9957**

Devendra Jalihal

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

IQAC

Jul-Oct 2022
(12 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601,
Guntur (Dist.), A.P.

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

FREE ONLINE EDUCATION
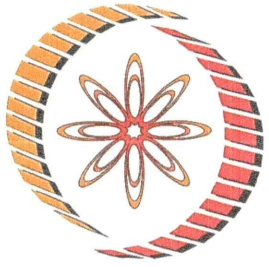**swayam**
शिक्षित भारत, उन्नत भारत

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

12

This certificate is awarded to

DOWPATI NITHISH

for successfully completing the course

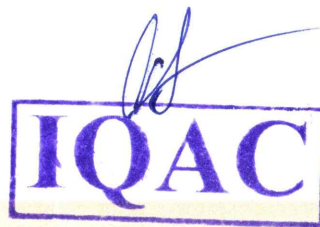## The Joy of Computing using Python

with a consolidated score of **75** %

Online Assignments	24.75/25	Programming Assignment	25/25	Proctored Exam	25/50

Total number of candidates certified in this course: **9957**

Devendra Jalihal

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

IQAC

Jul-Oct 2022
(12 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

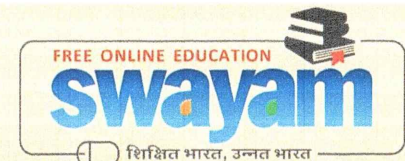**Prof. Andrew Thangaraj**
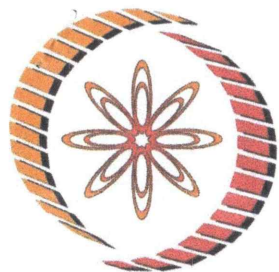NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

FREE ONLINE EDUCATION
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Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

M.Sneha
19471A05A1
CSE-B

This certificate is awarded to

SNEHA ANANYA MALLIPEDDI

for successfully completing the course

Python for Data Science

with a consolidated score of **69** %

Online Assignments	23.67/25	Programming Assignment	21.75/25	Proctored Exam	24/50

Total number of candidates certified in this course: **3991**

Devendra Jalihal

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

IQAC

Jul-Aug 2022

(4 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

Prof. Andrew Thangaraj
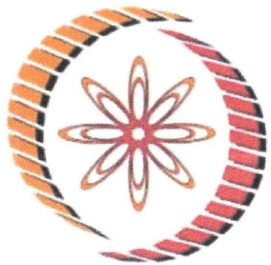NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

FREE ONLINE EDUCATION
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To validate the certificate

No. of credits recommended: 1 or

19471A05A3
CSE - B IV

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

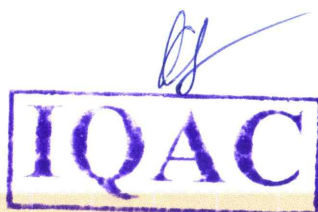This certificate is awarded to

ADITYA MANNEM

for successfully completing the course

Cryptography and Network Security

with a consolidated score of **69** %

Online Assignments	24.06/25	Proctored Exam	45/75

Total number of candidates certified in this course: **1810**

Jul-Oct 2022

(12 week course)

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PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
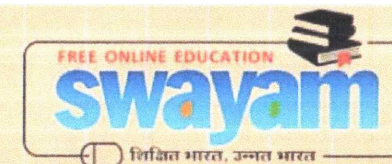(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur
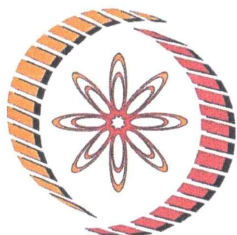
Indian Institute of Technology Kharagpur

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19471A05C2
(CSE-B)

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SIDHAPUREDDY BHANU PRAKASH REDDY

for successfully completing the course

19471A05C2

Cloud Computing

with a consolidated score of **51** %

Online Assignments	21.16/25	Proctored Exam	30/75

Total number of candidates certified in this course: **9640**

Jul-Oct 2022

(12 week course)

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
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NARASARAOPET - 522 601
Guntur (Dist.), A.P.

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

IQAC

Indian Institute of Technology Kharagpur

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ûdemy

CERTIFICATE OF COMPLETION

Fundamentals of Structural Analysis

Instructors **Dr Seán Carroll**

ANAPARTHI GANGAIAH

IQAC

Date **Nov. 21, 2022**

Length **3 total hours**

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
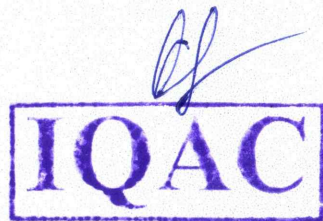(AUTONOMOUS)
NARASARAOPET - 522 601.
Guntur (Dist.), A.P.

udemy

CERTIFICATE OF COMPLETION

Basics of Civil Engineering in Construction

Instructors **Gokul Saud**

IQAC

Sivaji Arakanti

Date **Nov. 19, 2022**

Length **6 total hours**

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601
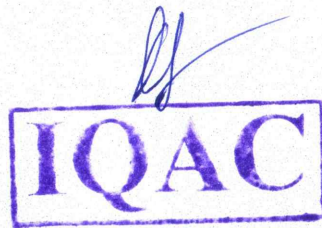Guntur (Dist.), A.P.

19471A0107

ûdemy

CERTIFICATE OF COMPLETION

Fundamentals of Structural Analysis

Instructors **Dr Seán Carroll**

ANNAM SRI DEVI VARA PRASAD

IQAC

PRINCIPAL
NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)
NARASARAOPET - 522 601
Guntur (Dist.), A.P.

Date **Nov. 18, 2022**

Length **3 total hours**

BRAIN O VISION

NEC

NARASARAOPETA ENGINEERING COLLEGE
(AUTONOMOUS)

CERTIFICATE OF MERIT

This Certificate Is Proudly Presented To

Orchu Venkata Ashok

For Your winning & Merit Knowledge on
2 Day BOOTCAMP + 32 Hours of HACKATHON
on Full Stack Web Development
From 24-08-2022 to 27-08-2022, organized by
NARASARAOPETA ENGINEERING COLLEGE
in association with
Brainovision Solutions India Pvt Ltd
We wish you Congratulations and All the best.

IQAC

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NARASARAOPETA ENGINEERING COLLEGE
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NARASARAOPET - 522 601.
Guntur (Dist.), A.P.
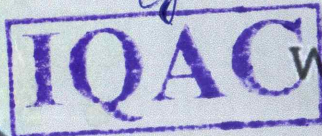
GANESH NAG DODDI
Founder & CEO - Brainovision

Dr. M. SREENIVASA KUMAR
PRINCIPAL

NEC **NARASARAOPETA**
ENGINEERING COLLEGE
(AUTONOMOUS)

AICTE

BRAIN O VISION
Brain O Vision Solutions India Pvt. Ltd...

CERTIFICATE of PARTICIPATION

PROUDLY PRESENTED TO

Dowpati Nithish

For active participation in the
12 Hours **BOOTCAMP** + 32 Hours **HACKATHON**
on **Web Development**
Conducted from **24-08-2022** to **27-08-2022**
Organized by **NARASARAOPETA ENGINEERING COLLEGE**
in collaboration with
Brainovision Solutions India Pvt.Ltd

IQAC

Ganesh Nag Doddi
Founder & CEO

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(AUTONOMOUS)
NARASARAOPET - 522 60
Guntur (Dist.), A.P.

Dr.M. SREENIVASA KUMAR
Principal