



# ROTARY CLUB OF STAMBHADRI



KHAMMAM H.I. - Dist. 3150

2019 - 20

: President :

Rtn. Cherukuri Yugendhar  
Cell : 9849069600

: Secretary :

Rtn. Bommidl Sunil  
Cell : 9246901808

: Treasurer :

Rtn. Mellacheruvu Ganesh  
Cell : 9849031552

Ref. No.

Date: .....  
Date:-04-07-2019

To  
The Principal,  
KITS Engineering College,  
Khammam.

Approval of sponsored research project titled **A cost-effective self-Healing Approach for Reliable Hardware System** On behalf of **ROTARY CLUB OF STAMBHADRI-KMM**; I am pleased to inform you that the management has studied through your proposed project proposal **A cost-effective self-Healing Approach for Reliable Hardware System**. We feel that your proposal is very workable.

Improved appliance functionality. Titled **A cost-effective self-Healing Approach for Reliable Hardware System** can also help you run your appliances better. ... Ultimately, connecting your appliances and other systems with automation technology will improve your appliance effectiveness and overall make your home life much more easier and enjoyable!

Copy to:  
Finance Officer,

- **ROTARY CLUB OF STAMBHADRI-KMM**
- Principal, KITS Engineering College

  
PRESIDENT

**ROTARY CLUB OF STAMBHADRI-KMM**

**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES***(Affiliated to JNTUH & Approved by AICTE, New Delhi)*

Ponnekal (Village), Khammam (Rural), Khammam (Dist) -507170

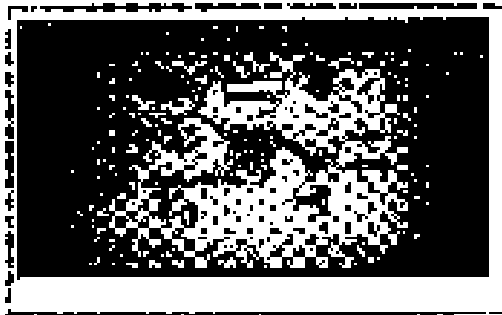
Phone: 08742 - 285399, 9908557792



**A Project Summary Report on A cost-effective self-Healing Approach for  
Reliable Hardware System**

<b>Project Title</b>	:	A cost-effective self-Healing Approach for Reliable Hardware System
<b>Investigator/Co-Investigator</b>	:	K RAJESH
<b>Department of Principal Investigator</b>	:	ECF
<b>Duration of completion of project</b>	:	6 MONTHS
<b>Amount Sanctioned</b>	:	0.30 Thousand
<b>Year of Sanction</b>	:	2019
<b>Duration of the project</b>	:	6 MONTHS
<b>Name of the Funding Agency</b>	:	ROTARY CLUB OF SAMBHADRI KMM
<b>Objectives</b>	:	<p>The area overhead is lower compared to other approaches relying on spare cells. The proposed approach relies on time multiplexing two functions in one cell within one clock cycle. The reliability of the proposed technique is studied and compared to conventional system with different failure rates. This approach is capable of healing up to 50% of the cells where each cell can cover another neighbor failed cell at most. The area overhead is 0% for the proposed approach which is much lower compared to other approaches using spare cell. The proposed approach is applied to investigate two case studies: ALU array, and neural network. Digital systems performance reduces with time in case of faulty parts in the system. So, researchers work on self-healing system to save performance with its age. Many of approaches are done on self healing which is based on redundancy; the spare parts are used instead of faulty parts. The main drawback of these approaches is area overhead. This paper presented an approach of self healing without redundancy. The idea is based on instead using spare blocks.</p> <p>Most of self-healing approaches are based on redundancy by adding spare cells. When a failure happens, the faulty cells are replaced by the spare cells after detection of faults</p>
<b>Methodology</b>	:	
<b>Out come</b>	:	

Investigator/Co-Investigator  
K RAJESH



**SELF-HEALING APPROACH**

• A new way to manage the safety of a nuclear reactor with a self-healing approach

**THE NEW APPROACH**

• Self-healing approach

• Self-healing approach

• Self-healing approach

**THE OLD APPROACH**

• Self-healing approach

• Self-healing approach

• Self-healing approach

**SELF-DIAGNOSIS**

**SELF-DIAGNOSIS**

• Self-healing approach

• Self-healing approach

• Self-healing approach

**SELF-DIAGNOSIS**

• Self-healing approach

• Self-healing approach

• Self-healing approach

• Self-healing approach

• Self-healing approach

**Fig. 1. Proposed self-healing approach**

**Fig. 2. Self-diagnosis approach**

**Fig. 3. Self-healing approach**

**Fig. 4. Self-healing approach**

• Self-healing approach

• Self-healing approach



Date: - 9-7-2020

To  
The Chairman,  
Ramu Banoth  
CANORX Software Services Private Limited.

Respected Sir,

**SUB:** - Request-Proposal for funding **ECO-FUEL EXBIT** for helping the society-Reg.

\* \* \* \* \*

I am writing to you on behalf of the organization to request your approval for the project proposal **ECO-FUEL EXBIT** developed by **J BALA KRISHNA**, Department of Mechanical Engineering, so that our organization **KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM** can apply for a funding amount twenty thousand in the academic year 2019-20. Duration of the project 6 MONTHS.

Aim: The collaborative project Eco-Fuel aims to develop next generation renewable fuel technologies from CO2 and renewable energy, thus helping to build a sustainable and climate-friendly future.

Thanking you sir

  
Investor/Co-investigator



**CANORX Motors Private Limited**  
CIN: U72900TG2020PTC139093

Date:-11-07-2020

To

The Principal,  
KITS Engineering College,  
Khammam.

Approval of sponsored research project titled **ECD-FUEL EXBIT** On behalf of **CANORX MOTOR** ; I am pleased to inform you that the management has studied through your proposed project proposal **ECD-FUEL EXBIT**. We feel that your proposal is very workable.

During his stay with the company he was found to be innovative, hard worker and good team player while his expertise in project management, client collaboration and cost control was particularly of immense value to the company.

Copy to:

Finance Officer,

- **CANORX MOTOR**
- Principal , KITS Engineering College

Chairman  
Ramu Banothu  
PRESIDENT

**CANORX MOTOR**

**CANORX Motors Private Limited Private Limited.**

203, 2nd Fls Housing Colony, Velupuram, a Kolary Nagar, Khammam, Telangana India 507002.

[www.canorx.com](http://www.canorx.com)

[admin@canorx.com](mailto:admin@canorx.com)

+91-9111543967/+91-9741204665.

**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES***(Affiliated to JNTUH & Approved by AICTE, New Delhi)*

Ponnekal (Village), Khammam (Rural), Khammam (D-st) -507170

Phone: 08742 - 285399, 9906567792

**A Project Summery Report on ECO-FUEL EXHIBIT****Project Title** : ECO-FUEL EXHIBIT**Investigator/Co-investigator** : J BALA KRISHNA**Department of Principal Investigator** : MECH**Duration of completion of project** : 6 MONTHS**Amount Sanctioned** : 0.20 Thousand**Year of Sanction** : 2020**Duration of the project** : 6 MONTHS**Name of the Funding Agency** : CANOREX MOTOR**Objectives**

Raw coal is still burnt as fuel in many developing countries. Besides pollution from coal combustion, coal briquettes always face problems during transportation and storage because they are friable and susceptible to moisture. On the other hand plastic waste in municipal solid waste is also a big problem which many countries are facing. Since synthetic plastics originate from petroleum products, plastic waste has high energy content. To solve these problems, a new solid fuel called Eco-fuel has been developed by briqueting a mixture of coal and different plastics. The commonly used plastics (polyethylene and polystyrene) were used in this study. Eco-fuel is clean, strong and easy to handle. It is easier to ignite than raw coal. Eco-fuel is resistant to water and water vapour. The acidic emissions of Eco-fuel are lower than that of coal briquette and can be well controlled by adding lime products.

**Methodology**

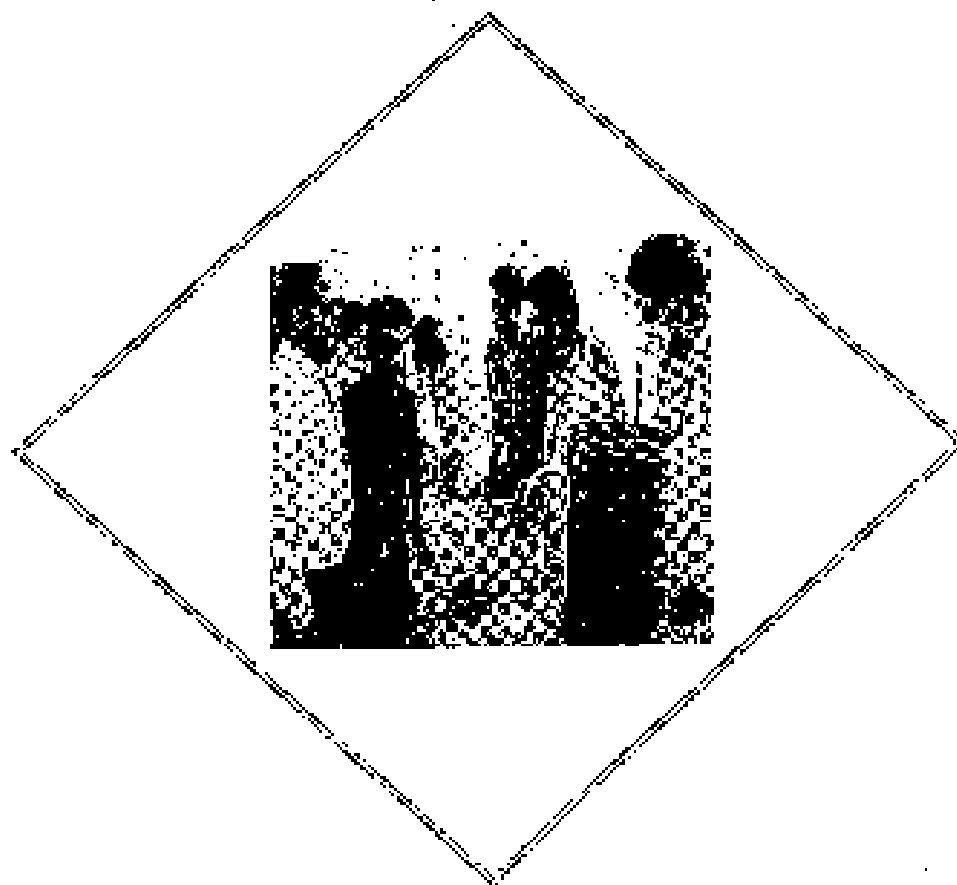
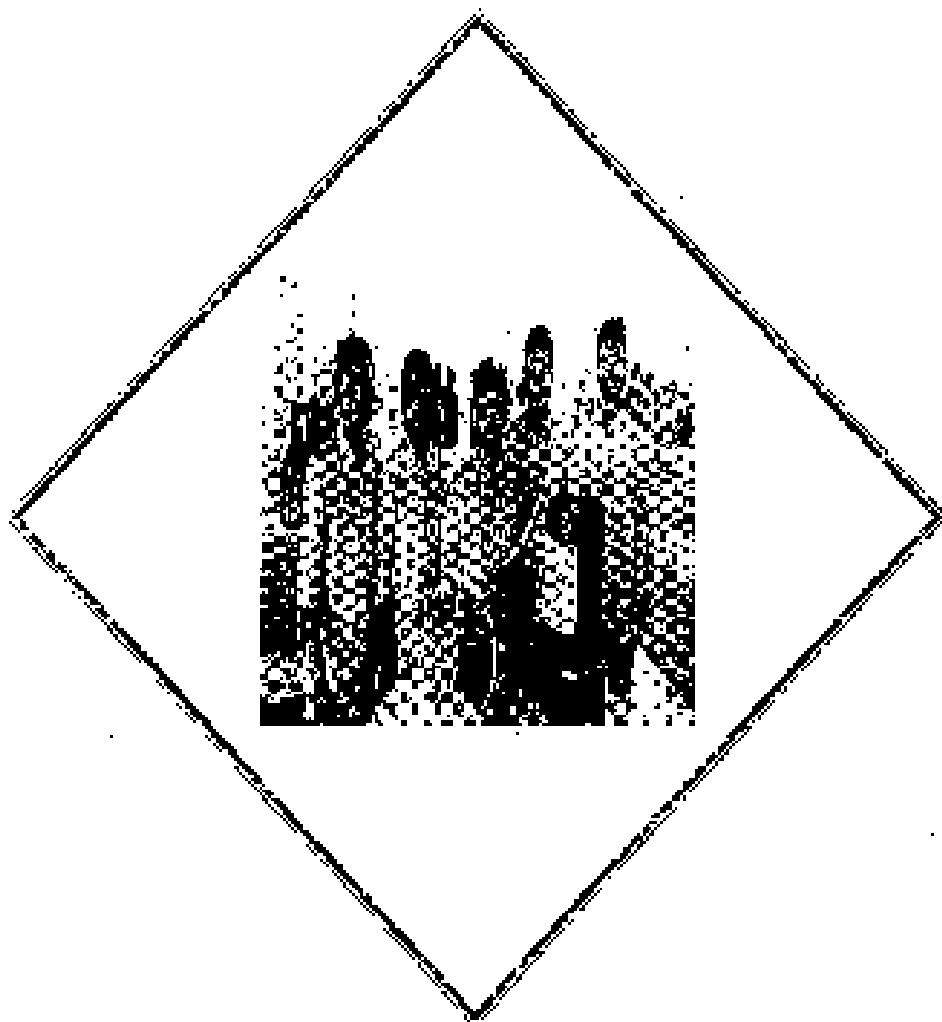
The elastic and adhesive property of thermoplastics makes them a good and strong binder. The breaking strength of Ecofuels with different amount of added plastics was tested and the results are in project. Coal briquette breaks down when the breaking force is 0.33 kg (lower than 1 kg) during the testing process. As the plastic content in the Eco-fuel increases, the breaking forces increase exponentially, reaching maximum values (35 kg and 25 kg respectively) at 80% plastic content.

**Out come**

The breaking strength of Eco-fuel is greater than that of the coal briquettes. The Eco-fuel does not break during handling and transportation. This makes the handling and transportation of the briquettes easy. The Eco-fuel is clean, strong and easy to handle during transportation and use, without dirtying the surrounding areas, the clothing and hands of the users.


**Investigator/Co-Investigator**

J BALA KRISHNA





Date: - 13-8-2019

To  
The Manager,  
HONDA -KHAMMAM  
Khammam-507001

Respected Sir,

**SUB:** - Request-Proposal for funding **AUTOMATIC RECHARGEABLE ELECTRICAL BIKE** for helping the society-Reg.

\* \* \* \* \*

I am writing to you on behalf of the organization to request your approval for the project proposal **AUTOMATIC RECHARGEABLE ELECTRICAL BIKE** developed by N ARUN BABU, Department of Mechanical Engineering, so that our organization **KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM** can apply for a funding amount of Eighty Thousands in the academic year 2019-20, Duration of the project 2 YEARS.

Aim: Motivated by the environmental, public health, ecological, and carbon-footprint issues associated with gasoline-powered automobiles, researchers, governments, and society as a whole have been engaged in a search for viable alternatives. Electric bicycles (e-bikes), which are propelled by a combination of pedaling and battery-powered electric motors, are a promising alternative to automobile transportation. Their primary advantages include lower purchase and operating costs compared to cars, ability to travel longer distances and with less physical effort compared to traditional bicycles, and zero emissions during operation.

Thanking you sir

  
Investigator/Co-investigator



**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES***(Affiliated to JNTUH & Approved by AICTE, New Delhi)*

Ponnekal (Village), Khammam (Rural), Khammam (Dist) -507170

Phone: 08742 - 285399, 9909567752

**A Project Summery Report on AUTOMATIC RECHARGEABLE ELECTRICAL BIKE**

<b>Project Title</b>	: AUTOMATIC RECHARGEABLE ELECTRICAL BIKE
<b>Investigator/Co-Investigator</b>	: NARUN BABU
<b>Department of Principal Investigator</b>	: MLCH
<b>Duration of completion of project</b>	: 2 YEAR
<b>Amount Sanctioned</b>	: 0.80 Thousand
<b>Year of Sanction</b>	: 2019
<b>Duration of the project</b>	: Extension
<b>Name of the Funding Agency</b>	: IICONTA -KHAMMAM

**Objectives**

: An electric bicycle also known as an e-bike is a bicycle with an integrated electric motor which can be used to assist propulsion. Many kinds of e-bikes are available worldwide, from e-bikes that only have a small motor to assist the rider's pedal-power (i.e. pedelecs) to more powerful e-bikes which are closer to moped-style functionality. All retain the ability to be pedalled by the rider and are therefore not electric motorcycles.

**Methodology**

: An electric bicycle also known as an e bike is a bicycle with an integrated electric motor which ... E-bikes use rechargeable batteries and the lighter ones can travel up to 25 to 32 km/h (16 to 20 mph), depending on ... small to medium companies have started using innovative new methods for creating more durable batteries.

**Out come**

: Electric motorcycles and scooters are plug-in electric vehicles with two or three wheels. The electricity is stored on board in a rechargeable battery, which drives one or more electric motors. Electric scooters (as distinct from motorcycles) have a step-through frame.

*Narun Babu*  
Investigator/Co-Investigator  
NARUN BABU

Youtube link:-1. <https://youtu.be/1SROCKGBWTs>

2. <https://youtu.be/Ry6GDrHkGMQ>

3. [https://youtu.be/EpR\\_a8J5vDY](https://youtu.be/EpR_a8J5vDY)





Date: - 10-7-2019

To  
The Chairman,  
Ramu Banoth  
CANORX Software Services Private Limited

Respected Sir,

**SUB:** - Request-Proposal for funding **CONTROLLING OF SOLENOID VALVES BY USING PLC,HMI & SCADA SYSTEMS** for helping the society-Reg.

\* \* \* \*

I am writing to you on behalf of the organization to request your approval for the project proposal **CONTROLLING OF SOLENOID VALVES BY USING PLC,HMI & SCADA SYSTEMS** developed by CH KRISHNA PRASAD, Department of EEE, so that our organization **KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM** can apply for a funding amount Fifty Two thousands in the academic year 2019-20. Duration of the project 6 MONTHS.

Aim: The objective of the project work is to Design, Develop & Testing of the Liquid Level Monitoring and Flow Based Liquid distribution System Using PLC and SCADA In simulation mode. The project mainly focuses on liquid level monitoring; calculate the flow rate in liquid flow line and the process in automatic mode with proper safety interlock and alarm. The system will provide real time process operation and parameters monitoring by process animations. The essence of this project is to convert the manually operated plant to fully automated plant for achieving higher accuracy, efficiency and time saving for the process industries.

Thanking you sir

  
Investigator/Co-investigator



**CANORX Motors Private Limited**  
CIN: U72900TG2020PTC139993

Date:-15/7/2019

To

The Principal,  
KITS Engineering College,  
Khammam.

Approval of sponsored research project titled **CONTROLLING OF SOLENOID VALVES BY USING PLC,HMI & SCADA SYSTEMS** On behalf of **CANORX MOTOR** ; I am pleased to inform you that the management has studied through your proposed project proposal **CONTROLLING OF SOLENOID VALVES BY USING PLC,HMI & SCADA SYSTEMS**. We feel that your proposal is very workable.

Improved appliance functionality. **CONTROLLING OF SOLENOID VALVES BY USING PLC,HMI & SCADA SYSTEMS** can also help you run your appliances better ... Ultimately, connecting your appliances and other systems with automation technology will improve your appliance efficiency and overall make your home life much more easier and enjoyable!

Copy to

Finance Officer,

- **CANORX MOTOR**
- Principal, KITS Engineering College



Chairman

Ramu Banotlu  
PRESIDENT  
CANORX MOTOR

**CANORX Motors Private Limited Private Limited.**

50, Adhika Housing Colony Velugusal, a Rotary Nagar, Channarayana Talatana India 507003.

[www.canorx.com](http://www.canorx.com)

[admin@canorx.com](mailto:admin@canorx.com)

91-91 1343967/191-974120466.

**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES**

(Affiliated to JNTUH &amp; Approved by AICTE, New Delhi)

Ponnakai (Village), Khammam (Rural), Khammam (Dist) -507170

Phone: 08742 - 235395, 9908567792

**A Project Summary Report on CONTROLLING OF SOLENOID VALVES BY USING PLC/IMC & SCADA SYSTEMS**

<b>Project Title</b>	: CONTROLLING OF SOLENOID VALVES BY USING PLC/IMC & SCADA SYSTEMS
<b>Investigator/Co-Investigator</b>	: C/ KRISHNA PRASAD
<b>Department of Principal Investigator</b>	: EEE
<b>Duration of completion of project</b>	: 6 MONTHS
<b>Amount Sanctioned</b>	: 0.52 Thousand
<b>Year of Sanction</b>	: 2019
<b>Duration of the project</b>	: 6 MONTHS
<b>Name of the Funding Agency</b>	: CANOREX MOTOR

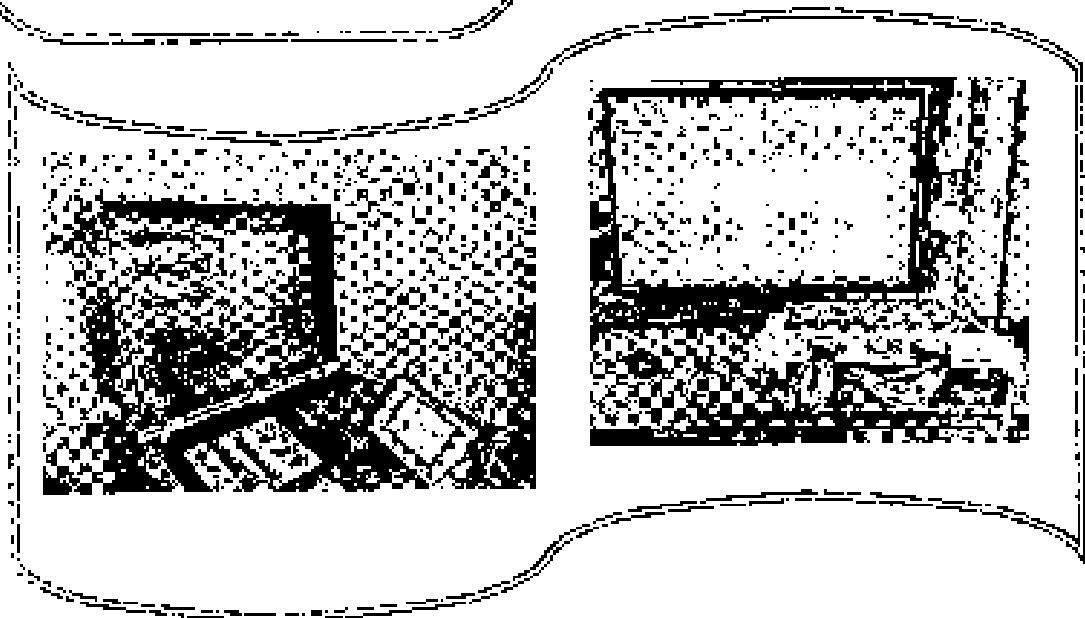
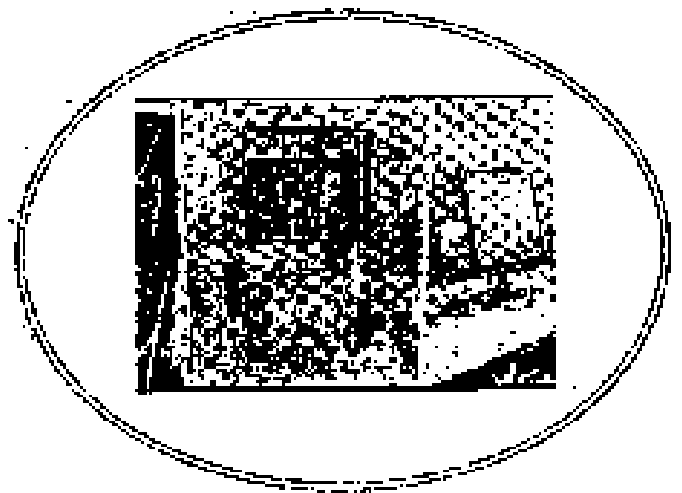
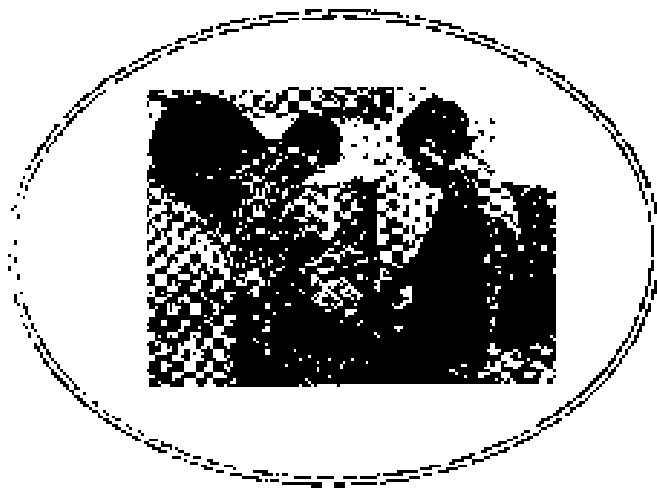
**Objectives** : The objective of the present work is to design, develop & testing of the Liquid Level Monitoring and Flow Based Liquid distribution System Using PLC and SCADA In simulation mode.

**Methodology** : A SCADA model is developed for the liquid level monitoring and transfer system used for effective online monitoring and control of liquid flow rate by regularizing the different set points. From the experimental results, PLC based adaptive controller enhances its performance remotely through SCADA system. The experimental analysis shows that PLC based SCADA system perform as entire process operations and the speed of the operation too faster than manual system. Automation based controlling system provides fair transient response with minimum error indices of 0.92% and good quality comparison with manual system.

**Out come** : The process of transferring a fixed quantity of fluid from a source of storage tank to destination which could be receiver tank or container is known as "Transferring". The Flow Based transferring of liquids from storage Tanks to Receiver tanks process flow chart can be described as follows. All the following process can be done through SCADA graphics by operator.



**Investigator/Co-Investigator**  
C/ KRISHNA PRASAD



**PACIFIC**




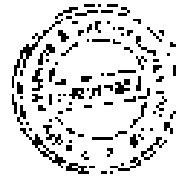
Date: 30<sup>th</sup> Mar 2020

**CERTIFICATE**

This is to certify that Mr. MOHAMMAD HAMEEDUDDIN(100F1AC201) pursuing bachelor of technology in Electrical and Electronics Engineering at Kharimam institute of technology and sciences has successfully completed the academic project on "CONTROLLING OF SOLENOID VALVES BY USING PLC,HMI & SCADA SYSTEM" with our company from 15<sup>th</sup> Jan 2020 to 30<sup>th</sup> Mar 2020. He was found to be diligent, hard working and energetic. He has shown willingness to learn and assist when needed and has a constructive attitude towards the team.

We will wish him all the best to his future endeavors.

  
K Chandan Sekhar  
Branch manager



Dr. J. S. Lakshmi, Head of Department, Electrical and Electronics Engineering,  
Kharimam Institute of Technology and Sciences, Kharimam, Hyderabad-500082.  
Dr. K. S. Lakshmi, Head of Department, Electrical and Electronics Engineering,  
Kharimam Institute of Technology and Sciences, Kharimam, Hyderabad-500082.  
Dr. K. S. Lakshmi, Head of Department, Electrical and Electronics Engineering,  
Kharimam Institute of Technology and Sciences, Kharimam, Hyderabad-500082.



Date: - 2-8-2020

To  
The Managing Director,  
Edugene Technologies,  
Information Technology and Services,  
Near Image Hospital, Ameerpet, Hyderabad.

Respected Sir,

**SUB:** - Request-Proposal for funding **Driver drowsiness monitoring system using visual behaviour and machine learning** for helping the society-Reg.

\* \* \* \* \*

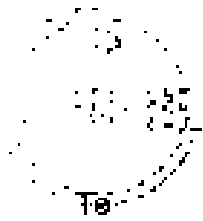
I am writing to you on behalf of the organization to request your approval for the project proposal Driver drowsiness monitoring system using visual behaviour and machine learning developed by V SUDHERSHAN RAO, Department of CSE, so that our organization KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM can apply for a funding amount of thirty seven thousands in the academic year 2020-21, Duration of the project 6 MONTHS.

Aim: Various mishaps have occurred in road disasters. Carriers who drive for consistently extended periods of time (particularly at night), as well as transport drivers of long-distance or overnight vehicles, are more vulnerable to this problem. Driver sluggishness is a dreadful nightmare for travellers in any world. Incalculable accidents and fatalities occur as a result of exhaustion-related road setbacks. As a result of its tremendous convenience suitability, the field of driver exhaustion and its symbol is a working zone of evaluation. The basic sluggishness region configuration is made up of three squares/modules

Thanking you sir

  
Investigator/Co-investigator





File No: 3-045/5/7,  
Sl. Nilaya List No. 151/2/1/1995  
Near Lunge Hospital, Amberpet, Hyderabad.  
Date: 06/08/2020

The Principal,  
KITS Engineering College,  
Khammam.

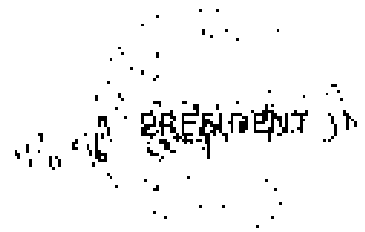
Approval of sponsored research project titled **Driver drowsiness monitoring system using visual behaviour and machine learning** On behalf of **EDUGENNE**; I am pleased to inform you that the management has studied through your proposed project proposal **Driver drowsiness monitoring system using visual behaviour and machine learning**. We feel that your proposal is very workable.

Improved appliance functionality. Driver drowsiness monitoring system using visual behaviour and machine learning can also help you run your appliances better. ... Ultimately, connecting your appliances and other systems with automation technology will improve your appliance effectiveness and overall make your home life much more easier and enjoyable!

Copy to:  
Finance Officer,  
• **EDUGENNE**  
Managing Director, KITS Engineering College

Managing Director  
Edugenne Techno Labs  
Information Technology and Services

**EDUGENNE**



**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES***(Affiliated to JNTUH & Approved by AICTE, New Delhi)*

Ponnekal (Village), Khammam (Rural), Khammam (Dist) -507170


Phone: 08742 – 285399, 9908567792



**A Project Summary Report on Driver drowsiness monitoring system using  
visual behaviour and machine learning**

<b>Project Title</b>	: Driver drowsiness monitoring system using visual behavior and machine learning
<b>Investigator/Co-Investigator</b>	: V SUDHERSHAN RAO
<b>Department of Principal Investigator</b>	: CSE
<b>Duration of completion of project</b>	: 6 MONTHS
<b>Amount Sanctioned</b>	: 0.37 Thousand
<b>Year of Sanction</b>	: 2020
<b>Duration of the project</b>	: 6 MONTHS
<b>Name of the Funding Agency</b>	: EDUGENNE

<b>Objectives</b>	: A person while driving a vehicle - if does not have proper sleep or rest, is more inclined to fall asleep which may cause a traffic accident. This is why a system is required which will detect the drowsiness of the driver. Recently, in research and development, machine learning methods have been used to predict a driver's conditions. Those conditions can be used as information that will improve road safety.
<b>Methodology</b>	: An alarm was set to ring after the detection to alert the driver. There will be limitations concerning the detection of drivers' conditions and facial expressions due to factors like darkness, light reflection, obstructions by drivers' hands and wearing of sunglasses. Convolutional neural gives better performance and facial extraction method accompanies it, as an additional drowsiness detection technique which is often used with other facial extraction methods.
<b>Out come</b>	: The block diagram of the proposed driver drowsiness detection system has been depicted in Fig 1. At first, the real-time video is recorded using a webcam. The camera will be positioned in front of the driver to capture the frontal face image. The frames are extracted from video to obtain 2-D images.

  
**Investigator/Co-Investigator**  
 V SUDHERSHAN RAO

# KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCE

(Approved by AICTE, New Delhi, Affiliated to JNTUH)

Ponnakkal village, Khammam-507170



## CERTIFICATE

This is to certify that the major project report entitled "A Study on the Design and Implementation of a Web-Based System for the Management of a Library" is being submitted by Mr. [Name] (Registration No. [Number]) in partial fulfillment for the award of B.Tech in faculty of Computer Science & Engineering to the Jawaharlal Nehru Technological University, Hyderabad, Hyderabad as a record of bonafide work carried out by them under my guidance and supervision. The result embodied in this Major project report has not been submitted to any other university or institute for the award of any degree.

  
Internal Guide

  
Head of the Department  
HEAD

Faculty of Computer Science & Engineering  
Jawaharlal Nehru Technological University  
PONNAKAL (V), KHAMMAM.

  
External Examiner

  
PRINCIPAL

PRINCIPAL  
Khammam Institute of Technology & Science  
PONNAKAL (V) KHAMMAM (R)-507170.

# KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES

(Affiliated to JNTUH & Approved by AICTE, New Delhi)

Ponnekal (Village), Khammam (Rural), Khammam (Dist) -507170

Phone: 08742 - 285399, 9908567792



Date: - 1-07-2019

To  
The Manager,  
ROTARY CLUB OF STAMBHADRI-KMM  
Khammam.

Respected Sir,

**SUB:** - Request-Proposal for funding **A cost-effective self-Healing Approach for Reliable Hardware System** for helping the society-Reg.

\* \* \* \*

I am writing to you on behalf of the organization to request your approval for the project proposal A cost-effective self-Healing Approach for Reliable Hardware System developed by K RAJESH, Department of ECE, so that our organization KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM can apply for a funding amount of Twenty Nine thousands in the academic year 2019-21, Duration of the project 6 MONTHS.

Aim: In this paper, self-healing concept for hardware systems is investigated and a new approach is proposed. This approach is capable of healing up to 50% of the cells where each cell can cover another neighbor failed cell at most. The area overhead is 9% for the proposed approach which is much lower compared to other approaches using spare cell. The proposed approach is applied to investigate two case studies: ALU array, and neural network.

Thanking you sir

  
Investigator Co-investigator

**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES***(Affiliated to JNTUH & Approved by AICTE, New Delhi)*

Ponnekal (Village), Khammam (Rural), Khammam (Dist) -507170

Phone: 08742 - 285399, 9908567792

Date: - 10/8/2020

To  
The Manager,  
MITRA  
Khammam-507001.

Respected Sir,

**SUB:** - Request-Proposal for funding **INTELLIGENT BORDER SECURITY INTRUSION DETECTION AND AUTO DESTROY SYSTEM** for helping the society-Reg.

\* \* \* \*

I am writing to you on behalf of the organization to request your approval for the project proposal INTELLIGENT BORDER SECURITY INTRUSION DETECTION AND AUTO DESTROY SYSTEM developed by K RAJESH, Department of ECE, so that our organization KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM can apply for a funding amount of fifty thousands in the academic year 2020-21, Duration of the project 6 MONTHS.

Aim: The aim of this work is to design the automated security system in order to detect, track and destroy the target for surveillance operations. The system can be operated in two modes, in which the target can be tracked automatically by using microcontroller based system. On other hand, the system can also be controlled manually in which the user has right to select the target and performs shooting if necessary. The image processing algorithms are implemented in Matlab. The process starts by processing the video signal on computer by using the video camera, then the target is selected which can be tracked further by using different image processing techniques. After the selection of target, the micro-controller unit takes the decision to shoot any unauthorized person or activity within its range. The gun is mounted on a tripod stand and its movement is controlled by using the stepper motor

Thanking you sir

  
Investigator / Co-investigator

**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES***(Affiliated to JNTUH & Approved by AICTE, New Delhi)*

Pannekal (Village), Khammam (Rural), Khammam (Dist) -507170

Phone: 08742 - 285399, 9908567792

**A Project Summary Report on INTELLIGENT BORDER SECURITY  
INTRUSION DETECTION AND AUTO DESTROY SYSTEM**

<b>Project Title</b>	:	INTELLIGENT BORDER SECURITY INTRUSION DETECTION AND AUTO DESTROY SYSTEM
<b>Investigator/Co-Investigator</b>	:	K RAJESH
<b>Department of Principal Investigator</b>	:	TCE
<b>Duration of completion of project</b>	:	6 MONTHS
<b>Amount Sanctioned</b>	:	0.50 Thousand
<b>Year of Sanction</b>	:	2020
<b>Duration of the project</b>	:	6 MONTHS
<b>Name of the Funding Agency</b>	:	MITRA

**Objectives** :

We proposed a solution to design an architecture that supports the gathering of information from heterogeneous sources. We are using various sensors which we will install around the perimeter of an area to detect any unknown disturbance (intrusion) around it. With the help of the gathered sensor data, the drone surveillance will be automatically activated and the location of the disturbance will also be sent to the drone and the soldiers in the nearby region, which will help us to track the disturbance so that we can apprehend the treason. We will install camera in the drone which will help us for tracking the target if any.

**Methodology** :

By harnessing the potential of internet of things for security and surveillance, the main goal is to build a working model and has been tested on an confined area with no error or end time failure of the model. It should be fault tolerant, there should be no noise in the information gathered from the sensors. The main objective of our work is to build a working intrusion detecting system with drone surveillance with the help of sensors fusion. This could only be achievable if our intrusion detection system will work accurately only then rest of the modules will function properly.

**Out come** :

The sensors for the intrusion detection such as Passive Infrared Motion Detectors, Photoelectric Beams, Robotics Sound Sensor modules are already available in the market which are providing good accuracy in terms of motion detection. The drones which will be used for aerial surveillance, monitoring and observing the remote areas already exist and are effective with few breaks for battery recharging.

Investigator/Co-Investigator  
K RAJESH



**Sri Mithra**  
Future Funding

Date:-14/8/2020

To  
The Principal,  
KITS Engineering College,  
Khammam.

Approval of sponsored research project titled **INTELLIGENT BORDER SECURITY INTRUSION DETECTION AND AUTO DESTROY SYSTEM** On behalf of **MITRA** ; I am pleased to inform you that the management has studied through your proposed project proposal **INTELLIGENT BORDER SECURITY INTRUSION DETECTION AND AUTO DESTROY SYSTEM**. We feel that your proposal is very workable.

improved appliance functionality. **INTELLIGENT BORDER SECURITY INTRUSION DETECTION AND AUTO DESTROY SYSTEM** can also help you run your appliances better. ... Ultimately, connecting your appliances and other systems with automation technology will improve your appliance effectiveness and overall make your home life much more easier and enjoyable!

Copy to  
Finance Officer,

- **MITRA**
- Principal, KITS Engineering College

  
PRESIDENT

**MITRA**

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# 6-1-75/1, KSN Mansion, 5th Floor, Wya Road, KHAMMAM - 507 052.

Cell : 98496 92004, 98490 55775, 92489 80222, 94909 92875

e-mail : srisathrasmitra@gmail.com

**A**  
**MINI PROJECT REPORT**  
**ON**  
**ANALYSIS OF THE BEHAVIOUR OF A BENT PIPE UNDER A POINT LOAD**  
**AND THE EFFECT OF THE SUPPORT POSITION ON THE BEHAVIOUR**

**Submitted in partial fulfillment of the requirement**

**For the award of degree of**  
**BACHELOR OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING (AUTOMOTIVE ENGINEERING)**

**BY**

**SHAIK NAZIYA (17QPIA0462)**

**Under the Supervision of**

**Dr. J. S. SURESH**

**Assistant Professor**



**OFFICE OF THE DEAN, KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES, KHAMMAM**

*Shri Kashi educational society's*

**KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES**

**(Approved by AICTE, under the affiliation of JNTU U)**

**PONNEKAL (V), KHAMMAM (RURAL), KHAMMAM-507170**

**(2020-2021)**



# KHAMMAM INSTITUTE OF TECHNOLOGY & SCIENCES

(Affiliated to JNTUH & Approved by AICTE, New Delhi)

Ponnekal (Village), Khammam (Rural), Khammam (Dist) -507170

Phone: 08742 – 285399, 9908567792

Date: - 1-8-2019

To  
The Managing Director,  
Edugene Technologies,  
Information Technology and Services,  
Near Image Hospital, Ameerpet, Hyderabad.

Respected Sir,

**SUB:** - Request-Proposal for funding **CREDIT CARD FRAUD ANALYSIS USING PREDICTIVE MODELING** for helping the society-Reg.

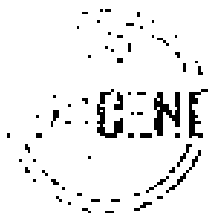
\* \* \* \* \*

I am writing to you on behalf of the organization to request your approval for the project proposal **CREDIT CARD FRAUD ANALYSIS USING PREDICTIVE MODELING** Developed by **V SUDHERSHAN RAO**, Department of CSE, so that our organization **KHAMMAM INSTITUTE OF TECHNOLOGY AND SCIENCE, KHAMMAM** can apply for a funding amount of fourty thousand in the academic year 2019-20, Duration of the project 6 MONTHS.

**Aim:** The main objective of this thesis is to perform predictive analysis on credit card transaction dataset **using machine learning techniques and detect the fraudulent transactions from the given dataset**. The focus is to identify if a transaction comes under normal class or fraudulent class using predictive models

Thanking you sir

  
Investigator/Co-investigator



H.No:6-3-943/87,  
Sri Nilaya Estates, Plot No: A1075,  
Near Image Hospital, Ameerpet, Hyderabad,

Date:-05-08-2019

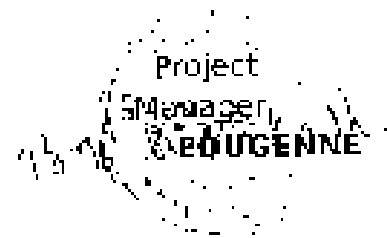
To  
The Principal,  
KITS Engineering College,  
Khammam.

Approval of sponsored research project titled **CREDIT CARD FRAUD ANALYSIS USING PREDICTIVE MODELING** On behalf of **EDUGENNE**; I am pleased to inform you that the management has studied through your proposed project proposal **CREDIT CARD FRAUD ANALYSIS USING PREDICTIVE MODELING**. We feel that your proposal is very workable.

It's all because of the dedication and hard work of you and your team that we hope our department could complete the project in time successfully. I have already got good information from various organizations for your project acknowledge and the hard work you and your team had shown in past experience. I am aware that there are days you all have spent hours working overtime just to finish the project. I feel proud that I have such a wonderful team and you have led the team in the right direction.


Copy to:  
Finance Officer,  
\* **EDUGENNE**  
\* Principal, KITS Engineering College  
Warm regards,

Managing Director,  
EduGen Technologies,  
Infiniti for Technology and Services



### A Project Summary Report on **CREDIT CARD FRAUD ANALYSIS USING PREDICTIVE MODELING**

<b>Project Title</b>	: CREDIT CARD FRAUD ANALYSIS USING PREDICTIVE MODELING
<b>Investigator/Co-Investigator</b>	: V SUDHERSHAN RAO
<b>Department of Principal Investigator</b>	: CSE
<b>Duration of completion of project</b>	: 6 MONTHS
<b>Amount Sanctioned</b>	: 0.43 Thousand
<b>Year of Sanction</b>	: 2019
<b>Duration of the project</b>	: 6 MONTHS
<b>Name of the Funding Agency</b>	: EDUGENNF
<b>Objectives</b>	: The finance and banking is very important sector in our present day generation, where almost every human has to deal with bank either physically or online. The productivity and profitability of both public and private sector has tremendously increased because of banking information system. Nowadays most of E-commerce application system transactions are done through credit card and online net banking.
<b>Methodology</b>	: The proposed system is used to detect the frauds on real time basis by analyzing incoming transactions. The system design consists of two components for fraud detection To improve the analytical accuracy of fraud prediction, we have implemented three different analytical techniques. These analytical models are run on credit card dataset and accuracy of analytical model is evaluated with help of confusion matrix.
<b>Out come</b>	: Among the three models, random forest decision tree performs best in terms of accuracy, precision and recall. The only problem with random forest is over fitting of tree in memory as data increases. The future scope of this work is to remove overfitting problem of decision tree and to detect real time fraud transaction for high streaming real time data.

  
**Investigator/Co-Investigator**  
 V SUDHERSHAN RAO