

WOMEN'S SAFETY PROTECTING SELF WITH THE HELP OF ELECTRIC SHOCK THROUGH SLIPPER

Submitted in partial fulfilment of the requirements for the award of
Bachelor of engineering degree in

Electric and Electronic Engineering

By

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**SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
Accredited with Grade "A" by NAAC
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APRIL 2023



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **SHALINI E** (Reg. No. 40140032) and **ROJA S** (Reg. No. 40140029) who carried out the project entitled "**WOMEN'S SAFETY PROTECT SELF WITH THE ELECTRIC SHOCK THROUGH SLIPPER**" under our supervision from February 2023 to April 2023.

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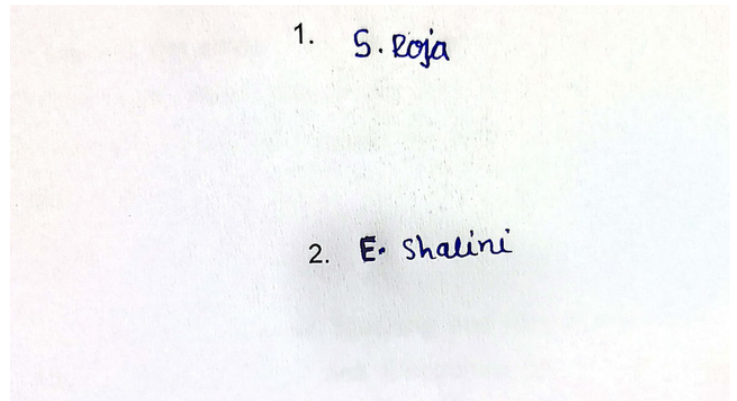
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DECLARATION

SHALINI E(Reg. No. 40140032) and **ROJA S**(Reg. No. 40140029) who hereby declare that the Project Report entitled “**WOMEN’S SAFETY PROTECTING SELF WITH THE HELP OF ELECTRIC SHOCK THROUGH SLIPPER**” done by us under the guidance of **Dr.Barnabas Paul Glady** is submitted in partial fulfilment of the requirements for the award of Bachelor of Engineering degree in Electrical and Electronics Engineering.

DATE:18.04.2023

PLACE:Chennai

A photograph of a piece of paper with two handwritten signatures. The first signature is 'S. Roja' and the second is 'E. Shalini'. Both are written in blue ink. The paper has a light, slightly textured background.

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

We are pleased to acknowledge our sincere thanks to Board of Management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. We are grateful to them.

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ABSTRACT

Women safety has been a big concern and it has been the most important duty of every person. There is no chance of the welfare of the world unless the condition of the women is improved.

Since the ancient time, women are given most respected place in the society but every day and every minute some women of all walks of life (women, girls and babies) are getting harassed, molested, assaulted and violated at various places all over the world.

It is estimated that 35% of the women have experienced physical and/or sexual violence at some point in their lives.

This paper includes various ideologies and methodologies of numerous authors who have reviewed multiple applications and devices using present technologies and processors and they have also upgraded these with certain requirements in order to decrease violence against women.

Also a small measure of improvement proposed in this paper, adds to the better performance of these devices and lead to better women safety.

Now-a-days women harassment is increasing and women and children safety is a big question mark. To overcome this problem based on some models we came up with an idea called 'NARI'. Nari is a Sanskrit word which defines woman.

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CHAPTER -1

INTRODUCTION

According to the National Crime Records Bureau, in 2011, there were more than 228,650 reported incidents of crime against women, while in 2015, there were over 300,000 reported incidents, which is a rise of 44 percent. Even though India has all the necessary laws to punish and prevent crimes against women like the Criminal Law (Amendment), Act 2013, which was enacted for effective deterrence against sexual offences, the number of crimes against women is increasing by the minute.

Keeping yourself safe is a priority, and every women deserves to know the proper skills to defend herself when danger attacks. There is a situation where a women can't able to seek for a help at that time she should fight for herself, she should stand for herself .

While authorities are doing their bit, with emergency response systems for times of distress, sexual crimes against women are common. As a society we need to grasp the immediate method to empower women with better tools and support systems. keeping this self defence as a major point we came up with an idea called "NARI" .

Introduction of our "NARI" , it is a security device specially designed for women in danger . It is simple and easy to use and carry with various functionalities. Actually there are lot of android applications and smart devices which helps to women in danger for example alert messages to family members, or to police station etc..

But if there's no signal at that time she can't able to inform or put an alert message..At that times she should fight for herself so for that our device NARI is useful at that time .NARI ,it is a normal sandal which are in built with transformer ,switch and battery. By switching on the switch which is placed side of the slipper through the transformer electricity will pass to the edge tip of the slipper by placing this edge to the opposite person's face or body he gets shocked. We can charge that slipper and we can reuse it it as a normal sandal or as a protection device. BY this a women can save herself without any help

...

CHAPTER-2

LITERATURE SURVEY

The status of women in India has gone through many great changes over the past few millennia. From equal status with men in ancient times through the low points of the mediaeval period to the promotion of equal rights by many reformers, the history of women in India has been eventful.

This paper focuses on a security system that is designed solely to serve the purpose of providing security to women so that they never feel helpless while facing such social challenges.

1. A safety device and application called FEMME using ARM controller. It is a security device which is specifically designed for women. The device and be purchased or the application can be installed in smart phones and can be accessed in emergencies.

2. A system consists of wearable safety device having an emergency button for sending notification and camera for capturing assaulter image, thus location of the victim is traced with help of GPS and image gets captured.

3. A security system for women. In this system there are two sections, one is transmitter which consists of emergency key, microcontroller, LCD, GPS, GSM, and buzzer and the other section is receiver which is the mobile phone.

(1) The system consists of various modules such as GSM shield (SIM 900A), Arduino ATmega328 board, GPS (GYGPS6MV2), screaming alarm (APR 9600), a set of pressure sensors for activation and power supply unit. The Delhi Nirbhaya case that triggered the whole nation was the greatest motivation for this system. It was high time we women needed a change.

(2) Women Employee Security System using GPS And GSM Based Vehicle Tracking. Womens security is a critical issue in todays world and its very much needed for every individual to be acting over www.ijcrt.org © 2018 IJCRT | Volume 6, Issue 2 April 2018 | ISSN: 2320-2882 IJCRT1813586 International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org 1040 such an

issue. This paper describes a GPS and GSM based vehicle tracking and women employee security system that provides the combination of GPS device and specialised software to track the vehicles location as well as provide alerts and messages with an emergency button trigger.

(3) A Mobile Based Women Safety Application Many unfortunate incidents have been taking place in women's case. Problems may come from any direction such as women walking on the road after the work, going to supermarket or many other reasons for which they go alone. People at home are not sure of their return safely. Another factor is women die without knowing the reason as they attend excursions and industrial trips conducted by the organisations. It happens due to attacks on women but not suicides.

CHAPTER-3

COMPONENTS REQUIRED

1. CHARGING SYSTEMS
2. SWITCH
3. TRANSFORMER
4. RECHARGEABLE LITHIUM ION CELL
5. SLIPPER
6. CONNECTING WIRES

CHARGING SYSTEM



Figure 1.1:charging system

- Input interface: Type-C USB.
- Battery overcharge lifting voltage: 4.00 V
- Battery: over-current protection current 3 A
- Maximum charging current output: 1000 ma
- Light state: no load the light not bright, red light for recharging, is full of blue light.

SWITCH



Figure 1.2: switch

- Rated voltage: dc 250v, rated current: 1.5a
- Constantly press it: on; release it: off
- Base size: 18mm/0 7" x 12mm/0 5", button: 5 4mm/0 21"(φ)
- Easy to control the circuit power on/off, widely used in the electronics design projects DIY
- Self Locking Switch, 260V 1.5 A Tactile Tact Switch 2Pin On Off Push Button Switch IY Electronics Accessories.

TRANSFORMER



Figure 1.3: Transformer

This is a high voltage step-up power supply module, which is commonly used in electronics experiments and demonstrations. The module can generate a voltage of up-to 400KV from an input of 3-6V from a normal Li-ion battery. The high-voltage module uses the principle of the Tesla coil.

Features:

1. High-Quality Silicone Wires at Input and Output
2. Creates an Arc of 400KV
3. Small in Size
4. Easy to Use

RECHARGEABLE LITHIUM ION CELL



Figure 1.4: Rechargeable lithium ion cell

This Standard 14500 1000mAh 3.7 Volt Rechargeable Li-Ion Battery is a single cell compact and powerful battery cell with a 1000 mAh capacity.

The Standard 14500 100mAh 3.7V Rechargeable Li-Ion Battery is a source of power for various portable devices including flashlights, hobby transmitters, receivers, etc.

SLIPPER



Figure 1.5: Slipper

CONNECTING WIRES

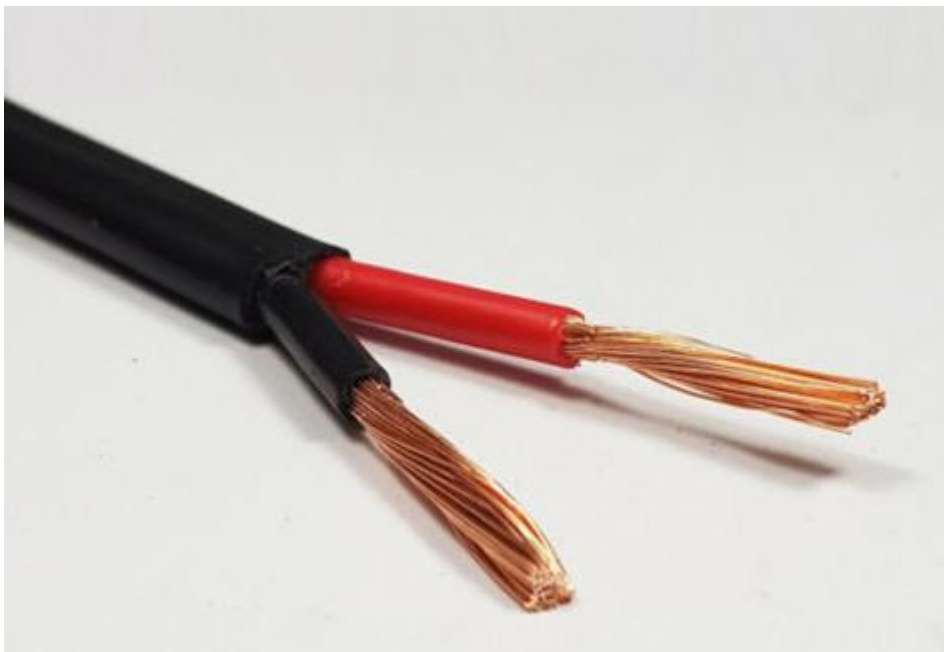


Figure 1.6: Connecting wires

Connecting wires allows an electrical current to travel from one point on a circuit to another because electricity needs a medium through which it can move. Most of the connecting wires are made up of copper or aluminum.

CHAPTER-4

BLOCK DIAGRAM AND CIRCUIT DESIGN

BLOCK DIAGRAM

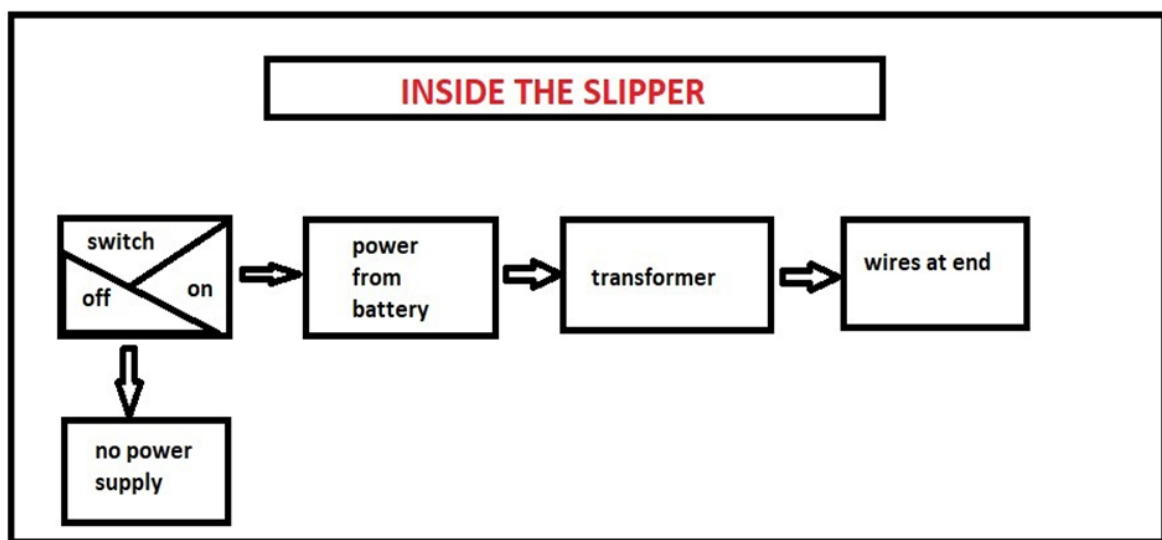


Figure 1.7:Inside the slipper things

CIRCUIT DIAGRAM

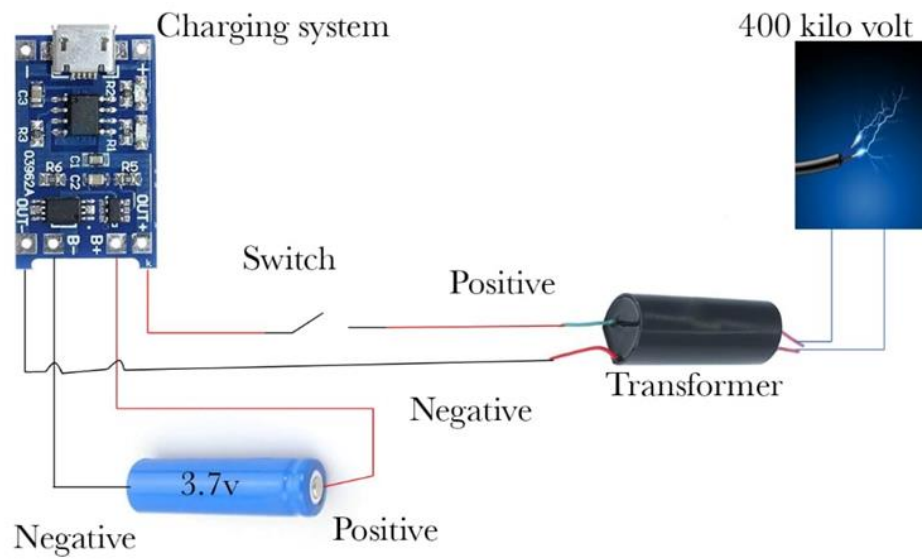


Figure 1.8:Circuit diagram

CHAPTER-5

WORKING PROCEDURE



Figure 1.9: Working procedure

- When a women is in trouble with any other persons like harassmt or rape situations when there is no chance of getting any help from others she can use these slipper device to protect herself.
- The all components are fix in the slipper as per block diagram.
- This device can charge by using USB cable.
- It works when the switch is ON, then the power is supply through the transformer to the end of the connecting wire at the starting point of the slipper.
- Then the opponent get shocked.

CHAPTER-6

JIO TAGGED PICTURE

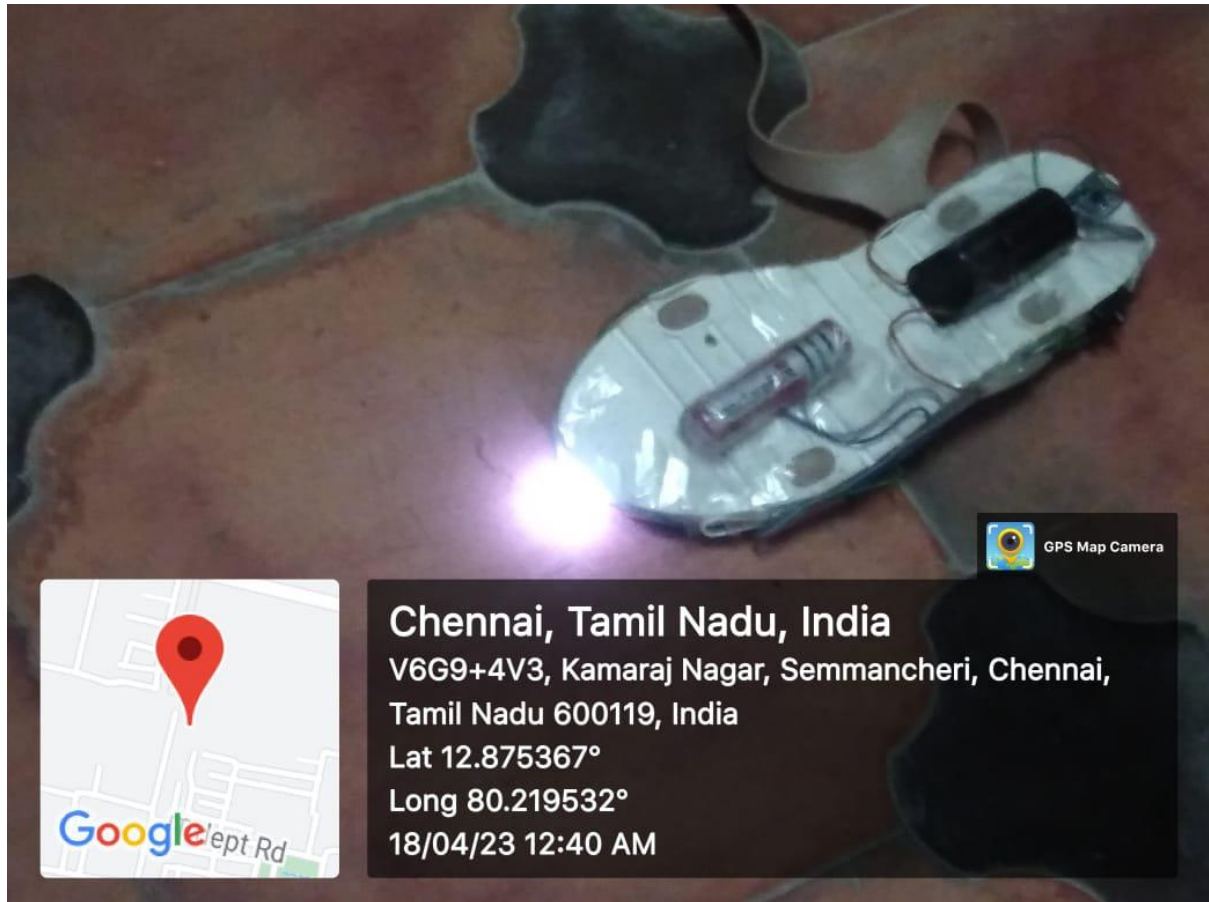


Figure 2.0:Jio tagged picture of women's safety protecting themselves from electric shock through slipper.

CHAPTER -7

FUTURE SCOPE AND LIMITATIONS

The future scope of our project is to help the women by expanding the knowledge and braveness to fight for themselves. Hoping this idea may lead to many project ideas which are user friendly and which can use in day to day life.

Limitations of our project are:

1) As the transformer and battery are in built in slipper we should use the slipper carefully without any damage , if any damage occurs then the water or any iron particles on the road easily get into the slipper then u also get shocked.

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CONCLUSION

NARI is a security device specially designed for women in danger . It is simple and easy to use and carry with various functionalities. Actually there are a lot of android applications and smart devices which helps to women in danger for example alert messages to family members, or to police station etc..

But if there's no signal at that time she can't able to inform or put an alert message..At that times she should fight for herself so for that our device NARI

is useful at that time .NARI ,it is a normal sandal which are in built with transformer ,switch and battery. By switching on the switch which is placed side of the slipper through the transformer electricity will pass to the edge tip of the slipper by placing this edge to the opposite person's face or body he gets shocked. We can charge that slipper and we can reuse it as a normal sandal or as a protection device. BY this a women can save herself without any help ... So this is a device where a women can save herself without seeking for any help..

CHAPTER-9

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