DETAILS OF   STUDENTS PROJECT

GANESH COLLEGE OF ENGINEERING

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Department of Electronics and Communication Engineering
Project List
Acaedmic year 2023-2024

Year/ Semester: IV/VIII

Batch	Reg.No	Name of the students	Gudie	Project Title
1	620620106002	AKASHAYA A S	Mr. P.BalaSubramaniyam AP/ECE	DESIGN AND IMPLEMENTATION OF BLOCK CHAIN BASED VOTING SYSTEM USING IOT
	620620106010	MUTHULAKSHMI M		
	620620106015	RAJESWARI S		
	620620106020	SIVASAKTHI K		
2	620620106021	SNEHA P	Ms. E.keerthika AP/ECE	IOT INTEGRATED MODERN FINGERPRINT BASEDVECHILE AUTHORIZED IGNITION STARTER AND PETROL THEFT IDENTIFICATION SYSTEM
	620620106009	MEENA M		
	620620106301	KUMARAVEL P		
	620620106013	PRATHAP		
3	620620106019	SANJAY KANTH S	Mr. T.Karthick AP/ECE	NEXT GENRAILWAY TRACK MONITORING AND CONTROLLED BY IOT
	620620106005	GOKUL G		
	620620106006	GOKULRAJ G		
	620620106007	GOWTHAMAN		

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4	6206201060303	NAGARAJAN C	Mr.M.Vasanth AP/ECE	SMART BLOOD BANK SYSTEM BASED ON IOT
	620620106305	SANJAI R		
	620620106306	THAMARAISELVAN S		
	620620106004	AVIN G		
5	620620106011	NAVEEN KUMAR S	Mr. S.Manivanan AP/ECE	IOT BASED SOLAR PANEL POWER MONITORING SYSTEM USING MOBILE CHARGER
	620620106026	VINOTH S		
	620620106008	HARIHARAN A		
	620620106013	PRASANNA A		
6	620620106012	PATTAIYATHAN K	Mrs. S.Viji AP/ECE	IOT BASED RFID ATTENDANCE SYSTEM USING ESP32
	620620106025	VETRIVEL V		

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DESIGN AND IMPLEMENTATION OF
BLOCK CHAIN BASED VOTING SYSTEM
USING IOT

A PROJECT REPORT

Submitted by

A.S.AKSHAYA	(620620106002)
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S.RAJESWARI	(620620106015)
K.SIVASAKTHI	(620620106020)

in partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

ENGINEERING

GANESH COLLEGE OF ENGINEERING, SALEM

ANNA UNIVERSITY: CHENNAI 600 025

MAY 2024

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60

ANNA UNIVERSITY : CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report " DESIGN AND IMPLEMENTATION OF BLOCK CHAIN BASED VOTING SYSTEM USING IOT " is the bonafide work of " AKSHAYA.A.S (620620106002), A.MUTHULAKSHMI (620620106010), RAJESWARI.S (620620106015), SIVASAKTHI.K (620620106020)" who carried out the project work under my supervision.

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SUPERVISOR

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Submitted for the ANNA UNIVERSITY examination held on 11/05/2024

INTERNAL EXAMINER

EXTERNAL EXAMINER

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IOT BASED VEHICLE FUEL THEFT MONITOR USING FINGERPRINT SENSOR

A PROJECT REPORT

Submitted by

MEENA.M	- (620620106009)
PRATHAP.P	- (620620106014)
SNEHA.P	- (620620106021)
KUMARAVEL.P	- (620620106301)

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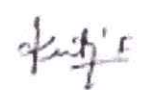
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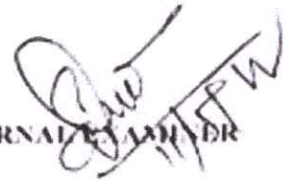Ganesh College of Engineering

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ABSTRACT

This paper proposes an IoT- incorporated present day unique finger impression based vehicle approved start starter and petroleum burglary recognizable proof framework. The framework works through a mix of biometric verification, continuous network, and high level observing capacities. A biometric finger impression acknowledgment module is incorporated into the vehicle's start framework, permitting just approved clients to begin the vehicle after fruitful confirmation. This guarantees that main people with enlisted fingerprints can get to and work the vehicle. Moreover, the framework consolidates IoT network, empowering consistent correspondence between the vehicle and a focal observing stage. Approved clients, like vehicle proprietors or armada chiefs, can remotely screen the vehicle's status, including start occasions and fuel levels, by means of a versatile application or web interface. Ongoing alarms are set off for any unapproved access endeavours or dubious exercises, enabling clients to make a quick move in light of potential security dangers. Notwithstanding vehicle access control, the framework incorporates fuel level checking sensors to identify any critical reductions in fuel levels. This usefulness empowers the distinguishing proof of fuel robbery occurrences, with alarms created at whatever point unapproved fuel siphoning or altering is recognized. Geofencing innovation further improves security by characterizing virtual limits for the vehicle's activity and setting off cautions when the vehicle moves outside assigned regions without approval. Information logging and examination capacities are incorporated into the framework, considering the capacity and investigation of start occasions, fuel level changes, and security alarms. This information driven approach works with the ID of examples of abuse or robbery, empowering proactive safety efforts and preventive activities.

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NEXT-GEN RAILWAY TRACK MONITORING AND CONTROLLED BY IOT

A PROJECT REPORT

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GOWTHAMAN.S	(620620106007)
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BACHELOR OF ENGINEERING

IN

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MAY 2024

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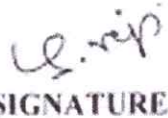
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Certified that this project report **"NEXT-GEN RAILWAY TRACK MONITORING AND CONTROLLED BY IOT"** is the bonafide work of **"GOKUL.G (620620106005), GOKULRAJ.G (620620106006), GOWTHAMAN.S (620620106007), SANJAY KANTILS (620620106019)"** who carried out the project work under my supervision.

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ABSTRACT

This paper proposes a new method for monitoring the irregularities in railway tracks by updating the status of the tracks in the cloud. The IoT based Railway Track Monitoring System (IoT-RMS) is proposed for monitoring the condition of the railway track. The system identifies any abnormality in the tracks at an early stage. It is intended to propose a device which can automatically detect any cracks in railway tracks. The created device will be attached into the train engine and it consists of a sensor that will detect crack a few meters away and as soon as any crack is detected the train driver will get a signal so he can apply emergency brakes along with it the authorities will be notified with the correct location at which the fault is detected. The proposed approach is benign because the Indian Railway is the biggest railway network in Asia so there should be an efficacious methodology to detect and correct any kind of mishap due to railway tracks. The proposed system is different from others because the device is embedded in the train itself, which could reduce manual work and labour wages. a new hybrid method is proposed for locating irregularities on a track, even in the absence of a GPS signal. Pre-processing of the GPS signal is carried out effectively because the sensors used in IoT-RMS are capable of functioning in a high noise environment. The IoT-RMS updates the location of the abnormality in the cloud and shares it with other trains that will be passing through that location. This project aims at the eradication of any kind of casualty in Indian Railway and if this system creates, even if a small refinement it will make a difference in the nation.

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DEPARTMENT OF CIVIL ENGINEERING
PROJECT LIST
ACAEDMIC YEAR 2023-2024
YEAR/ SEMESTER: IV/VIII

S.NO	BATCH	REG.NO	NAME OF THE STUDENT	GUIDE	PROJECT TITLE
1	I	620620103002, 620620103003, 620620103301, 620620103302, 620620103303	M.KAVIBHARATHI K.RAHUL T.DINESHKUMAR A.JEEVANANTHAN NESAMAI.M	TAMILARASI.S	An Experimental investigation of high strength concrete using manufacturing sand

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AN EXPERIMENTAL INVESTIGATION OF HIGH STRENGTH CONCRETE USING MANUFACTURING SAND

A PROJECT REPORT

Submitted by

KAVIBHARATHI M	**(620620103002)**
RAHUL K	**(620620103003)**
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Of

BACHELOR OF ENGINEERING

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Certificate that this project report "AN EXPERIMENTAL INVESTIGATION OF HIGH STRENGTH CONCRETE USING MANUFACTURING SAND ", A REVIEW " is the bonafide work of " A.JEEVANANTH (620620103302)., who carried out the project under my supervision.

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Submitted for the project vivo-voice held on...10 - 05 - 2024.........

INTERNAL EXAMINER

EXTERNAL EXAMINER

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ABSTRACT

High strength concrete replaced manufactured sand is the more advantage in the Construction industry. The main objective of High strength concrete to develop the compressive strength of concrete by replacing Natural sand into Manufacture sand and using admixture.

To examine the workability of manufactured sand and using admixture in concrete. To investigate the performance of this concrete terms of its compressive strength and split tensile strength.

This paper puts forward the applications of manufactured and as an attempt towards sustainable development in India. It will help to find variable solution to the declining availability of natural sand to make eco-balance. Manufactured sand is one among such materials to replace river sand, which can be used as an alternative fine aggregate in mortars and concretes.

The use of manufactured sand in concrete is gaining momentum these days. The present experimental investigations have been made on concrete using manufactured sand as fine aggregate and observed the effects of crushed manufactured sand on strength properties of concrete.

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DEPARTMENT OF MECHANICAL ENGINEERING
PROJECT LIST
ACAEDMIC YEAR 2023-2024

YEAR/ SEMESTER: IV/VIII

BATCH NO	REG.NO	NAME	PROJECT TITLE	GUIDE
1	620620114009	NAVEEN K	OPTIMIZATION DESIGN, MODELING AND DYNAMIC ANALYSIS OF WIND TURBINE BLADE	M.RAMKUMAR
	620620114321	YOGESHWARAN V		
	620620114316	RAGHUL K		
2	620620114003	ISRAVEL PRASANNA K	STRUCTURAL AND THERMAL ANALYSIS OF GAS TURBINE BLADE USING BY FINITE ELEMENT METHOD	V.JAGADEESHWAR
	620620114005	KALAIVANAN G		
	620620114314	NARESH K		
3	620620114304	BALAJI J	MECHANICAL BEHAVIOUR OF AL METAL MATRIX COMPOSITE SPUR GEAR WITH VARIOUS REINFORCEMENTS	E.VENKATESAN
	620620114019	VIGNESH T		
	620620114007	MAHESWARAN V		
4	620620114501	TAMILARASAN M B	ANALYSIS OF DRILLING PARAMETERS FOR VARYING CONE ANGLE ON SS309 BY USING VMC DRILLING	S.SIVAKUMAR
	620620114016	SHARAN J		
	620620114006	LOGANATHAN S		
5	620620114309	KAVINRAJ P	FABRICATION OF GEARLESS POWER TRANSMISSION USING ELBOW MECHANISM FOR RIGHT ANGLE	I.ANGU
	620620114307	JEROSLINTONY A		
	620620114308	KABILAN K R		
6	620620114001	BOOPALAN M	MECHANICAL PROPERTIES AND TESTING OF FRICTION STIR WELDED ALUMINUM ALLOY 2024 SIMILAR JOINTS	M.RAMKUMAR
	620620114012	RAMANA V		
	620620114018	VELAN V		
	620620114004	JEEVA A		

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7	620620114302	ARAVINTH M	MECHANICAL BEHAVIOUR OF AL METAL MATRIX COMPOSITE SPUR GEAR WITH VARIOUS REINFORCEMENTS	E.VENKATESAN
	620620114318	SUBASH F		
	620620114305	BHARATH J		
8	620620114312	NANTHA KUMAR G	ANALYSIS OF DRILLING PARAMETERS FOR VARYING CONE ANGLE ON SS309 BY USING VMC DRILLING	V.JAGADEESHWAR
	620620114317	RANJITH S		
	620620114319	SURYAGOKUL		

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STRUCTURAL AND THERMAL ANALYSIS OF GAS TURBINE BLADE USING BY FINITE ELEMENT METHOD

A PROJECT

Submitted by

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Certified that this Thesis titled **"STRUCTURAL AND THERMAL ANALYSIS OF GAS TURBINE BLADE USING BY FINITE ELEMENT METHOD "**is the bonafide work of **620620114003 ISRAVEL PRASANNA K 620620114005 KALAIVANAN G 620620114314 NARESH K**who carried out under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for the University Viva-voce Examination held on_24.03.2023

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75

ABSTRACT

The design optimization of wind turbine blades through investigating the design methods and analyzing the performance of the blades. The current research work in this area include wind turbine blade geometric design and optimization, aerodynamics analysis, wind turbine blade structural design and dynamics analysis. Blade geometric design addresses the design parameters, including airfoils and their aerodynamic coefficients, attack angles, design tip speed ratio, design and/or rated wind speed, rotor diameter, blade aerodynamic shape with chord length and twist distributions, so that the blade achieves an optimum power performance. The geometry of the blade is an aerodynamic shape with nonlinear chord and twist distribution, which can be obtained based on the BEM theory with respect to given aerofoil with known aerodynamic coefficients. In terms of blade aerodynamics analysis, there are four types of aerodynamic models which can be used to predict the aerodynamic performance of blades, including blade element momentum (BEM) model, lifting panel and vortex model, actuator line model, and computational fluid dynamics (CFD) model.

The aerodynamic contour design and performance analysis of wind turbine blades are important parts of the design theory and application of wind turbine. According to the space coordinate transformation theory, the space coordinates of the blade elements have been calculated .Aiming at the dynamic performance analysis of composite blade, a modeling method of combining Unigraphics NX 8.5 with ANSYS was proposed referred to the actual layer structure. Dynamic analysis was performed for the blade by using the finite element method. This study has been successfully applied to production of 20KW composite wind turbine blades.

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OPTIMIZATION DESIGN, MODELING AND DYNAMIC ANALYSIS OF WIND TURBINE BLADE

PROJECT REPORT

Submitted by

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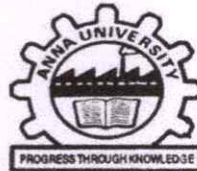620620114321 **YOGESHWARAN V**
620620114316 **RAGHUL K**

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BACHELOR OF ENGINEERING

In

MECHANICAL ENGINEERING

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APRIL/MAY 2024

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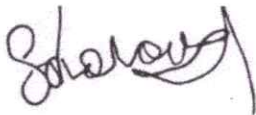
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Mr.E.VENKATESAN.M.E.,

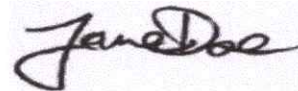**S+UPERVISOR**

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