

# **ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES**

Piglipur, Batasingaram Panchayath, Hayath Nagar Mandal, Hyderabad, R.R. Dist. 501 512.

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#### 3.2.1 LIST OF INNOVATIONS COUNCIL DETAILS E-COPYS OF PATENTS , INDIAN KNOWLEDGE SYSTEM,-BRAIN YOGA DAY AND IPR CELL

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# Direct High-Speed Charging Of Electric Cars by Solar Panels

#### ABSTRACT

In present, environmental problems which originate from the consumption of fossil fuels caused emission of polluting gases into the atmosphere creating the need for change in mobility habits in today's daily life. Thus, companies and governments had made strong investments in the automotive sector especially in the development of electric vehicles (EVs) and the technologies associated with them. This project aims to alleviate the current state of fast charging and environmental problems by proposing a high performance DC-DC boost converter controlled by PI controller. The proposed converter is able to generate different output power level based on the desired preset reference voltage value. For simplicity, EV batteries are being replaced with one resistor as a load whereas the input source of the converter is attained from PV panels. Key sight Technologies measurement tools will be utilized to measure and valid at the experimental results with the simulation one.



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#### Vehicle movement based street lights system

#### ABSTRACT

The project aims at saving energy by detecting the vehicle movement on highways and switching on the block of street light ahead of it and simultaneously switching off the trailing lights. As soon as the vehicle moves ahead the trailing lights automatically switches off. This can be used to save a lot of energy instead of using conventional system where the street lights are remained ON. Another mode of operation can be used where the lights are remained ON with 10% intensity and when the vehicle passes by the lights ahead of it are switched on with 100% intensity and the trailing lights revert back to 10% intensity. PWM is used for intensity control through microcontroller. The sensors sense the vehicle movements and send it to a 8051 microcontroller that initiates commands for switching the lights ON/OFF.



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## Automatic intelligent plant watering system

### ABSTRACT

This project is taken up as India is an agriculture oriented country and the rate at which water resources are depleting is a dangerous threat hence there is a need of smart and efficient way of irrigation . In this project we have implemented sensors which detect the humidity in the soil (agricultural field) and supply water to the field which has water requirement. Microcontroller then supply water to that particular field which has water requirement till the sensors is deactivated again This type of system is often used for general plant care, aspartic caring for small and large gardens. So, the microcontroller has to be coded to water the plants in the greenhouse about two times per day. The system automation is designed to be assistive to the user. We hope that through this project people will enjoy having plants without the challenges related to absent or through this project.



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### Automatic speed control system preventing accidents

Mobile : 9848924705

#### ABSTRACT

The Objective of this project is to develop a system to keep the vehicle secure and protect it by the occupation of the intruders, the main aim of the project to develop a system automatic speed control of vehicle and accident avoidance using eye blink sensor and ultrasonic sensor. The ultrasonic sensor system continuously sends signals and monitors any car or other obstacles are in front of car.. Vehicle is controlled automatically without any manual operation when the vehicle is at 4 meter distance away from the front vehicle. Also give alarm to alert to the driver. To avoid this kind of accident, the warning system, which contains alarm and display system can arrange at rear side of each and every vehicle. If any short circuit occurs in engine part smoke sensor detecting and give alert to driver and stop the vehicle.



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## **Strategic Zones for Substation Cyber Security Protection**

### ABSTRACT

The shift to widely distributed forms of energy generation and storage, requiring increased interconnectivity to geographically balance supply with distributed demand for electricity, creates a more complex electrical network. This complex network is generally labeled as the 'Internet of Energy' to stress there evince that the digital components acquired in the electrical grid. But this introduces in the national electrical system new vulnerabilities related to the cyber risk. This paper illustrates the optimal approach that a TSO (Transmission System Operator) can adopt to manage such a risk in the electrical substations. Such an approaches based on the Zero Trust paradigm and is composed of technological, procedural and cultural elements in order to adequately manage cyber security issue all along the life cycle of any component.



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### Wireless power transmission for mobile charge DC Fans Leeds

#### ABSTRACT

The main objective of this project is to develop a device for wireless power transmission. The concept of wireless power transmission was realized by Nikolas teals Wireless power transmission can make a remarkable change in the field of the electronics engineering which eliminates the use conventional copper cables and current carrying wires. Based on this concept, it is developed to transfer power within a small range. The implementation of the paper can be used for charging batteries those are physically not possible to be connected electrically such as pacemakers (An electronic device that work sinplaceofad effective heart valve) implanted in the body that runs on a battery. The patient is required to be operated every year to replace the battery. This project analyses and designs a kind of system so as to charge a rechargeable battery wirelessly for the purpose. Since charging of the battery is not possible to be demonstrated, we are providing a DC fan that runs through wireless power.



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### Solar Smart irrigation system

### ABSTRACT

Irrigation is one of the important processes in agricultural system. Generally it is dependent on rain but after introduction of pressurized irrigation system the dependency of rain is decreased day by day. The pressurized irrigation system is controlled manually by the farmers. Manually operated system requires extra manpower for supervising therefore it decreases the field efficiency. Sometimes this irrigation leads to over irrigation than the actual plant requirement and under irrigation when plants required more water in their peak periods On the other hand electricity supply is the major concern in remote areas. Farmers are not getting regular supply of electricity for agriculture operations.



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### Smart solar Home safety system with low voltage alert

#### ABSTRACT

The basic security demands of a home, whether in a metropolis or a metropolitan zone, continue to be a serious issue. In today's context, establishing a

full-featured and reliable model that will accurately send alerts to the destined mode of reference in the event of an intrusion or attempted threat is essential. In this research, we offer a full simulation of an experimental prototype of a wireless sensor network based on infrared sensor technology, with in dividable nodes strategically and sequentially deployed. When the suspected intrusion occurs. Because it uses solar energy as a power source, this system is cost effective and reliable, has minimal power consumption, and is environmentally friendly. The system detects human trespass using A PIR-based sensor and sends out warnings as needed.



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### Solar tracking with street light system

### ABSTRACT

The main intention behind this paper is to develop a solar lighting system that combines timer based sun tracking system to trap maximum solar irradiation and to maintain the solar panel perpendicular to sun rays, a LED dimmer circuit for reducing power consumption in idle situations i.e, when no one is present in the vicinity of the street lamp. Thus, providing a solution to utilize maximum solar irradiation incident on the solar

panelundervariousseasonalchangesandweatherconditions, also to reduce unnecessary power usage inid lesituations.. The other feature in this system is to maintain the SOC of the system at 50%. The IOT interface included in the system enables to keep track of various parameters of the system maintenance, remotely monitor system and is used for data logging operations. The Amazon cloud server is constantly updated by the on-going system operations through the GPRS module.



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### Foot step power generation system

#### ABSTRACT

In this project we are generating electrical energy by means of a non- conventional method just by walking on the footsteps. Non-conventional systems for energies are very much required at this time. Energy generation using footsteps requires no any fuel input to generate electricity. In this project we are

generatingelectricityjustwiththehelpofrackandpinionarrangementalongwithalternatorandchaindrive mechanism.For its proper functioning such that it converts Force into electrical energy, the mechanism consists of rack &pinion, chain drives, alternator and battery. We have discussed its various alternate applications with extension also. The power generation is much worthy but it has little initial cost effective factors.



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# Digital vehicle speedometer with speed limit setting

#### ABSTRACT

Now a day's Accidents are increasing day by day and people are becoming heavily injured and some of them are lost their lives. Firstly in olden and modern days most of the vehicles came with analog speedometer. The speed middle in the speedometer showing the speed of the vehicle. We will set the speed of a vehicle to 50% using the program and providing the security code to the speedometer. Parents of an Owner of the vehicle only know the password and none of the user cannot know the password, If the vehicle needs to beg of permission and password from parent.



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# Universal motor by using SCR control

### **ABSTRACT:**

Speed control of AC and DC motor is carried out by using universal bridge drive. This universal Bridge which consist combination of IGBT & MOSFET and Diodes by changing the gate pulses. This universal Bridge is controlled by V/F control method. This method is used for single phase AC and DC motor control with small modification in hardware and software using Simulink. Power circuit includes inverter which connected to PWM generator. There are many industrial and domestic applications were speed variation is required, many speed control techniques are used like rheostat control, variable voltage control, v/f control. The simulation is carried out in MATLAB. The characteristics of motors can be studied from waveform.



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# Prepaid Energy meter by using GSM Module

### ABSTRACT

The aim of the project is to minimize the queue at the energy meter billing counters and to restrict thus age of energy meter automatically, if the bill is not paid. The project also aims at proposing a system that will reduce the loss of power and revenue due to power thefts and other illegal activities. The work system adopts atonally new concept of "Prepaid Energy Meter". The GSM technology is used so that the consumer would receive messages about the consumption of power (in watts) and if it reaches the minimum amount, it would automatically alert the consumer to recharge. The automated billing system will keep track of the real time consumption and will leave little scope for disagreement on consumption and billing. The power utility can recharge the prepaid card remotely through GSM/SMS mode base on customer requests.



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# **Fabrication of Solar Bulk Material Handling System**

#### ABSTRACT

Due to Rapid development in production, exports and living standards, etc, the need for increasing mining capability of the country is becoming inevitable. Material transfer system is a common piece of mechanical handling equipment that moves materials from one location to another. Material transfer systems like belt, bucket, grab, screw conveyors allow quick and efficient transportation of wide variety of materials, which make them very popular in the material handling and packaging industries. Though material transfer systems have numerous advantages they also require huge amount of power for operation.



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## **Hospital Sanitizing Robot**

#### Abstract

The world is severely affected by the Covid-19 pandemic health-care workers are hostile to work inside of COVID-19 hospital due to social distancing. Supplying essentials food and delivering medicine in hospitals has a challenge. To address the need of the World health organization and the certified sanitizing system is a solution for personnel and surface decontamination. To overcome the problem developed automatic portable sanitizing equipment for spraying sanitization solution. The portable sanitizer unit is attached to the top of the mobile robot. The system integrates a sprinkler mechanism and is used to distribute air and disinfectant fluid mixture. The mobile robot main components consist of a DC motor, Bluetooth module, Adriano, Motor driver, Submergible pump, Sprinkler, Battery, DC Converters are used, The of hospitals. The application are a can include hospital corridors, medical shops, operation theatre, walking pathways, doctor room, testing center, and patient room.



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### Hand Gesture Control Robot

#### Abstract

A robot is the system which deals with construction, design and operation. This system is related to robot and their design, manufacture, application. Robotics is currently focused on developing systems that modularity, flexibility, redundancy, fault tolerance and some other researchers are on completely automating manufacturing process or a task, by providing sensor based to the robot arm. Recently developing industry and manpower are critical constraints for completion of task, to save human efforts the automation playing important role in the system. This system is used for regular and frequently carried work. One of the major and most commonly performed works is picking and placing of jobs from source to destination. In the earlier systems, the motion of the human hand is sensed by the robot through sensors and it follows the same. As the human travels their hand, the accelerometer also starts moving accordingly motion of the hand sensor displaces and this sensor senses objector parameter according to motion of hand.



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# **GSM Based Home Security and Alert System**

#### Abstract

This project has 3 basic modules. First module of this project detects if person is entering in room. LCD display placed outside the room displays this status. And if person has entered then buzzer is turned on. Second part of project serves the functionality of a door-latch opening using a password entered through keypad. As well as sending this data to a computer through serial port. This module also turns on buzzer if 3 wrong passwords are entered consequently. User can change this password anytime he/she wish using a keypad. Third module uses LPG gas sensor to detect the gas leakage. If there is leakage then buzzer is turned on. GSM modem is used to send the SMS whenever there are changes in any of the three modules.



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## **IOT Based Accident Detection and Alert System**

#### Abstract

In this project we are going one step ahead with GPS and going to track a vehicle using GPS and GSM. This Vehicle Tracking System can also be used for Accident Detection Alert System, Soldier Tracking System and many more, by just making few changes in hardware and software. Tracking of vehicle is a process in which we track the vehicle location in form of Latitude and Longitude (GPS coordinates). GPS Coordinates are the value of a location. This system is very efficient for outdoor application purpose. This kind of Vehicle Tracking

SystemProjectiswidelyintrackingCabs/Taxis,stolenvehicles,school/collegesbuses etc. Thissystem is basically an embedded one. Embedded stands for hardware controlled by software. Here, the software using an Arduino controls all the hardware components. Arduino plays an important role in the system.



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### Automatic Ambulance Rescue System

#### Abstract

Traffic congestion and tidal flow management were recognized as major problems in modern urban areas, which have caused much thwarting for the ambulance. Moreover road accidents in the city have been incessant and to bar the loss of life due to the accidents is even more crucial. To implement this we introduce a scheme called AARS (Automatic ambulance rescue system). The main theme behind this scheme is to provide a smooth flow for the ambulance to reach the hospitals in time and thus minifying the expiration. The idea behind this scheme is to implement a ITS which would control mechanically the traffic lights in the path of theambulance. Theambulanceiscontrolledbythecentralunitwhichfurnishesthemostscantroutetothea mbulance and also controls the traffic light according to the ambulance location and thus reaching the hospital safely.



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### **IoT Based Agriculture Robot**

#### Abstract

Nearly three quarters of Indian families depend on agricultural income. Almost all crops suffer from plant diseases and insects like Tungro virus, moths and butterflies. Farmers find it difficult to identify actual disease. According to Indian crop survey, on an average scale of 80 percent of crops get damaged due to disease and insects. If the problems are known before then diseases can be prevented. There is a scope for improvement in these fields using IoT Technology. So, we are designing an IoT based robot that willmon it or the crop and also the environment around the crop. This system uses machine learning technique to identify the problem and takes measures to prevent diseases and insects that harm the crops. Different sensors are used to study the environment, and a camera to detect the plant type and disease. A number of prototype guidance systems have been developed but have not yet proceeded to commercialization. Our crop monitoring system is efficient and affordable which will help the Indian farmers.



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# Dynamic Road Traffic Control System

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Fax

#### Abstract

The main aim of this paper is design smart traffic system to develop a dynamic road signal based on density. Rapid advancement in scientific knowledge and growth in worldwide economic activities has led to a steep rise in the volume of vehicular activity for human and product mobility hence leading to more road constructions. Vehicular Movement controls in addition to controllers are, therefore, a critical necessity of themodern – day society. Toward this end, this paper is aimed toward the design of microcontroller-based traffic control device taking as a case study the complex layout and linkage among the service roads of the Senate building and College of Science and Technology, Covenant University, Nigeria. The Arduino platform is the microcontroller preference for this idea. Also, to make this idea more effective and productive, a Light Emitting Diode (LED) advertising displays has been incorporated into its implementation to take advantage of there light wait time to disseminate useful information or facts.



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Phone : 08415-201689 (O) Mobile : 9848924705 Website : aits-hyd.org E-mail : principalaith@gmail.com Fax : 08415-201688

# Smart and Secure Single ATM Card for Multiple Bank Accounts Abstract

ATM is an condensation of Automated Teller Machine. It's introduced in the time 1959 for encouraging tone service in retail banking. This makes people to deposit, withdraw and transfer quantum without the help of banking help's and it can be done at anytime and anywhere. At first, the ATM was made to distribute for the particular bank guests but latterly on the ATMs are connected to interbank network, so that it enables people to deposit, withdraw and transfer quantum from the ATM machines not belonging to that particular banki.e., anyone can pierce any banks ATM machine to carry out their deals. ATMs calculate on authorization of a fiscal sale by the card issuer or other authorizing institution via the communication network. This is frequently performed through an ISO 8583messaging system. Numerous bank charges ATM operation

freights from the guests for the deals. At present every clienthasan individual ATM card for each and every bank in which he/she maintains account. So handling the cards, their watchwords play a major part then. So to overcome these difficulties we embedded further than one bank account of the stoner in a single ATM smart card, so that the stoner can swipe the card and can elect the bank from which he/ she are interested to carryout sale.



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## **Smart Irrigation System**

#### Abstract

Currentglobaltechnologyplaysanimportantroleinthefieldofagriculture. Automationisthetech nology with which a procedure or process is executed without human assistance. The main objective of this work is to determine how a person can use the automatic irrigation system of his own moderately

economicalfacilitiesinafewhourstoconnectsomeelectroniccomponentsandothermaterials. An automatic irrigation system based on sensor-based systems has been designed and implemented as one of the most widely used and advantageous automatic systems. This will help people in their daily activities, thus saving them time and hard work. This system uses sensor technology with the microcontroller, relay, DC motor and battery. Behave as an intelligent switching system that detects the soil moisture level and irrigates the plant if necessary. The ON / OFF motor will automatically be based on the dryness level of the soil. Sensor readings are transmitted to a computer to generate graphs for analysis. This type of irrigation system is easily controlled and controlledusingacomputer.Ingeneral,thissystemappliesautomaticallyforsmallandlargegardens,nurs eries,greenhousesandgreenroofs.Thiswillalsosavetimeandenergy,aswellasminimizewaterloss.Itwill alsohelpthefarmer to benefit from the plantation without solving irrigation planning problems.



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### **Fire Fighting Robot**

#### Abstract

With the advent of technology, humans are replaced with robots in life-threatening situations. We aim to design a robot capable of detecting and suppressing fires. By designing and implementing an autonomous robot capable of detecting and extinguishing flames, disasters can be avoided with minimal risk to human life. In this research, an autonomous robot capable of detecting flames indoors and maneuvering towards the flame to extinguish it with the help of carbon dioxides illustrated. It could be used to work with fire fighters to reduce the risk of injury to victims. The robot development is consisting of three elements which is the hardware, electronic, and programming. The robot has three DC motor, twofer driving system and another single DC motor for ball suction subsystem and the fire blowing subsystem. Various sensors are also interfaced withPIC16F877A as a feedback to the robot such as photoelectric sensors, fiber optic sensor and RGB color sensors.LCD display also gives the graphical information of the robot status to the user. For the programming part, Languages used to determine the robot action gain from the sensors input.



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### **Blue tooth controlled Robot**

#### Abstract

Arobotis usually an electro mechanical machine ethatis guided by computer and electronic programming. Many robots have been built for manufacturing purpose and can be found in factories around the world. The design of the robot is such that it is controlled by a mobile app. We use Bluetooth communication to interface Arduino UNO and android. Arduino can be interfaced to the Bluetooth module though UART protocol. According to commands received from android the robot motion can be controlled. The consistent output of arobotic system along with quality and repeatability are unmatched. This robot is capable of spying using wireless camera. This robot can be reprogrammable and can be interchanged provide multiple applications.



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### **Metal Detector Robot**

#### Abstract

Metal Detector Robot is an instrument controlled by an Android-based smart phone that detects the presence of metal, especially landmines, on a designated location. The usage of landmines causing injury and fatality makes detectors important. The old method of detecting landmines such as direct sweeping is very risky for stepping the landmine unintentionally. In this research, the robot system is equipped with a metal detector useful to detect the metal presence based on coil induction when it's approaching the metal. LCD works as an interface showing frequencies of detected metals. The robot movement is controlled by DC's current motor programmed using Arduino UNO. When the robot detects the metal presence, the buzzer sound will be triggered, and held will show the detected metal frequency. The testing result shows that an Android-based Smartphone can control the robot up to 15 meters radius.



h PRINCIPAL Annamacharya Institute o Technology & Sciences Pighpur (V), Batasingeram (Post) lapurmet (M), R.R. Dist. HYD-504 552



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# IoT Based Energy Audit And Bill Generation System

#### Abstract

This article proposes and analyzes a system which is used for energy meter billing and monitoring. The system is fully Internet of Things (IOT) based and highly desirable in field of energy. In this system consumer can do power management by knowing energy usage time to time. The customer needs to pay the bill on schedule,

ifcouldn't, the electric power connectivity can be turned of fautonomously from the distant host. The article explains the modeling and working of different units of the system and also discussed the basic components and their functions such that IOT and its working, microcontroller (ARM7-LPC2138) and it architecture, USB to TTL Converter and its features, GSM system, Relay and LCD display and its interfacing with microcontroller.



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Phone : 08415-201689 (O) Mobile : 9848924705 Website : aits-hyd.org E-mail : principalaith@gmail.com Fax : 08415-201688

#### Intelligent pollution monitoring system with Arduino microcontroller

### Abstract

The level of pollution has increased with times by lot of factors like the increase in population, increased vehicle use, industrialization and urbanization which results in harmful effects on human wellbeing by directly affecting health of population exposed to it. In order to monitor quality of air, a Wireless sensor network (WSN) based new framework is proposed which is based on data acquisition and transmission. The parameters of the environment to be monitored are chosen as temperature, humidity, volume of CO, volume of CO2, detection of leakage of any gas - smoke, alcohol, LPG. The values of these parameters are transmitted by using Zigbee Pro (S-2) to a base station where they are being monitored. The value of temperature and humidity are transmitted over Bluetooth also so that every person in the range of the system can check it over their smart phones and laptops as these parameters hold importance to everyone. CO, a dangerous parameter is monitored with an extra precaution. A text message is sent to the base station through GSM module whenever its volume exceeds a particular safe limit intended for a particular application.



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#### **REMOTE CONTROL BASED SOLAR PLOUGHING MACHINE:**

#### Abstract

In order to reduce the cost of cultivation and to encourage farmers to use cost effective and smart mechanisms to design this device effectively. This mechanism reduces human labor and it is a eco friendly (Zero emission) method of plugging .Operating this machine requires no technical knowledge or training and is very much user friendly. Sensor are fixed in the front wheel of the machine using which the machine deviates itself from stones and other obstacles in the sloughing field. This intent will be focused for farmers to grow up their life by developing the agriculture growth in India. This machine gets power from the solar energy. It will be operated remotely by left/right turning and deviates from the obstacles with the help of Ultrasonic sensor.



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#### DIGITAL SCROLLING LED DISPLAY NOTICE BOARD

Abstract

Present in all colleges and institutions digital notice board is using very well for addressing the information to all students. Here we are using power supply section, one blue tooth module, one Arduino board and P10 led digital display module. Normally a welcome note will display on the P10 module until we type something in our android mobile. After typing the data that is wirelessly transmitted to Bluetooth module. This module receives data from android mobile and send that data to Arduino board.

Arduino process the information and give that to P10 led digital display module. Now the P10 module will scroll the information to all. For this entire process we should require only 230v AC supply. By using power supply section we can convert 230v AC supply into 5v DC supply. In this manner we can display and scroll any information any time according to our requirement

This is developed by the Faculty and Student team as a consultation Project. The Digital Scrolling LED Display Notice Board caters to the notifications and announcements to general public.



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Technology & Sciences Pigipur (V), Batasingerem (Post) Abdullapurmet (M), R.R. Dist. HYD-50\* 552 Office of th Department Ministry of Governm INTELLECTUAL PROPERTY INDIA INTELLECTUAL PROPERTY INDIA

Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

APPLICATION NUMBER APPLICATION TYPE DATE OF FILING

APPLICANT NAME

TITLE OF INVENTION

FIELD OF INVENTION

E-MAIL (As Per Record)

ADDITIONAL-EMAIL (As Per Record)

E-MAIL (UPDATED Online)

PRIORITY DATE

REQUEST FOR EXAMINATION DATE

PUBLICATION DATE (U/S 11A)

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05/05/2023

PRINCIPAL Annamacharya Institute of Technology & Sciences Piolipur (V), Batasingaram (Post) UN R. D. D. M. Sciences 51

ORDINARY APPLICATION

**Application Details** 

202341029324

23/04/2023

- 1. Dr.Arempula Sreenivasa Rao
- 2. Shobana. G
- 3. B.Padma Vijetha Dev
- 4. Maria Sahaya Diran D
- 5. Mrs. L. Rachel
- 6. Dr.R.Swaminathan
- 7. Dr.Sripriya Arunachalam
- 8. Dr. Mohammad Amir Khusru Akhtar

An Artificial Intelligence (AI) Network Based-Host Intrusion Detection System for IOT Devices

COMPUTER SCIENCE

mail2patentipr@gmail.com

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Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

	Application De	tails
ION NUMBER	202241006399	
ION TYPE	ORDINARY APPLICATION	
FILING	07/02/2022	
IT NAME	<ol> <li>Dr. S. SIVAKUMAR</li> <li>Dr. J. PRAKASH</li> <li>Dr. U. NARENDER</li> <li>Dr. LAVANYA DHANESH</li> <li>Dr. R. GOMALAVALLI</li> <li>Mr. R. PARTHEEPAN</li> <li>Dr. ASIM DATTA</li> <li>Ms. P. DHANA SELVI</li> <li>Ms. L. SREEVIDYA</li> <li>Mr. KISHORE ABISHEK</li> </ol>	
NVENTION	ELECTRIC POWER DISTRIBUTION E PHYSICAL SYSTEM	MPLOYING ENSEMBLE MACHINE LEARCING ELLER I LE
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Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

	Application Details
ION NUMBER	202141057894
ION TYPE	ORDINARY APPLICATION
FILING	13/12/2021
IT NAME	<ol> <li>Dr. R. UMAMAGESWARI</li> <li>Dr. S. SIVAKUMAR</li> <li>Dr. D.C. JULLIE JOSEPHINE</li> <li>Dr. M. PARAMESWARI</li> <li>Dr. U. NARENDER</li> <li>Dr. S. P. SASIREKHA</li> <li>MS. MADURI MADHAVI</li> <li>Mr. MADHAV SHARMA</li> <li>Mr. VIJAY MOHAN SHRIMAL</li> <li>Mr. R. PARTHEEPAN</li> </ol>
NVENTION	ATOMIC POWER PLANT SAFETY MONITORING SYSTEM EMPLOYING IOT INTEGRATED HAPS LEDGER CLOUD MODULE
INVENTION	
s Per Record) IAL-EMAIL (As Per Record) PDATED Online)	umaphd71@gmail.com
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# **ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES**

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#### Date: 10/01/2024

# Start-Up and innovation Cell

- Identify and reward innovations and share success stories
- Organize periodic workshops/seminars/interactions with entrepreneurs, investors and create a mentor pool for student innovators.
- Network with peers and national entrepreneurship development organization.
- Create an instructions innovation portal to highlight innovative projects carried out by institutional faculty and students.
- Organize hackthons, ideas completions, Mini challenges etc with the involvement of industries.

### **Committee Members**

S.NO	NAME OF THE MEMBER	DESIGNATION
1	Dr P V Krishna Murthy	Principal
2	Dr U Narender	Co-Ordinator(EEE)
3	Dr G Sayanna	Co-Ordinator(MECH)
4	Dr A Sreenivasa Rao	Member
5	Dr Kolli Sunder Kumar	Member
6	Mr V Ramesh Babu	Member
7	Mr V Rama Krishna	Member



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Date: 10/01/2024

# **Innovation Cell**

Innovation is conversion of idea leading to improvement in way of doing things depending on availability of resources with guidance from those who are more experienced around us.

**AITS Innovation Cell** is thus envisaged to network people, ideas, experience and resources to motivate the innovation community in the college. This cell helps to nurture the students' ideas and encourage them to bring up business proposals. The Innovation Cell may facilitate even in getting funds for the project.

Learning is a continuous process and there are always possibilities for improvement in the existing system around us. Using the facilities of workshops, laboratories, library including digital library facility, internet and intranet facilities and research facilities available in the institute, innovative ideas could be translated into reality or existing systems could be improved upon.

The main aim of this Cell is, thus, to create intuition in terms of creative design ideas in various fields of engineering in an aesthetic approach. Innovation Cell will assist students and also encourage young talented minds by providing them a perfect platform for showcasing their talents, working together as teams and participate in various competitions. It will also serve to provide the students a platform to excel in their specialized area of interest.



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#### **Objectives of the Cell**

To motivate students to bring out their hidden talents in various disciplines of Engineering.

- To provide platform to realize and believe in themselves.
- To empower students to become young entrepreneurs.
- To create an innovative environment for the students to discover, develop, deploy and express their skills and talents.
- To motivate students to take part in Hackathons & prototype development, Technical Tutorials.
- To encourage students to carry out their hidden talents in various disciplines of Engineering.

### **COMMITTEE MEMBERS**

S NO	NAME OF THE MEMBER	DESIGNATION	POSITION
SNU		MBA.HOD	CO-ORDINATOR
1		ASSOC PROFESSOR	CO-COORDINATOR
2	Mr V Rama Krisnna		MEMBER
3	Dr K Sunder Kumar		MEMBER
4	Dr A Sreenivasa Rao	ASST.PROFESSOR	



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Date: 22/01/2024

#### IMPLEMENTATION SKILL INDIA MISSION

India's total population comprises the one-fifth majority of youth. They contribute significantly to the economy. However, lack of skill-building and job opportunities obstructs their growth. To remove this concern, the Indian Government has launched the skill India mission. This scheme offers skill development training and financial aid to beneficiaries keeps reading to know more about this scheme.

The Skill India Mission was launched in 2015 by the central Government to make Indian youth belonging to rural and urban areas competent for employment.

It aims to empower India's youth by offering necessary skills and training to increase their chances of getting jobs in various sectors. This also boosts an individual's productivity and knowledge.

The initiative also aims to educate more than 40 crore individuals and create a workforce by 2022. It does so by offering different courses and classes for free.

The national Skill Development Mission takes account of the proceedings through a result-oriented structure that connects with modern business requirements. Technically, this scheme takes care of convergence, institutional training, overseas employment, leveraging public infrastructure and sustainable livelihoods.

Interested individuals can register themselves through an online process and enlist for a preferred course.

Let's check what the objectives of te Skill India initiative are to understand this scheme better.

# Following are the purposes of the said scheme for the development of the workforce in India.

- The Skill India Mission aims to offer market-oriented skills training to nearly 40 Crore Indians by 2022.
- It works to create a space for promoting the talents of youths and creating job opportunities for them.
- Skill India Mission funds sector that are searching for options to recognize areas for skill development.



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- It removes the gap between talented youth and enterprises.
- Lowering the poverty graph in the country.
- Boosting healthy competition in Indian businesses.
- Support Indian workforce and local production in the Indian and global markets.
- Diversifying skill development schemes to meet crucial challenges.
- Enhancing engagement of social partners and improving the relationship between public and private partnership.
- Seek investors to finance sustainable skills development. Apart from objects, individuals should also check the features of the Gramin Skill Development mission.

# The features of the Skill India Mission are as follows.

- It creates a lucrative scheme for the development of rural youth.
- This scheme focuses on improving the entrepreneurship and service skills if Indian youth.
- National Skill Mission supports and offers training to individuals working both organized and unorganized sectors. For instance, cobblers, nurses, masons, kiln workers etc., can apply for this .
- Skill India Mission also focuses on developing sectors, such as designing, textiles, gems industry, transportation, real estate etc., These areas need adequate training for growth.

# These Schemes include the National Apprenticeship Promotion Scheme (NAPS)

- 1. MUDRA loans under the Pradhan Mantri MUDRA Yojana (PMMY),
- 2. Deendayal Antyodaya Yojana National Rural Livelihoods Mission 3. (DAY-NRLM) / Deendayal Antyodaya Yojana National Urban Livelihoods Mission
- 4. (DAY-NULM), Mahatma Gandhi National Employment



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#### INDUSTRY-INSTITUTE INTERACTION INTERNSHIP POLICY 2023-2024

#### **REFERENCE**:

- 1. Internship syllabus of All Disciplines
- 2. AICTE Internship Policy

**PREAMBLE:** Internships are educational and career development opportunities, providing practical experience in a field or discipline. Internships are far more important, as employers are looking for employees who are properly skilled and have awareness about the industry environment, practices, and culture. The internship is structured, short-term, supervised training often focused on particular tasks or projects with defined time scales.

#### APPLICABLE TO:

- 1. Civil Engineering
- 2. Computer Science & Engineering
- 3. Electronics and Communication Engineering
- 4. Electrical & Electronics Engineering
- 5. Mechanical Engineering
- 6. CSE(AI&ML)
- 7. CSE(DS)
- 8. MBA

#### OBJECTIVE:

- To provide possible opportunities to learn, understand and sharpen the real-time technical/managerial skills required at the job.
- The core objective is to expose technical students to the industrial environment, which cannot be simulated/experienced in the classroom and hence creating competent professionals in the industry and understanding the social, economic, and administrative considerations that influence the working environment of industrial organizations.

#### HOW TO SEARCH INTERNSHIP?:

- Apply through company official portals
- Search a company nearby to your stay
- Ask for the company from your family/friends,
- Identify a company through Faculty Mentor/Department Faculty/Placement office

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#### SCHEDULE:

Sr.No.	Particulars	
1	Application Form filling	Date or Duration
2	Taking letter for internship	29 Nov 2023
3	Getting confirmenti	30 Nov 2023
		10 Dec 2023
4	Start of Training	15 Dec 2023

#### Internship Guidelines:

Step 1: Request Letter/ Email from the office of respective department of the college should go to industry to allot various slots of 4-6 weeks during vacation as internship periods for the students. Students request letter/ profile / interest areas may be submitted to industries for their willingness for providing the training. (Sample attached)

**Step 2**: Industry will confirm the training slots and the number of seats allocated for internships via Confirmation Letter/ Email. In case the students arrange the training themselves the confirmation letter will be submitted by the students in the office of Training & Placement through the concerned department. Based on the number of slots agreed to by the Industry, Faculty Mentor will allocate the students to the Industry. In addition, the internship slots may be conveyed through Telephonic or Written Communication (by Fax, Email, etc.) by Faculty members who are particularly looking after the Final/Summer Internship of the students.

Step 3: Students on joining Training at the concerned Industry / Organization, submit the Joining Report/ Letters / Email.

**Step 4**: Students undergo industrial training at the concerned Industry / Organization. In- between Faculty Member(s) evaluate(s) the performance of students once/twice by visiting the Industry/Organization and Evaluation Report of the students is submitted in the department office with the consent of Industry persons/ Trainers. (Sample Attached)

Step 5: Students will submit a training report after completion of internship.

Step 6: Training Certificate to be obtained from industry.

**Step 7**: List of students who have completed their internship successfully will be issued by Faculty Mentor and the same should be maintained by the respective department (III Coordinator).

Internship Report: After completion of Internship, the student should prepare a report to indicate what he has observed and learnt in the training period. The student may contact the Industrial Supervisor/ Faculty Mentor for assigning special topics and problems and should prepare the final report on the assigned topics. Daily diary will also help to a great extent in writing the industrial report since much of the information has already been incorporated by the student into the daily diary. The training report should be should be been supervisor and Faculty Mentor.





The Internship report will be evaluated on the basis of following criteria:-

i. Originality.

- ii. Adequacy and purposeful write-up.
- iii. Organization, format, drawings, sketches, style, language etc.
- iv. Variety and relevance of learning experience.
- v. Practical applications, relationships with basic theory and concepts taught in the course.



Dr.P.V.Krishna Murthy Principal AITS-HYD

PRINCIPAL Annamacharya Institute of Technology & Sciences Piglipur, Batasingaram (P) Systhmagar (K) R.K. Itt., HY0-500



# ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES

Piglipur (V), Batasingaram (Post), Abdullapurmet (M), R.R.Dist., Hyderabad - 501 512.

(Approved by AICTE, Recognized by the GOVT. of T.S., Permanent Affiliation from JNTUH, Hyderabad.) Accredited by "NAAC" with "B+" Grade, Recognized by UGC Under Section 2(f) and 12(B).

Mobile : 9848924705 9912344480 Website : aits-hyd.org E-mail : principalaith@gmail.com

Date: 10/01/2024

# Intellectual Property Rights Cell (I P R Cell)

"Intellectual property is a part and parcel of our life. No matter what we do and where we are, we are always surrounded by the fruits of human creativity and inventions which make our life easier".

Intellectual property (IPR) refers to various distinct types of creations of the mind: inventions, literary and artistic works, and symbols, names, images and designs used in commerce. A set of exclusive rights like copyrights, trademarks, patents, industrial design rights and trade secrets are recognized under the corresponding fields of law.

IPR is protected by law, for example, patents, copyrights and trademarks, which enable people to earn recognition or financial benefit from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest, the IPR system aims to foster an environment in which creativity and innovation can flourish.

**Objectives:** 

- To create an awareness about IPR for faculties and students.
- To impart training on future endeavors regarding patent filing processes.
- To conduct workshops, seminars and training course on IPR.
- To create an opportunity for Product development and Commercialization.

**IPR** Policy:

Academic and Research Institutions are concerned with successfully managing projects and research initiatives and the protection of their IP Rights which will benefit all stake holders.

### Intellectual Property Rights (IPR) Committee

- 1. Mr PLSP Raja Rao, MBA Department as Nodal Officer.
- 2. Dr P V Krishna Murthy, Principal as Advisor.
- 3. Dr K Sunder Kumar, R&D Centre as Member.
- 4. Dr U Narender, Head, Electrical & Electronic Department as Member,
- 5. Dr G Sayanna, Head, Mechanical Engineering as Member.



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Phone : 08415-201689 (O) Mobile : 9848924705 Website : aits-hyd.org E-mail : principalaith@gmail.com Fax : 08415-201688

#### AITSH/NSS/2022-2023

Date: 19-06-2023

То

The Principal

Annamacharya Institute of Technology & Sciences

Piglipur, Batasingaram,

Hyderabad.

Sub: Permission to conduct a program on "Yoga Day". Reg;

#### Sir,

As a part of regular NSS activity, the AITS NSS Unit would like to conduct a program on **"Yoga Day"** on **21/06/2023**. In this regard we request you to permit us to conduct the program, please do the needful.

Thanking you.

Annam Technology & S Piglipur (V). B. L. inspirant ( 

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AITS NSS Unit



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#### AITSH/NSS/2022-2023

Date: 19/06/2023

### **CIRCULAR**

It is hereby informed that our NSS Unit is organizing a program on"Yoga Day" as a part of regular NSS activity on 21/06/2023. Interested staff members and students are requested to participate in the event and make it a grand success.

Anounar

**Program Officer** 

#### AITS NSS Unit

Copy to Principal Office Dean of Administration **HOD'S** MBA CSE CIVIL MECH EEE ECE BS&H





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### **ACTIVITY REPORT**

Name of the	YOGA DAV
Activity	
Type of the	SERVICE
Activity	
Date and Time of	DATE:21.06.2023 & TIME:10:00 AM TO 12:00PM
Activity	
Details of	NUMBER OF STUDENTS PRESENT:72
Participants	
Coordinators	DR.K.SUNDER KUMAR AND NSS VOLUNTEERS
Organizing	NSS CELL
Department	
Description	Annamacharya Institute of Technology & Sciences,
	Hyderabad-National Service Scheme (AITSH-NSS)
	unit cell organized Yoga Day. Yoga Day is
	celebrated among the youth to make them
	understand the importance of Yoga in their life. It
	helps the students understand how to maintain
	harmony between body and mind. Two lectures

PRINCIPAT Annamacharya Institute of Technology & Sciences Piglipur (V), Batasingaram (Post) Andultaburmel (M), P.R. Dist, HYD-501 512

 organized to explain the importance of Yoga. The

 Honorable Principal Dr. P.V Krishna Murthy

 inaugurated the program and spoke about

 importance of Yoga.

 Photos

 Voga DAY AT AITS CAMPUS

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