

# VIGNANA BHARATHI Institute of Technology

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# **Abstract Book of Best Project's**



2015

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#### SEWAGE TREATMENT PLANT AT VBIT CAMPUS

Abhishek Goggi U. Sachin Karthik Rayaprolu Nithil Kumar thungathurthy Santhosh Kumar Dubbaka

#### ABSTRACT

A study is to be conducted for the primary treatment and management of sewage generated in Vignana Bharathi Institute of Technology College and its buildings and a sewage treatment plant is to be designed. The total sewage generated in one day is to be estimated considering the projected population, hostels and residential area for the next 30 years.

The Per-capita demand is to be estimated for the population. It is observed that during the construction of college 3 different septic tanks were constructed and sludge water which is coming out of these septic tanks are being soaked in to the Ground . In view of above situation a centralised Septic Tank and a paved soak pit is designed to utilise the treated water for Irrigation. The various components of sewage treatment plant viz. septic tank, Soak pit, Canal is to be designed considering the various standards and permissible limits of treated sewage water.

The Calculations are to be made according to the details estimated like Population estimate, Per-capita Demand ,Turbidity, hardness of water. It is to be concluded from the study that in next future years the predicted population and estimated sewage in MLD. The dimensions of Septic tank, Soak pit, Canal are to be found out effectively to treat the sewage water keeping the sewage quality within the permissible limits.

After the Design and Treatment treated water will be supplied for irrigating the crops on Research Farm and the remaining sludge after treatment will be used as manure on Farm. The use of treated water will reduce the ground water use and additionally the treated sludge will be very useful for increasing the fertility of soil.

# DESIGN AND ESTIMATION OF PROFESSORS QUARTERS IN VBIT

Abhilash Kanneboyina Hari Kumar Katle Latha.D Naresh Kumar

### ABSTRACT

A Villa was originally an "AN ANCIENT ROMAN UPPER CLASS COUNTRY HOUSE" Its origin takes place during ROMAN EMPIRE at ROMAN VILLA. After fall of Roman Empire these construction also come to end till 20 century.

In this project mainly we discuss about the design procedure of various elements of building like beams, columns, slabs, footing and stair case of two floors. The total area is 4.95acres ie 20031.93sq.m for the construction and we are using M20 grade concrete and Fe 415 steel. Area of the built up area is 162.5sq.m and total area of the plot is 200 sq.m.

# RAIN WATER HARVESTING AND EFFICIENCY AT VBIT CAMPUS

Arshad Mohd Sameer Shaik Tanuj Pusa Touseef Abbas

### ABSTRACT

Water supply in urban area is always shortage against the total demand. Surface water inadequate to meet our demand and we have to depend on ground water. Due to rapid urbanization, infiltration of rainwater into the subsoil has decreased drastically and recharging of ground water has diminished. This scenario requires an alternative source to bridge the gap between demand and supply. Rainwater, which is the purest form of water, would be an immediate source to augment the existing water supply by "catching water wherever it falls".

Rainwater Harvesting is the process of collecting and storing rainwater in a scientific and controlled manner for future use. Rainwater harvesting in VBIT CAMPUS include roof top rainwater harvesting, rainwater harvesting in paved and un-paved areas (open fields, parks, pavement landscapes etc.).

In this Project were going to design a rain water harvesting system for this we are going to do a preliminary survey which includes the area of paved and unpaved surface and then make a contour map for the elevations. Later we will get the annual precipitation data from the Irrigation of the district. and we are also going to find the soil properties of the particular area by performing various tests. Later we are going to select the drain canal path for the rain water to travel from various sources to the harvesting pit.

After completing soil test and survey, the Harvesting pit is to be designed for the volume which is going to be collected from the surface areas (paved and unpaved). In which different bed layers thickness and type of material are found. And a tank volume is designed for the total volume drained in to filter bed.

Later the water which is stored in water harvesting tank is used for different applications and efficiency are find out.

Apart from these the waste water from the few sources is also collected and filters through water beds and stored in harvesting water tank.

#### SOIL STABILIZATION

Meena Kulakarni Mooli Vijaya Kumari Sharanya Katukoju Sri Vidhya G P

# ABSTRACT

Soil stabilization means the improvement of stability or bearing capacity of the soil by the use of the suitable admixtures or stabilizers.

The laboratory testing was focused on the strength properties. However a number of other basic properties of importance for the understanding of the strength behavior of stabilized soils were also investigated , such as the density , water treatment ,degree of saturation , permeability and the compression properties.

Limited financial resources to provide a complete network road system to build in conventional method. Effective utilization of locally available soils and other suitable stabilizing agents. Encouraging the use of industrial wastages in building low cost construction of road.

For soil stabilization, there are many methods. Among those methods we choosen Soil – lime stabilization method .It is a chemical method of soil stabilization. In this method the addition of lime to soil, chemical reactions are occurring. Due to these reactions the plasticity of soil will be reduce and increasing long term strength and reducing swell potential.

#### **DESIGN OF FLEXIBLE PAVEMENT**

Gopinath Puskuri Sampath Thangallapally Jahangir Pershad Y Sri Hari Madas

## ABSTRACT

The main purpose of flexible pavement is to provide smooth surface for the vehicles and comfort to the passengers.

In the first phase, carrying out survey with the help of surveying instruments to know the existing ground level and to prepare contour map of site.

In the second phase, soil samples are collected randomly covering the entire site. The obtained soil samples are tested in geo technical lab to know the soil strength parameters.

In the third phase, thickness of pavement is designed based on the CBR graphs.

### **DESIGN OF INDUSTRIAL SHEDS IN VBIT**

Mohan Adavath Prasad Dudala Ranjith Mekala Ramavath Pandu

# ABSTRACT

#### Uses of Industrial shed :

- A shed is typically a simple single storied structure that is used for storage, hobbies, or as a workshop.
- Sheds used in industries are very large structures which are constructed through metal sheathing over a metal frame, plastic sheathing and frame. Steel offers numerous possibilities to achieve both pleasant and flexible functional use.
- For longer spans, the design is optimized in order to minimize the use of materials, cost and installations effort.
- Large open spaces can be created that are efficient, easy to maintain, and are adaptable as demand changes.
- steel is durable and can be well molded to give the desired shape to give an ultimate look to the structure that has been constructed.
- Steel is chosen on economic grounds as well as for other aspects such as fire, architectural quality and sustainability.

#### Design of Industrial storage shed and analysis of stresses produced on failure of a Joint :

- In this project work submitted, it is proposed to carry out the design of an industrial steel storage shed, and to find out the increase in the stresses induced in the members of the structure adjacent to the member in which the connection failed.
- In this study, comparison of truss of three types of section has been analyzed using conventional working stress method and recently adopted limit state method. Also the moments and slenderness's produced are found and described.
- In this standards the whole calculations are done for the dead, live and the wind load which are most important for the design of the industrial shed i.e., pitched roof truss.
- The modal of the truss is analyzed and designed as per IS : 875 1987 (Part-I, Part-II, Part-III) and IS:800:2007.
- The stability analysis of single storeyed steel building with pitched roof is carried out using Software Computer Aided Design i.e., (STAAD PRO)

#### **CHEMICAL ATTACK ON CONCRETE**

Nikhilender Naidu D Swathi K Sai narayan Reddy E Raj Pavan Reddy E

# ABSTRACT

Construction is one of the significant sectors of Indian economy and is an integral part of the development. Today India's urban population is the second largest in the world and its future development leads to increased demand for housing to cope with this problem India should desperately need to plan for acquisition of land and rapid creation of dwelling units.

Construction is a complex process involving basically the areas of Architectural planning, Engineering & Construction. There is growing realization today that speed of construction needs to be given greater importance especially for large housing projects. This is not only essential for the faster turnover of equipment and investment – leading possible to the reduction in the housing cost but also for achieving the national objective of creating a large stock to overcome shortest possible time. Fortunately, some of the advanced technologies catering to faster speed of construction are already available in the country. For e.g. Prefabrication, autoclaved blocks, slabwall system of construction etc.

This thesis describes the "**Chemical attacks on concrete**". Good concrete can resist some chemicals after addition of water to concrete but requires protection from the destructive effects. Due to the presence of chemicals, there is a possibility of deterioration to the concrete structures, which has to be prevented. For this, we have to study the concrete behaviour on chemical attack, by conducting strength test on normal concrete compared with test specimen.

#### FIBER REINFORCED CONCRETE

Jagadeesh Thalloju Pudmi Aakavaram Phanindra Theegala Velpula jagadeesh

# ABSTRACT

In conventional concrete, micro-cracks develop before structure is loaded because of drying shrinkage and other causes of volume change. When the structure is loaded, the micro cracks open up and propagate, because of development of such micro-cracks, results in inelastic deformation in concrete. This can be overcome by using FRC. Fiber reinforced concrete (FRC) is cementing concrete reinforced mixture with more or less randomly distributed small fibres. In the FRC, a numbers of small fibres are dispersed and distributed randomly in the concrete at the time of mixing, and thus improve concrete properties in all directions. The fibers help to transfer load to the internal micro cracks. FRC is cement based composite material that has been developed in recent years and has been successfully used in construction with its excellent flexural-tensile strength, resistance to spitting, impact resistance and excellent permeability and frost resistance. Durability of the concrete is improved by reducing the crack widths. In this project work, we are designing M20 and M30 grades of concrete cubes and cylinders with GFRC then comparing the results of compressive strength and split tensile strength with conventional concrete.

# MODELS OF CANAL REGULATORY SYSTEMS INCLUDING CROSS DRAINAGE AND CROSS MASONARY WORKS

V. Pavan Kumar K, Vinay Kumar M. Jannaiha M. Anjaneyulu R. Nagesh

### ABSTRACT

It is to propose to construct the models of canal regulatory system including the lining of canal, dourly providing head regulator, cross regulator, drop, under tunnels, siphons, canal siphons, super passages and DLR Bridge which are crossing over the canal.

It is further aimed to construct the models of distributaries including OT sluices, modules, Flexibilities and proportionalities on the distributory system

It time permits it is further decided to construct the model of a reservoir durely providing spillway, head regulator and stilling basin etc...

#### **HYDRAULIC BRIDGE**

A.V. Sai Veda S. Vasanthi L. Siri chandana

#### ABSTRACT

Hydraulically Assisted Bridges is a new concept into bridge design which incorporates an integrated hydraulic system into the bridge in order to carry more weight. The system is most suitable for arch based bridges in which the main forces are directed in a horizontal sideways direction. The hydraulic system is integrated into the main load bearing members of the bridge can be minimally controlled by computers; however if calibrated and constructed accurately, the system has the possibility for non-electronic autonomic self-adjustment which entails low maintenance cost and a reduced safety risk in an event of an electrical malfunction. Consequently less money can be used in purchasing materials and the project cost is reduced.

#### **REINFORCED CONCRETE STRUCTURES**

G.Sushma Y.Ravalika G. Sneha K, Sujith K, Rukmini R, Ram

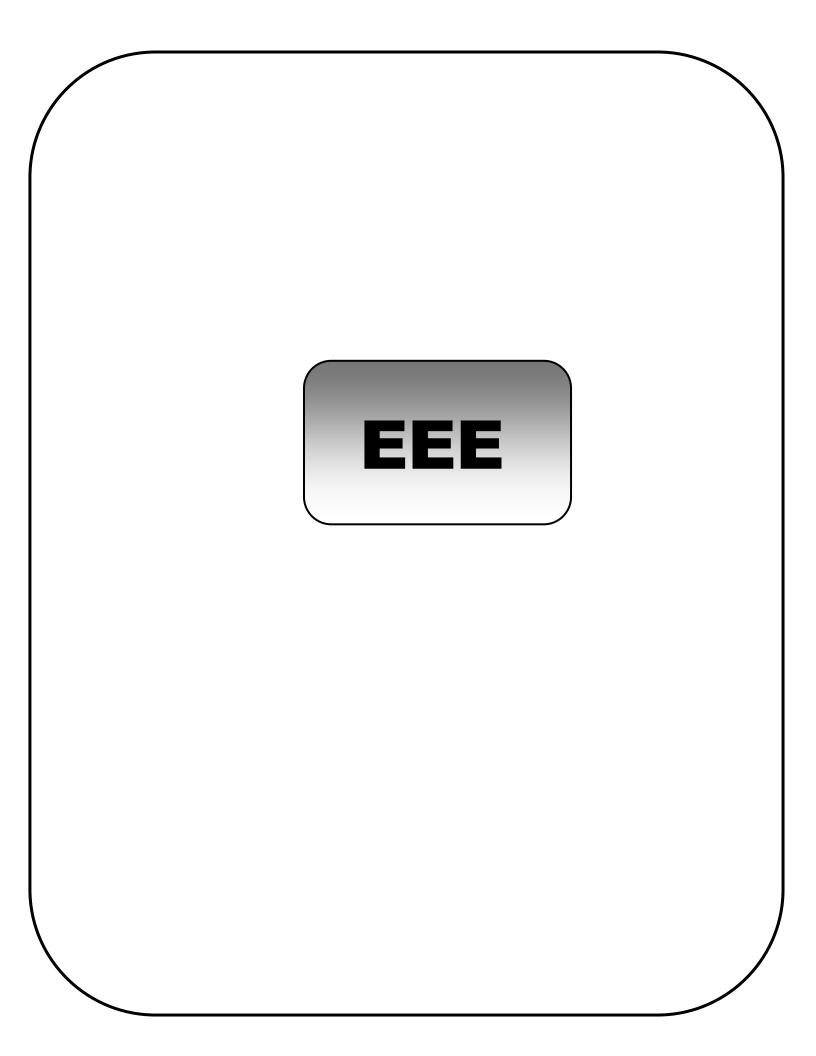
### ABSTRACT

A **reinforced concrete column** is a structural members designed to carry compressive loads, composed of concrete with an embedded steel frame to provide reinforcement. For design purposes, the columns are separated into two categories: short columns and slender columns.

A **concrete slab** is common structural element of modern buildings. Horizontal slabs of steel reinforced concrete, typically between 4 and 20 inches (100 and 500 millimeters) thick, are most often used to construct floors and ceilings, while thinner slabs are also used for exterior paving. Sometimes these thinner slabs, ranging from 2 inches (5.1 cm) to 6 inches (15 cm) thick, are called *mud slabs*, particularly when used under the main floor slabs<sup>[1]</sup> or in crawl spaces.<sup>[2]</sup>

In many domestic and industrial buildings a thick concrete slab, supported on foundations or directly on the subsoil, is used to construct the ground floor of a building. These can either be "ground-bearing" or "suspended" slabs. In high rise buildings and skyscrapers, thinner, pre-cast concrete slabs are slung between the steel frames to form the floors and ceilings on each level.

In situ concrete slabs are built on the building site using formwork - a type of boxing into which the wet concrete is poured. If the slab is to be reinforced, the rebars are positioned within the formwork before the concrete is poured in. Plastic tipped metal, or plastic bar chairs are used to hold the rebar away from the bottom and sides of the form-work, so that when the concrete sets it completely envelops the reinforcement.



# NEW LOGIC AND SIMULATION BASED OVER CURRENT AND UNDER VOLTAGE RELAY

Ajay Bharath Reddy.V G.Sushm S.Yashwanthachary

#### ABSTRACT

Key words: over current, under voltage simulink.

The project on "A New Logic and Simulation based Over Current and Under Voltage Relay" for Three Phase System has been simulated in Mat lab-Simulink. The Highlight of the scheme is that under Fault condition, the Current/Voltage waveform at the point of protection is being compared with the previous history of the healthy waveform of the same quantity under no fault condition by delaying the healthy waveform (current/voltage waveform). The faulty waveform is being compared without delaying it. Thus comparison is being made continuously and the corresponding hardware circuit is being developed.

#### TOUCH SCREEN BASED HOME AUTOMATION SYSTEM

K,Rambabu K,Sravan reddy K,Uday kumar

#### ABSTRACT

#### Keywords: RF technology, automation system, microcontroller.

The main objective of this project is to develop a home automation system with a touch screen based control panel. As technology is advancing so houses are also getting smarter. Modern houses are gradually shifting from conventional switches to centralized control system, involving touch screen switches. Presently, conventional wall switches located in different parts of the house makes it difficult for the user to go near them to operate. Even more it becomes more difficult for the elderly or physically handicapped people to do so. Remote controlled home automation system provides a simpler solution with touch screen technology. Touch screen control panels are also designed for commercial, industrial and medical systems.

The project mainly aims in designing completely automated switchboard with the help of touch screen sensor and wireless RF technology to control the home appliances and also provide a user friendly environment of the user to operate the devices effectively. It aims in providing a reliable system for safe operating few high-end devices like lamps, fans and motors etc. The device consists of a microcontroller, which is interfaced with the input and output modules, the controller acts as an intermediate medium between both of them. So the controller can be termed as a control unit. The input module is nothing but a touch screen sensor, which takes the input from the user and provides the same to the microcontroller interfaced with RF transmitter. The data will be received by the RF receiver and is fed to controller.

# MAXIMUM POWER POINT TRACKING(MPPT) OF SOLAR POWER APPLIED FOR DC FAN

K, Santhosh kumar CH. Srinivas G. Vasavi N. Santhosh

#### ABSTRACT

#### Keywords: solar panel ,MPPTS, solar energy.

The purpose of this project is to design and construct a solar tracker system that follows the sun direction for producing maximum out for solar powered applications. The system also controls DC fan using relay switch. Achieving balance between power consumption and power production is a bigger challenge today. The best way to solve this imbalanced equation is to use solar energy as efficiently as possible. The problem in the usage of solar energy is with solar cell panel should be exposed maximum to the sun light. If the solar panel is fixed in a particular direction then the sun light intensity varies from morning to evening. Moving the solar cell panel in the direction of sun can increase the solar energy generated from the solar cell. The main controlling device of the project is Microcontroller to which LDR's and stepper motor with panel setup to its shaft are interfaced. The Microcontroller gets input from LDR sensors regarding the direction of sun and controller process this information and controls the movement of solar panel attached to DC motor

#### **PREPAID AND TALKING ENERGY METER**

A.Gynaneshwar Rao T.Laxman Naidu M.L.Haritha G.Shiva Kumar

# ABSTRACT

#### Keywords: Energy meter, smart card, micro controller.

The purpose of this project is to design and develop an intelligent energy metering system that can efficiently control the amount of electricity consumed by the user. Electricity users can buy specific amount of energy to use it only when they needed. This is achieved by interfacing energy meter with smart card technology. Smart card based prepaid electricity is a unique and new concept which saves lot of time and power for electricity department. User can recharge the card whenever the power is required. People now can buy electricity in advance, using the socalled prepaid electricity cards in the form of smart cards. The proposed prepaid smart card can also be used to manage electricity consumption. Thus, people can consume only as much power as they really need.

The project consists of a microcontroller, energy meter, relay, buzzer, LCD, and LED indicators. The microcontrollers internal non-volatile memory is used to store the electricity consumed. The nonvolatile memory inside the Smartcard is used to store the prepaid amount. When the recharged value becomes zero on power consumption, the microcontroller put off all the loads connected to it through relay. User has to replace the recharge card with new one.

# AUTOMATIC RAILWAY GATE CONTROL USING MICROCONTROLLER WITH HIGH SPEED ALERTING SYSTEM

M.Naveen P.Niveditha D.R.Damodar K,Vaishnavi

#### ABSTRACT

#### Keywords:microcontroller,IR sensors,DC motor.

Railroad related accidents are more dangerous than other transportation accidents in terms of severity and death rate etc. Therefore more efforts are necessary for improving safety. There are many railways crossing which are unmanned due to lock of manpower needed to fulfill the demands. Hence many accidents occur at such crossing since there is no one to take care of the functioning of the railway gate when a train approaches the crossing. The main objective of our project is to manage the control system of railway gate using microcontroller.

The proposed model has been designed using 89S52 microcontroller to avoid railway accidents occurring at unattended railway gates if implemented detection of train approaching the gate can be sensed by means of two sensors (IR) placed on either side of the gate. This work utilizes the two sensors placed on either side of the gate. This work utilizes two sensors that are fixed one at upside and similarly the other sensor is fixed at down side of the train direction. Sensors are fixed on both sides of the gate. We call the sensors along the train direction as foreside sensor and the other as after side sensor. When foreside sensor gets activated the sensed signal is sent to the microcontroller and the gate is closed and stays closed until the train crosses the gate and reaches after side sensors. When the side sensor activated and the signal about the departure is sent to the microcontroller motor turns in opposite direction and gate opens and motor stops automatically.

# WIRELESS ENERGYMETER READING ON HANDHELD DEVICE BASED ON ZIGBEE TECHNOLOGY

M.T.Saisharan Teja T.Lohith Reddy K,Sharanya M.Suraj Kumar

### ABSTRACT

Keywords: Energy meter, Transmitter, Receiver, Microcontroller.

The purpose of this project is to remote monitoring and control of the Digital Energy Meter. This system enables the Electricity Department to read the meter readings regularly without the person visiting inside each house. This can be achieved by the use of Microcontroller unit that continuously monitors and records the Energy Meter readings in its permanent (nonvolatile) memory location. This system also makes use of a Zigbee module for transmitting and receiving the readings of Energy Meter.

The Microcontroller based system continuously records the readings and the live meter reading can be sent to the Hand held device. The receiver end comprises of Zigbee module, which receives the data from the transmitter section. The data received at the receiver end is fed to the microcontroller present at the receiving end using Zigbee wireless technology. The microcontroller at the receiving end is provided with a LCD. The readings received is processed and displayed on the LCD. The

Microcontroller is programmed using Embedded C language.

# GAS LEAKAGE DETECTION BY USING MICROCONTROLLER WITH GSM MODULE

B.Pavan kalian G.Karthik P.Prithvi upadyaya K,Sai Sharanya

#### ABSTRACT

#### Keywords: Microcontroller, MQ6 Gas sensor.

The main aim of this project is to continuously monitor the house or industries and if any gas leakage, smoke detection, fire accidents occur, the system should immediately start the exhaust fans or blower to bring the situations to the normal previous position. This project totally eliminates a person who has to monitor the predefined area all the time.

MQ6 Gas Sensor is used in the application. The status of this sensor will be continuously monitored by the microcontroller. Whenever sensor detects any gas its conductivity increases and send to the microcontroller. The microcontroller displays proper status on LCD Display as well as on LED indicators. It also sends SMS to already stored mobile number with the information regarding the status of these sensors

# AUTOMATIC IRRIGATION SYSTEM ON SENSING SOIL MOISTURE CONTENT

ShivaRami Reddy Sreedhar Rathode Pavan Kumar RamaKrishna

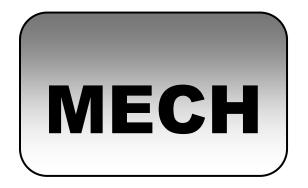
#### ABSTRACT

#### Keywords: Microcontroller, GSM Technology, Irrigation system.

The project is designed to develop an automatic irrigation system which switches the pump motor ON/OFF on sensing the moisture content of the soil. In the field of agriculture, use of proper method of irrigation is important. The advantage of using this method is to reduce human intervention and still ensure proper irrigation.

The project uses a PIC16F72 microcontroller which is programmed to receive the input signal of varying moisture condition of the soil through the sensing arrangement. This is achieved by using an op-amp as comparator which is in-build the microcontroller. Once the controller receives this signal, it generates an output that drives a relay for operating the water pump. An LCD display is also interfaced to the microcontroller to display status of the soil and water pump. The sensing arrangement is made by using two stiff metallic rods inserted into the field at a distance. Connections from the metallic rods are interfaced to the control unit. The system also checks the water level using water level detection sensor in the tank and when the input from the water level is low the motor gets controlled using relay switch.

The concept in future can be enhanced by integrating GSM technology, such that whenever the water pump switches ON/OFF, an SMS is delivered to the concerned person regarding the status of the pump. We can also control the pump through SMS.



# DESIGN AND FABRICATION OF SOLAR POWERED MULTIPURPOSE AGRICULTURAL VEHICLE WITH 90° STEERING MECHANISM

K,RamBabu K,Sumanth Kumar K,Mukunda Babu B.Santhosh Kumar

### ABSTRACT

Keywords: Agriculture Vehicle, Ploughing/Tilling, Spraying, Sowing.

Agriculture is the backbone of Indian economy. But the state of agriculture is in its decreasing trend. This is due to lack of mechanization. Moreover there is need for a combination of Mechanical, Electrical and Agricultural scientists working together for the development. This increases the per hectare productivity of the agricultural land. Electricity for this can be obtained from renewable energy resources like that of a solar. Thus this robot is clean energy based farmer friendly device.

For many years robotic systems have been widely used for industrial production and in warehouses, where a controlled environment can be guaranteed. In agriculture and forestry, research into driverless vehicles has been a vision initiated in the early 1960's with basic research on projects on automatic steered systems and autonomous tractors. Recently, the development of robotic systems in agriculture has experienced an increased interest, which has led many experts to explore the possibilities to develop more rational and adaptable vehicles based on a behavioral approach. In the current generation most of the countries do not have sufficient skilled man power specifically in agricultural sector and it affects the growth of developing countries. So it's a time to automate the sector to overcome this problem. In India there are 70% people dependent on agriculture. Innovative idea of our project is to reduce the human effort and increase the yield.

In this Project, Agriculture Vehicle has been designed to perform multi operations like loosening the soil, Ploughing/Tilling, Manure Spraying, Seed Sowing etc. Agriculture Vehicle has been designed with its length is 810 mm, the width 270 mm, and the height of 270 mm, and gap between the frame and the ground 120 mm. We designed the components Chassis, Circular Toothed Wheel, Steering Gears, Manure Tray, Multi-teeth Plough and Seed Sower using AutoCAD modeling software. The Material considered for making of Vehicle Chassis is Mild Steel because of its relatively low tensile strength, less cost and easy to form according to our convenient dimensions. Development of each and every component is done very carefully and finally fabrication of our Multi-Purpose Agricultural Vehicle is up to the expectations.

# DESIGN AND FABRICATION OF RENEWABLE WAVE ENERGY-BASED INNOVATIVE ENERGY CONVERTER FOR FUTURE POWER GENERATION

K,Archana T.JayaKrishna Javed Mohammed C.S.Karthik

### ABSTRACT

Keywords: Wave Energy, Wave Energy Converter (WEC).

Over the years, many systems have been developed to extract power from ocean waves, tides, and currents. Wave energy has become a main focus due to higher energy densities and predictability. Wave power refers to the energy of ocean surface waves and the capture of that energy to do useful work. Sea waves are a very promising energy carrier among renewable power sources, since they are able to manifest an enormous amount of energy resources in almost all geographical regions.

Wave energy is the transport of energy by ocean surface waves and the capture of that energy for the use of electricity generation. A device that is able to convert wave energy is typically called a wave energy converter (WEC). The principle of operation of the WEC device is to convert vertical heave displacement into a rotational action, which generates electrical power. The heave displacement is created by the WEC system riding incoming waves. The Details of Different types of Wave Energy Converters are mentioned in brief in this project.

In this project we describe the design of our wave energy converter for power generation. We designed the components Bow, Frame, Free wheels, Shaft using AutoCAD modeling software. Development of each and every component is done very carefully and finally fabrication or assembly of our wave energy converter is up to the expectations.

# DESIGN AND FABRICATION OF LIGHT MATERIALS TRANSPORT SYSTEM

Gopini Akula Kumar Chakali Ashish Savrup Rakesh Malavath

## ABSTRACT

Keywords: Material Transport/Handling System.

In the last several years material handling has become a new, complex, and rapidly evolving science. Material handling cannot be avoided in logistics, but can certainly be reduced to minimum levels. Material handling system design has a direct influence on the logistics cost. Therefore, how to improve the efficiency of material handling system gets more and more people's attention.

Material handling can be defined as: "art and science of conveying, elevating, positioning, transporting, packaging and storing of materials starting from the time. The function of material handling is to move the right material to the right place, at the right time, in the right amount, in sequence and in the right position or condition in order to achieve minimum production cost.

This project is mainly based on the simple light material transport system to perform complex task within a short time and successfully in a cost effective way. The Details of different types of material transport equipments, Objectives and advantages are mentioned in brief in this project. In this project we describe the design of our project model for Material Transport. We designed the components Hanger Link, Crank Link, Main Frame Component and Wooden Frame, using AutoCAD modeling software. The Material considered for making of main components is Mild Steel because of its relatively low tensile strength, Less cost and easy to form according to our convenient dimensions. Development of each and every component is done very carefully and finally fabrication or assembly of our Material Transport system is up to The expectations.

# DESIGN & FABRICATION OF AGRICULTURE SPRAYER AND WEEDER COME PLANER

Kotha Rama Krishna S.Ravi Teja Shyam Sunder Reddy P.Swetha Reddy

# ABSTRACT

In order to meet the food requirements of the growing population and rapid Industrialization modernization of agriculture is inescapable.Mechanization enables the conversation of inputs through precision in metering ensuring better distribution ,reducing quantity need for better response and prevention of losses or wastage of inputs applied. Mechanization reduces unit cost of production through higher productivity and input conversation.

Farmers are using the same methods and equipment for the ages. In our country farming is done by traditional way, besides that there is large development of industrial and service sector as compared to that f agriculture .The Spraying is traditionally done by labour carrying backpack type sprayer which requires more human effort.The weeding is the generally done with the help of bulls which becomes costly for farmers having small farming land.So to overcome these above two problems a machine is developed which will be beneficial to the farmer for spraying and weeding operations.

# DESIGN AND FABRICATION OF SEMI AUTOMATED WHEEL CHAIR CONTROLED BY JOYSTICK AND MEMS SENSOR

P.Sai Teja S.Satish B.Satish K,Sampath

K,Sai Kiran Reddy K,Sai Krishna P.Sandeep K,Sairam

### ABSTRACT

The main aim of this project is to design a wheel chair for physically people to help mainly for the leg amputes. As this project uses the joystick technology and MEMS, for controlling the directions of the wheel chair, which consumes less power by the user to operate it so that even the patient can operate without any stress. Wheel chair movement can be controlled in forward, left and right direction.

Automation is the frequently spelled term in the field of mechanical engineering. the hunger for automation brought many revolutions in the existing technologies. one among the technologies ,which had greater developments, is the controlling based on joystick is a simple device with three direction movement joystick when titled in the forward direction makes the wheel chair moves forward and same applies for the left and right directions.

MEMS is a micro Electro Mechanical sensor which is a highly sensitive sensor and capable of detecting the tilt. this sensor finds the tilt and makes use of the accelerometer to change the direction of the wheel chair depending on tilt. For example if the tilt is to the right side then the wheel chair moves in right direction or if the tilt is to the left side then the wheel chair moves in left direction. Wheel chair movement can be controlled. forward, left right direction

# DESIGN AND DEVELOPMENT OF PAPER CUTTER USING GENEVA MECHANISM

K, Rohini M.Saritha G.Shashikanth Reddy K, Shireesha

#### ABSTRACT

Keywords: Geneva Mechanism.

Geneva mechanisms producing intermittent motion have widely spread because of their simple construction and long duration of life. However, the latter may be attained only in case they are impeccably designed and correctly operated. Geneva mechanisms have long been popular as a means of producing positive incremental motion. This popularity stems in part from the simplicity of the mechanism, both in design and construction, which makes it a relatively low-cost indexing device. In addition, the mechanism inherently produces a precise positioning motion that is necessary for many applications.

In this Project, model has been designed to perform paper cutting operation using Geneva mechanism. In This Project Four slot Geneva is considered which is made up of Aluminium Material because of its low density, low weight, high strength, superior malleability, easy machining, excellent corrosion resistance and good thermal and electrical conductivity. The base frame of our project and other few components are made of wood. The main components in our project are Geneva wheel, two small gears, chain, threaded shafts, paper rollers and scissor. Development of each and every component is done very carefully and finally fabrication of our Project and is up to the expectations.

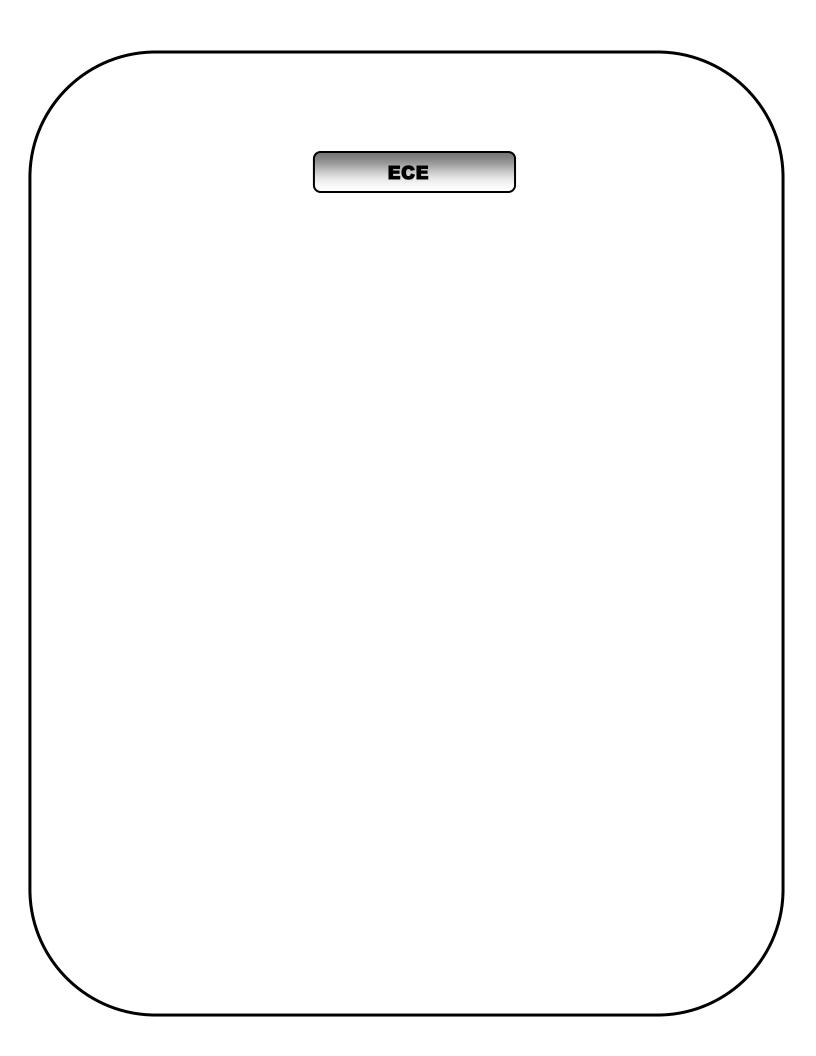
# FABRICATION OF SIX LEGGED SPIDER LINKAGE USING KLANN MECHANISM MOUNTED WITH SCISSORLIFT MECHANISM

S.Rakesh Reddy Pranav Kumar K, Gopi Y.Harish Kumar Reddy

# ABSTRACT

It has been that off-road vehicles with legs exhibit mobility, obtain higher energy and provide more comfortable movement than those of conventional tracked or wheeled vehicles while moving on rough terrain. So there is necessity to analyze &develop these leg mechanism which consist of six –links which is used as an alternative for wheels .each wheel is replaced by two klann mechanisms whose cranks are 180 degrees out of phase. To provide mobility for the mechanism is used as a replacement of wheels finds applications in planetary exploration ,walking chairs for the disabled and for military transport, rescue in radioactive zones for nuclear industries and in other hostile environments.

A scissors mechanism uses linked, folding supports in a criss-cross X pattern, known as a pantograph. Extension is achieved by applying pressure to the outside of a set of supports located at one end of the mechanism, elongating the crossing pattern. This can be achieved through hydraulic, pneumatic, mechanical or simply muscular means. This mechanism is used in devices such as lift tables and scissor lifts.



# A ZIGBEE BASED WEARABLE PHYSIOLOGICAL PARAMETERS MONITORING SYSTEM

V.Himabindu A.Prashanth P.Madhupriya

#### ABSTRACT

The design and development of Zigbee smart noninvasive wearable physiological parameters monitoring device has been developed and reported .The system can be used to monitor physiological parameters, such as temperature and heart rate, of a human subject. The system consists of an electronic device which is worn on the wrist and finger, by an at-risk person. Using several sensors to measure different vital signs, the person is wirelessly monitored within his own home.

An impact sensor has been used to detect falls. The device detects if a person is medically distressed and sends an alarm to a receiver unit that is connected to a computer. This sets off an alarm, allowing help to be provided to the user. The device is battery powered for use outdoors. The device can be easily adapted to monitor athletes and infants. The low cost of the device will help to lower the cost of home monitoring of patients recovering from illness. A prototype of the device has been fabricated and extensively tested with very good results.

In recent times, wireless sensors and sensor networks have become a great interest to research, scientific and technological community. Though sensor networks have been in place for more than a few decades now, the wireless domain has opened up a whole new application space of sensors. Wireless sensors and sensor networks are different from traditional wireless networks as well computer networks and, therefore, pose more challenges to solve such as limited energy, restricted lifetime.

# 1\*4 RECTANGULAR MICRO STRIP PATCH ARRAY ANTENNA AT 2.5 GHZ FOR MAX APPLICATION

Mounika Raj K, Abhilash Reddy

#### ABSTRACT

#### Keywords: patch array antenna, WIMAX, CST micrwave software, substrate FR-4

This project presents the design of microstrip rectangular 1x4 patch array antenna with centre frequency at 2.5GHz for WIMAX application. The array of one by four (1x4) patch array microstrip rectangular antenna with microstrip line feeding based on quarter wave impedance matching technique is designed and simulated using Computer Simulation Tool (CST) Microwave Environment software. The performance of the designed antenna was then compared with the single patch rectangle antenna in term of return loss, Voltage Standing Wave Ratio (VSWR), directivity, radiation pattern and gain. The array antenna was then fabricated on the substrate type FR-4 with dielectric constant of 4.3 and thickness of 1.6mm respectively. The array antenna was measured in the laboratory using Vector Network Analyzer (VNA) and the results show good agreement with the array antenna simulated performances.

#### **DESIGN OF PIC 16C67 MICROCONTROLLER**

V.Sai Sravani B.Kinnera Jyothi Srirama

### ABSTRACT

The project aims to design the CPU of the PIC microcontroller 16C67 from Microchip Inc. This microcontroller has a simple instruction set with only 35 instructions, and each instruction is a single 14-bit word. Out of the 35 instructions, 26 execute in ONE instruction cycle and 9 execute in TWO instruction cycles. [In this design, an INSTRUCTION cycle consists of two clock cycles, while in the original, the instruction cycle consists of 4 clock cycles.]

The design consists of an Instruction Register, Instruction Decoder, ALU, Control Unit, program counter (PC), stack, ROM and RAM. A state machine provides the basis for the generation of the control signals.

The design will execute all the instructions of the PIC16C67 CPU. Verification of the design will be done through simulation using ModelSim simulator and Verilog is the HDL used for capturing the design.

# EMBEDDING CIPHER TEXT IN AUDIO SIGNAL USING STEGANOGRAPHY

K,Krishna Yashasvi K,Bala Murali Krishna Bharadwaj

#### ABSTRACT

Steganography the art of hiding the fact that communication is taking place, by hiding information in other information. Many different carrier file formats can be used, but digital images are the most popular because of their frequency on the Internet. For hiding secret information in audio, there exists a large variety of steganographic techniques some are more complex than others and all of them have respective strong and weak points.

Different applications have different requirements of the steganography technique used. For example, some applications may require absolute invisibility of the secret information, while others require a larger secret message to be hidden.

In this paper we present a novel method for digital audio steganography where encrypted covert data is embedded into the Least Significant Bit (LSB) of host audio signal. This project will expose an overview of audio steganography, its uses and software techniques needed to look up in associating the information. It also attempts to identify the requirements of a good steganographic algorithm and briefly reflects on which steganographic techniques are more suitable for which applications.

### **INVISIBLE MOTION DETECTION IN VIDEOS**

Vaishanavi Dasu S.Reshma Neelofer S

## ABSTRACT

Our world is constantly changing, and it is important for us to understand how our environment changes and evolves over time. A common method for capturing and communicating such changes is imagery -- whether captured by consumer cameras, microscopes or satellites, images and videos provide an invaluable source of information about the timevarying nature of our world. Due to the great progress in digital photography, such images and videos are now widespread and easy to capture, yet computational models and tools for understanding and analyzing time-varying processes and trends in visual data are scarce and undeveloped.

Our goal is to reveal temporal variations in videos that are difficult or impossible to see with the naked eye and display them in an indicative manner. Our method, which we call Eulerian Video Magnification, takes a standard video sequence as input, and applies spatial decomposition, followed by temporal filtering to the frames. The resulting signal is then amplified to reveal hidden information.Our technique can run in real time to show phenomena occurring at temporal frequencies selected by the user.

Many seemingly static scenes contain subtle changes that are invisible to the naked human eye. However, it is possible to pull out these small changes from videos through the use of algorithms.We give a way to visualize these small changes by amplifying them and we present algorithms to pull out interesting signals from these videos, such as the human pulse, sound from vibrating objects and the motion of hot air, can be extracted for further analysis, or exaggerated to become visible to an observer.

The algorithm can reveal the blood pumping beneath someone's skin, with such detail that you can accurately measure their heart rate. It could also be released for mobile devices, such as smart-phones or, so that you can see the heartbeat of those around you in real time, FBI lie detection agents, and doctors alike. It also allows us to see the tiniest movements of eye muscles, the swaying of buildings in the wind, or fatigue in bolts and rivets that is invisible to the Naked eye.

### **FINGER PRINT BASED EVM**

Y.Sagar Reddy Sandeep Dandu Suresh Rallabandi

## ABSTRACT

The objective of voting is to allow voters to exercise their right to express their choices regarding specific issues, citizen initiatives, constitutional amendments, recalls and/or to choose their government and political representatives. the largest democracy in the world. Now- a -days it has become very usual for some forces to indulge in rigging which may eventually lead to a result contrary to the actual verdict given by the people. In order to provide inexpensive solutions to the above, this project will be implemented with biometric system i.e. finger print scanning. This is used to ensure the security to avoid fake, repeated voting etc. It also enhances the accuracy and speed of the process.

The system uses thumb impression for voter identification as we know that the thumb impression of every human being has a unique pattern. Thus it would have an edge over the present day voting systems. The purpose of such system is to ensure that the voting rights are accessed only by a legitimate user and no one else.

In this, creation of a database consisting of the thumb impressions of all the eligible voters in a constituency is done as a pre-poll procedure. During elections, the thumb impression of a voter is entered as input to the system. This is then compared with the available records in the database. If the particular pattern matches with any one in the available record, access to cast a vote is granted. But in case the pattern doesn't match with the records of the database or in case of repetition, access to cast a vote is denied or the vote gets rejected. The result is instantaneous and counting is done.

# CONTROL OF APPLIANCES REMOTEL USING ANDROID & ARDUINO

Srikanth Jukuri K.Srivathsa

## ABSTRACT

#### Keywords: ARDUINO, ANDROID DEVICE, RELAY.

The purpose of this project is to control an appliance by using an Android device and an Arduino. This project is also designed to operate any appliance globally. This system uses a Relay where it gets activated whenever the electrical parameters exceed the predefined values. The Relay can be used to operate a Circuit Breaker to switch off the main electrical supply. User can send commands through a web service to an android device where this device is in turn connected to the Arduino.

This system can be designed to send the current status of appliances from the Android device to the web page. This project makes use of an on-board computer which is commonly termed as microcontroller. This on-board computer can efficiently communicate with the different sensors being used. The controller is provided with some internal memory to hold the code. This memory is used to dump some set of assembly instructions into the controller. And the functioning of the controller is dependent on these assembly instructions. The controller is programmed using Embedded C language.

### **MODULARITY BASED IMAGE SEGMENTATION**

Divya Karri Srikar Phani Kumar M VSR Prasad T

## ABSTRACT

Image segmentation is a preprocessing process to group image pixels into some sizable homogeneous regions so that the complexity of further analysis can be substantially reduced. The existing techniques such as Partial Differential Equation based method, Compression-based texture merging, and Watershed segmentation method had problems such as (1) image segmentation is an ill-defined problem image segmentation is an ill-defined problem and the optimal segmentation is user or application dependent; (2) image segmentation is time consuming in that each image includes a large number of pixels, especially for high resolution images, and this prevents image segmentation from being applied to real-time applications. These are overcome and improved by Modularity based Image Segmentation, which considers time complexity, regularity preservation and the prevention of over-segmentation.

To address the problem of segmenting an image into sizeable homogeneous regions, this project proposes an efficient agglomerative algorithm based on modularity optimization. Consider an over-segmented image that consists of many small regions is given; our algorithm automatically merges those neighboring regions that produce the largest increase in modularity index. When the modularity of the segmented image is maximized, the algorithm stops merging and produces the final segmented image. To preserve the repetitive patterns in a homogeneous region, we propose a feature based on the histogram of states of image gradients, and use it together with the color feature to characterize the similarity of two regions. By constructing the similarity matrix in an adaptive manner, the over-segmentation problem can be effectively avoided. Modularity based image segmentation is studied and verified using Matlab code. Our algorithm is tested on the publicly available Berkeley Segmentation Data Set as well as the Semantic Segmentation Data Set and compared with other popular algorithms. Experimental results have demonstrated that this algorithm produces sizable segmentation, preserves repetitive patterns with appealing time complexity, and achieves object-level segmentation to some extent. We have enhanced our project in reducing the complexity by varying parameter 'a', by which the number of segments for analyzing have been reduced.

### SMART DIGITAL DOOR LOCK FOR THE HOME AUTOMATION

Santhosh Kumar. K Vivek Kasturi N.V. Saikrishna

## ABSTRACT

Security is a prime in our day to day life .Everyone wants to be as much secure as possible .An access control for doors forms a vital link in a security chain.

The microcontroller based wireless digital lock for is an access control system that allows only authorized persons to enter a particular room. It is allow cost so that the concept is implemented by using microcontroller.

In this project we are using P89v51RD2 microcontroller for controlling the equipments in the home. GSM modem is used to communicate and respond to the remote commands and those are send to the controller.

The system has a Keyword or switches by which the password can be entered through it. When the entered password equals with the password stored in the memory then the GSM module sends a message to the user .Then the user sends an SMS to the embedded system then the relay will be on the door will be opened. Entering password should be displayed on the liquid crystal display and the GSM. If the sending password through the GSM is also correct, then the lock will be opened otherwise the lock will not be opened.

## **IVRS FOR EDUCATIONAL INSTITUTES**

K.Moulishwar P.Shailaja

## ABSTRACT

#### Keywords: IVR system, Micro controller, DTMF decoder

The Interactive Voice Response (IVR) system serves as a bridge between people and computer by connecting the telephone network with instructions. The IVR system uses prerecorded or computer generated voice responses to provide information in response to an input from a telephone caller. The input may be given by means of touch-tone or Dual Tone Multi-Frequency (DTMF) signal, which is generated when a caller presses a key of his/her telephone set, and the sequence of messages to be played is determined dynamically according to an internal menu structure (maintained within the IVR application program) and the user input. The IVR System which will be designed to provide an ideal platform for the operation of start-ups and existing small concern. It will be a highly economical and efficient way to replace the Dialogic card which is very costly and requires a high maintenance and regular up gradation. The IVRS system which will be designed will consist of simple components like microcontroller and some basic application chips interfaced to a PC which will have small software running in the back end while the other jobs are performed on the front end.

### ULTRASONIC PROXIMITY DETECTOR

K.Pavithra V.Prashanthi

## ABSTRACT

An ultrasonic sensor typically comprises at least one ultrasonic transducer which transforms electrical energy into sound and, in reverse, sound into electrical energy, a housing enclosing the ultrasonic transducer or transducers, an electrical connection and, optionally, an electronic circuit for signal processing also enclosed in the housing. Ultrasonic sensors have typically been used in applications such as detecting and identifying solid objects, measuring the shape and orientation of a work piece, detecting possible collisions between objects to avoid the collisions, room surveillance, flow measurement, and determining a type of material by measuring the absorption of sound.

By combining parts of electronic to the ultrasonic sensor it become an ultrasonic proximity detector. A proximity detector is an electronic device that detects the physical movement in a given area and transforms motion into an electric signal. The proximity detector may be electrically connected to devices such as security, lighting, audio 2 alarms. Ultrasonic proximity sensors are used in a wide variety of applications. ultrasonic detectors are mainly used in for security systems.

Now days in the market there are many kind of ultrasonic motion detector sell, basically this project is to design an ultrasonic motion detector use to detect physical movement of human, animal, or anything that move. The design is to improving the use of sensor in detecting motion. Also to reduce the cost to built an ultrasonic proximity detector

## **ARDUINO LED AUDIO SPECTRUM**

K,Haritha S.Saket

## ABSTRACT

Keywords: Arduino, Sound, Spectrum, Shield

The aim of the project is to observe the spectrum of the audio signal input of the ATmega328 microcontroller. A spectrum shield supports the microcontroller in displaying the spectrum of the audio signal. LEDs are interfaced to the microcontroller to illustrate the variations in the audio spectrum of the audio being played. A 7\*5 matrix is formed using the LEDs. Audio input is given to the shield using an audio port from a playback device. A 9V battery provides the juice to run the system.

### IMAGE PRIVACY USING STEGANOGRAPHY WITH MATLAB

W.Sruthi V.Sowmya D.Sindhuri

### ABSTRACT

In this digital world, we come across a lot of images, pictures, and photos day in and day out. Most of these pictures are casual, and go on the social media as and when they are taken. But, there are also a few images that are highly confidential, like high confidentiality pictures, Blue prints of plans and maps etc. However, the confidentiality & security of these images lies in doubt given the extent of hacking tools in today's world. Thus, we intend to design a fool-proof application using MATLAB that retains the properties of the image in other forms using stenographic techniques, and completely deletes the original Image.

This Application, named "Hide My Image" is a simple looking MATLAB GUI, that takes and image as an input. It also asks the user for an Input pin. It then reads each pixel value of the image, modifies these pixel values based on the pin entered. It then stores these modified values in 4 cover images using stenographic techniques. After this, the application then deletes the original image. The cover Images are named as original name\_#, where # is a numeric from 1-9. These Cover Images which have the content of the original image stored in them are then zipped into a folder with the same name as the original image. To retrieve the Image, the user selects the zip folder the application had created. The application then loads all the cover images from the folder. The user is asked for the pin. This pin should match the pin entered during the Image hiding process. Based on the pin entered, the corresponding reverse algorithm is applied and the image is reconstructed.

Since for each pin that is entered, a different combination of logic is applied to the data, a wrong pin will create a garbage image and hence preserve the confidentiality of the Image. Also, the application keeps track of failed pin entries and deletes and destroys the cover images after a set number of failed attempts. Thus, this creates a very robust method of image security that can be used to preserve high confidentiality images.

## **HI-TECH ELECTRO GENERIS**

K, Shivakumar E. sravani P. Vaishanvi Y. Vamshi sai P. Ushashree

# ABSTRACT

*Keywords: Thermoelectricity, current due to pressure, to reach the increasing demands for electricity.* 

In concern with the effective utility of resources available to our reach, we intend to push forth technology through innovative ideas as engineers to the best of man's use. The genesis of this project is to initiate and implement the idea of generation of electricity through Piezo materials and Peltier tiles on the principles of Application of Pressure and Thermoelectricity. Being cost effective in analogy with the solar cells, this project on a wide scale basis can prove to be worthy in light of renewable energy. In view of the environmental effects undertaking, this project is eco-friendly and further assist to maintain bio-diversity.

### SOUND TO ELECTRICITY

D.Abhishek Y.Siddharth

## ABSTRACT

There are many problems being faced by man in the present day world in the field of power and energy. Many new techniques have been developed but no alternative was able to provide 100% efficiency.

We have developed a hypothetical analysis which could solve this problem. We all have learned about the basic mechanism of headphones in which electricity gets converted to sound. We have theoretically tried to reverse this process through which we could obtain electricity from sound. We would be using a basic microphone which converts sound to electricity, but the output voltage we receive from a microphone is very minute i.e. milli votls. The voltage we get at the output cannot be applicable to any of the electronic devices. As compensation, we have planned to increase this voltage by connecting many voltage amplifiers in cascade. The output voltage we acquire from the end of this voltage amplifier can be used to power up electronic devices.

We could install such kind of devices at places like traffic signals, airport runways, railways, platforms. There will be some sort of noise in these kinds of places all the time and the voltage we acquire every second could be stored in battery. If we have managed to install 1000 machines in thousand different places and connected all the devices to a single battery source, we could use this voltage from the single battery source for various applications. Theoretically if we assume the output from one device which is kept near a traffic signal (from 9 A.M to 9 P.M) is 200 volts, then the voltage source which reaches to the battery from all the devices will be around 200000 volts. This method if implemented properly has the power to change the future.

# SPEED CONTROL UNIT DESIGNED FOR A DC MOTOR USING MICROCONTROLLER

P.Sai Divya L.Ravali D.Mounika

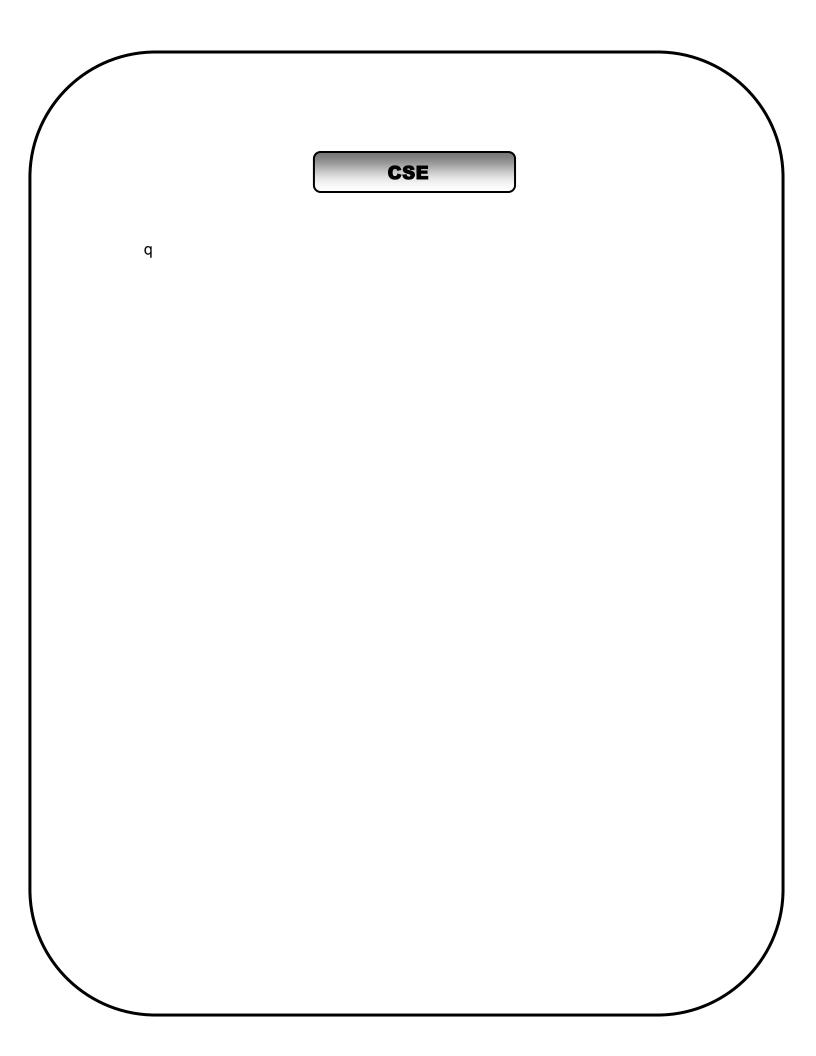
## ABSTRACT

The project is designed to control the speed of a DC motor using an 8051 series microcontroller. The speed of DC motor is directly proportional to the voltage applied across its terminals. Hence, if voltage across motor terminal is varied, then speed can also be varied.

This project uses the above principle to control the speed of the motor by varying the duty cycle of the pulse applied to it (popularly known as PWM control). The project uses two input buttons interfaced to the microcontroller, which are used to control the speed of motor. PWM (Pulse Width Modulation) is generated at the output by the microcontroller as per the program.

The program can be written in Assembly language or in Embedded C. The average voltage given or the average current flowing through the motor will change depending on the duty cycle (ON and OFF time of the pulses), so the speed of the motor will change. A motor driver IC is interfaced to the microcontroller for receiving PWM signals and delivering desired output for speed control system of a small DC motor.

Further the project can be enhanced by using power electronic devices such as IGBTs to achieve speed control higher capacity industrial motors.



# ABSTRACT

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## INTERACTIVE LEARNING ANDROID AND WEB APPLICATION

Md.Shahid Khan D.Ramanjaneyulu B.Ritesh B.Ramya G.Shailaja K.Sunitha

## ABSTRACT

#### Key words: Interactive learning, e-learning, online classes.

Interactive Learning is a pedagogical approach that incorporates social networking and urban computing into course design and delivery. Interactive Learning has evolved out of the hyper-growth in the use of digital technology and virtual communication particularly by students. It has persuaded students to learn beyond classrooms. The use of interactive technology in learning for these students is as natural as using a pencil and paper were to past generations. The Net Generation or Generation Y is the first generation to grow up in constant contact with digital media.

## e-TRANSACTIONS INTERFACE

CH Haripriya T Manisha

## ABSTRACT

The **"E-Transaction Interface"** is a design targeted at the future banking solution for the users who are having multiple bank accounts at the multiple banks. This interface integrates all existing banks and provides business solutions for both retail and corporate. This system acts as a standard interface between the clients and all the banks that register with the system and clients who maintains accounts in various banks. Users doesn't have to visit individual bank's website to make money transactions instead they can directly log on to E-Transaction Interface and make any kind of request and get his work fulfilled and in the backend the system will take care of all the obligation required in order to carry on transaction smoothly. The main Vision of this project is to eliminate all the diversities amongst banks, which generally client faces at the time of any transaction. By doing so Client gets used to only one Systematic Standard way of banking. So, the ease of banking will be improved. This functionality is capable of providing the kind of banking facilities that a customer could get online. Of course, the bank that implements this solution decides the features available to customers.

#### **TECHNICAL PREP**

Ravali.G Renuka.J Suma Gayathri

## ABSTRACT

Technical Prep is an ANDROID project. The objective of this android app is to make the job seeker well prepared for technical interview. With this app, the job seeker can be well aware of the important concepts of the particular topic. It also includes quick tests on the important topics that have been covered which helps to know how much job-seeker is prepared for an interview. In recent years, the android market has grown exponentially; with Android operating system based mobile devices having a major share of the total mobile phone sales all over the world.

Preparation can make difference between getting an offer and getting rejected. The mistake done in interview is not being fully prepared. To prepare for an interview there is no proper way, rather, there are specific and important strategies to enhance one's chances for interview success. Every interview is a learning experience, so learning that takes place during the preparation and actual interview process is useful for the future interviews.

### HOMOMORPHIC ENCRYPTION

N.Akhila Rajat Doodle

## ABSTRACT

"Homomorphic encryption is a form of encryption which allows specific types of computations to be carried out on ciphertext and obtain an encrypted result which when decrypted matches the result of operations performed on the plaintext". A Homomorphic encryption has different homomorphic schemes according to its properties. In the existing system when the Data provider sends encrypted data with same private key he generated to the cloud server then the attacker attacks the encrypted data with chosen ciphertext attack and get data. To prevent cipher data from CCA (chosen ciphertext attack) propose Proxy Re- Encryption algorithm with AB-GKM Key Generation Algorithm. In Homomorphic encryption scheme data was encrypted by the private key and public key was kept with client only. We again pass that data in proxy re-encryption algorithm and get every time random key generated cipher data. If attacker gets that key ones then they need to decrypt that data twice with two different keys. If once attacker gets the plaintext than he is not able to get every plaintext between client and server. So this system provides more security than existing system.

## **OBSTACLE DETECTION FOR BLIND PEOPLE**

V.S.M.Anusha M.Spandana G.Vidya M.Veda Sravani

## ABSTRACT

#### Keywords: IOIO, GPS, Sensors, Handheld device

This handheld device presents as an alternative tool to give support to disabled people in several situations which should consists android as an operating system. This is a GPS based blind man device which intellectually navigates the location with the help of voice alerts. The main aim of this system is to detect obstacles by using IOIO device(*pronounced* as *yoyo*) by connecting sensors. It provides a greater advantage producing voice based announcement for locations and gives beep sound for obstacles.

### **ONLINE ENROLLMENT SYSTEM**

Ashwaq Ganesh Navaneeth Reddy

# ABSTRACT

#### Keywords:-PHP, MYSQL

The aim of the project is to generate the hall ticket the hall ticket, admin uploads the notifications for exams depending up on the notifications the candidate is going to apply or enroll for the exam with his basic information as per the SSC certificate, by this information an hall ticket is generated with a exam center to write the exam, to his nearby area ,this is a online process ,the admin provide online exam ,and provide notification information's and recruitments rules, the user should provide correct mobile number and email id ,Here admin itself having a login id to manage the data.

# CRYPTOGRAPHIC BASED APPROACH FOR WEB INFORMATION

Sateesh Kumar.T P.Venugopal CH.Venu

## ABSTRACT

Keywords: webcryptology, cryptology for security, cryptolog, DES

#### **Objective:**

The main objective of this project (Crypto Log) is to send the confidential details and related confidential files and documents to their recipients in a securable way. The most common secret key cryptosystem is the Data Encryption Standard (DES), or the more secure Triple-DES which encrypts the data three times.

#### **Existing System:**

1) The system does not provide security to the data store in database.

2) In Existing System, the security is not provided throughout the server and database.

#### **Proposed System:**

1) The system provides security to the data store in the database.

2) In Proposed System, the security is provided throughout the server and database by disabling the cookies etc.

The Cryptology has been divided into 5 different modules:

- 1. Administrator
- 2. User
- 3. Cryptic message
- 4. Cryptic files
- 5. Image transformation

## IMAGE STEGNOGRAPHY

Sai Shashank.g Vamshikrishna Shourya.G

## ABSTRACT

#### Keywords: Image Steganography, LSB, Encryption, Information hidig, java.

Steganography is the art of hiding the fact that communication is taking place ,by hiding information in another information. Many different carrier file formats can be used, but digital images are the most popular because of their frequency on the internet. For hiding secret information in images, these exist a large variety of steganography techniques some or more complex than others and all of them have respective strong and weak points. Different applications may require absolute invisibility of the secret information, while others require a large secret messages to be hidden. This project report intends to give an overview of image steganography, its uses and techniques.

### LEAVE MANAGEMENT SYSTEM

A.uday Kiran Revu Vamshi Venkatesh Akula A.Phaneendra P.Diljith T.Nikhil

# ABSTRACT

#### Keywords: BOOTSTRAP, JAVA, JAVA SCRIPT, AJAX, JSON, JQUERY,

The Leave Management System (LMS) is Web based application that can be accessed by organization employees through Internet. This system is mainly used to automate the workflow of leave applications and their approvals. The main aim of this application is to reduce the paper work in all the organizations and make the leave management totally online, so that it is easy to accept or apply for leave from any place. There are features like auto generated email notifications, applying and cancelling of leave, different acceptance flow for different level employees, admin can give the public holidays based on their state, user friendly GUI with calendar, status bar for tracking your leave status, etc in this system. Admin can add the employee and the user name and automated password is mailed to the user.

The hierarchy in an organization can be added, altered by admin.

### **AIDE MEMOIRE**

P.N.Bhargavi Chaitanya Sharma Mahesh

## ABSTRACT

#### Keywords:-android developer tools, java,xml

A Birthday reminder application is important for busy people because we do not have to remember all the dates, and writing them down somewhere is not a very good idea because then we have to keep track of that piece of paper. The application lets you set the birthday and then get reminded when the time comes. So it becomes a perfect tool for follow up.

"Aide Memoire" is an application which facilitates its users by reminding the birthdays. Nowa-days, most of us rely on technology to be reminded of what to do next. At times, due to the busy schedule of our daily routine we tend to forget the important occasions such as friend's birthdays. To fill in this gap we use this application. Our efforts are to make a reminder on smart phones and gives notifications to remind the user about the birthday of his friend's before hand. In this application, the user enters the birthdays of his friend's and sets the date when he wants the reminder to remind his about it and it's his personal choice to choose any date.

### BUSINESS TRAVEL AND RE-EMBURSEMENT SYSTEM

P. Swathi G. Ramya Sai S. Nagamani K, Spoorthi P. Mamata N. Mounika

N. Ravali N. K. Kousihk P. Durga Bhavani R. Mounika S. Naga Swathi T. Prathyusha T. Kaavya V. Aashish

Sahitya

## ABSTRACT

#### Keywords: BOOTSTRAP, JAVA, JSON, AJAX.

BUSSINESS TRAVEL REIMBURSEMENT SYSTEM includes management of the following modules: Application Admin, Travel request and expense claim, Policy Administration, Master Data Manager, Workflow Management.For an employee to be able to createtravel request/expense claims, it willfirst be necessary that a system administrator create the user account in this new tool. Travel requestor functionality should include developing the GUI's for each type of travel categories in the form of application wizard so that a user can move from any screen to any other screen. Workflow Management is based on policies and approval matrix defined at reporting unit level. Policy Module includes making of 7 UI's for travelcategories and 14 UI's for expense categories for searching, creating, editing and deactivating the policies. MDM includessearching, creating, updating and Export/Import of master data like flight category, flight provider.etc., The objective is to offer value-added services to company travellers to enhance the travel experience and to make it as trouble-free and cost-effective as possible.

## POSHAN

B Priyanka G Nikitha P manasaR Pavani G Priyanka reddy

# ABSTRACT

### Developed in: Eclipse, JEE, Tomcat, Bootstrap

- Information on types of food preparations made at breakfast, lunch and dinner and amount of raw ingredients used for each preparation are obtained.
- The energy intake, Protein intake and various nutrient values are analyzed from the data.
- From the analysis of the data, the consumption control measures can be suggested to the individuals.

## **UNIVERSAL PASSWORD MANAGER**

C Ramya V Sravanthi G Vishnu priya

ABSTRACT

# Keywords:-ANDROID DEVELOPMENT KIT, ECLIPSE, JAVA

The android application "UNIVERSAL PASSWORD MANAGER" is aimed at providing an ease of storing and organising all your account passwords. Password Manager is the easiest way to access all your passwords where ever you are .Password Managers usually store passwords, requiring the user to create a MASTER PASSWORD which is ideally, and single and very strong password that grants the user access to their entire password database. The core functionality of this application is to securely store large collection of passwords. The application is absolutely safe and doesn't require any permissions such as access to the internet, your contacts. Your passwords, logins, credit card numbers, bank accounts and other personal information is saved in your private app. This is far safer than having your passwords on a piece of paper in your wallet, or a text file in your computer.

## **ONLINE MENTORING SYSTEM**

A Sidharth reddy B Sachin V Sai kumar

## ABSTRACT

Keywords:- Eclipse, Apache Tomcat 7.0, JAVA 1.7

Mentoring is a powerful process that can help to boost the knowledge transfer in an organization. However the traditional system of doing mentoring manually may result in unwanted constraints such as the time needed to schedule the mentoring sessions. This paper proposes an online mentoring system that provides a centralized information sharing system for mentor and understudies or mentees. It allows mentoring sessions to happen at any time convenient to both parties. The system also provides mentoring among peers instead of just between mentor and students.

## **UG REPORTING TOOL**

Anitha Rumana Reena

## ABSTRACT

**Objective: Bug Reporting Tool** is the system which enables to report the Bugs. It not merely reports the Bugs but provides the complete information regarding Bugs detected.

• Bug ReportingTool ensures the user of it who needs to know about a provide information regarding the identified Bugs. Using this no Bugs will be unfixed in the developed application.

A **bug reporting tool** is a software applications that is designed to help quality assurance and programmers keep track of reported software bugs in their work. It may be regarded as a sort of issue[matter] tracking system.

- A major component of a bug tracking system is a database that records facts about known bugs.
- Facts may include the time a bug was reported, its severity, the erroneous [wrong]program behavior, and details on how to reproduce the bug; as well as the identity of the person who reported it and any programmers who may be working on fixing it.
- A bug reporting tool should allow administrators to configure permissions based on status,

move the bug to another status, or delete the bug.

## **GIS BILL MONITORING SYSTEM**

Monika A Navya.K Spandana.S

## ABSTRACT

#### **OBJECTIVE:**

GIS Bill Monitoring System monitors the bills that have been generated by the concerned official, and the location where the bill was generated by him/her.

#### ABSTRACT

**GIS Bill Monitoring System** is a real timebill monitoring and trackingsystem. This system is built using GIS and web technologies.

(GIS) is a computerized system for capturing, storing, checking, and displaying data related to positions on Earth's surface, on one map. This enables people to analyze and understand patterns and relationships more easily. Many different types of information can be collected and compared using GIS. Digital or computerized data can also be entered.

### E-RECOVERY

T. Sree Sai Ramya Jayesh Kumar Nikhil Parihar

## ABSTRACT

**Objective:** The main objective of our application is to decrypt the encrypted data i.e. messages, images, audio, video, etc... from messengers like WhatsApp.

Our project provides a simple solution to the complications involved in decrypting the encrypted data from messengers like WhatsApp. You can decrypt the entire chat history with the timestamps using our application. It is a forensic application which will be used by the cyber crime and forensic department officials to find out the facts from the encrypted databases. You just have to install the application and see that the databases of the messenger application are present in the mobile's internal memory or SD card.

#### **ABSTRACT:**

**WhatsApp Messenger** is an instant messaging app for smart phones that operates under a subscription business model. The proprietary, cross-platform app enables users of select feature phones to use the Internet to transmit communication. In addition to text messaging, WhatsApp can be used to send images, video and audio media messages. Locations can also be shared through the use of integrated mapping features.

Our project is used to decrypt the encrypted data from WhatsApp using the databases that are backed up. If you have any backups of WhatsApp chat history, you will be able to recover chat history from your backups. If you have deleted any chat history or messages without backup, you cannot recover lost messages using this application. WhatsApp automatically makes backups every day at 4 AM (your local time) and stores them on your phone's internal memory (only given that there is enough free space) or external microSD card of your mobile phone. In the beginning WhatsApp communications were not encrypted and data was sent and received in plaintext, meaning messages could easily be read if packet traces were available but now even they are following an encryption procedure. Our application can even get data from such encrypted

## VEHICLE TRACKING SYSTEM

O.V.S.Harika N.Anusha

## ABSTRACT

#### **OBJECTIVE:**

Vehicle Tracking system helps us find the position of the vehicle and transmit the data and it replays the movement of the vehicle and displays the same on a digested map of proposed site.

#### ABSTRACT

In this the Automatic Vehicle Tracking System is built using GPS, GPRS, GIS and web technologies.

The vehicles will be fitted with the vehicle mounted unit. The unit will generate the position data using the GPS technology and will transmit the data at a pre-defined interval in the built-in memory of unit. At the end of the day / trip, the logged position data is downloaded to the server of the central control station. At the central control station (CCS), the VTS application software replays the movement of the vehicle and displays the same on a digitised map of Proposed site. The VTS application also generates different types of reports including exception reports.

The VTS consists of four different components viz.; Vehicle Mounted Unit, Central Control System Server and Application Software, Geographical Information System, and Wireless Communication System

# A WEB APPLICATION AS WELL AS A MOBILE APPLICATION FOR A MICRO, SMALL AND MEDIUM ENTERPRISES (MSME)

M.Avinash Baba Sai Manjeeth Reddy Sahiti Harshitha Akshita Gulati

## ABSTRACT

Our project aims for the betterment of the Micro, Small and Medium Enterprises (MSME). Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socio-economic development of the country. The MSME that we have selected is Nirmal Arts

The people at Nirmal are uneducated and nomads to help them come out into the modern world we have designed a Web application on aspx platform as well as a Mobile application through which they can Update, Delete, View the items i.e. Toys and Paintings directly from their phone. It has helped them become more technologically literate and gain a position in the society. The application is already been used by the owner of Nirmal Toys in Adilabad and in very much into practice. The sales have also been increased rapidly as an account of the Web application. Many people from around the world have ordered a number of items according to their likeness.