



Senior Design Project
IOT BASED WOMEN SECURITY SYSTEM

Audhora Islam
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Faculty Advisor:
Dr. Shohana Rahman Deeba
Assistant Professor
ECE Department
Spring 2021

LETTER OF TRANSMITTAL

December, 2019

Dr. Mohammad Rezaul Bari
Chairman,
Department of Electrical and Computer Engineering
North South University, Dhaka

Subject: Submission of Capstone Project on “IOT Based Women Security System.”

Dear Sir,

With due respect, we would like to submit our **Capstone Project Report on IOT Based Women Security System**” as a part of our BSc program. This project was very much valuable to us as it helped us gain experience from practical fields and apply in real life. We tried to the maximum competence to meet all the dimensions required from this report.

We will be highly obliged if you kindly receive this report and provide your valuable judgment. It would be our immense pleasure if you find this report useful and informative to have an apparent perspective on the issue.

Sincerely Yours,

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Audhora Islam
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ECE Department
North South University, Bangladesh

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Pulok Adhikary
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ECE Department
North South University, Bangladesh

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Monika Zaman
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ECE Department
North South University, Bangladesh

APPROVAL

Audhora Islam (ID # 123 0830 642), Pulok Adhikary (ID #143 0234 642), Monika Zaman (ID #171 1940 642) from Electrical and Computer Engineering Department of North South University, have worked on the Senior Design Project titled “IOT BASED WOMEN SECURITY SYSTEM” under the supervision of Dr. Shohana Rahman Deebapartial Ma’am fulfillment of the requirement for the degree of Bachelors of Science in Engineering and has been accepted as satisfactory.

Supervisor’s Signature

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Dr. Shohana Rahman Deeba

Assistant Professor

Department of Electrical Engineering & Computer Science
North South University
Dhaka, Bangladesh.

Chairman’s Signature

.....

Dr. Mohammad Rezaul Bari

Associate Professor

Department of Electrical Engineering & Computer Science
North South University
Dhaka, Bangladesh.

DECLARATION

This is to certify that this Project is our original work. No part of this work has been submitted elsewhere partially or fully for the award of any other degree or diploma. Any material reproduced in this project has been properly acknowledged.

Student's names & Signatures

Audhora Islam

123 0830 642

Pulok Adhikary

143 0234 642

Monika Zaman

171 1940 642

ACKNOWLEDGEMENT

We wholeheartedly say thanks to Dr. SHOHANA RAHMAN DEEBA, Assistant Professor of Electrical and Computer Engineering for her dynamic support and excited direction in fulfillment of this venture work. We stay obliged to her for this significant idea in regards to this task work.

We express our profound feeling of appreciation to our respected HOD, DR. MOHAMMAD REZAUL BARI, for giving an incommensurable chance in the division.

On an individual note, we wish to benefit from this chance to communicate our profound feeling of sincere appreciation and in debt to our family, companions and well-wishers without their motivation, friendship, gifts and steady consolation this work might have not seen the light of the day.

ABSTRACT

At present women alongside men are working in different sectors like banking, offices, garments sector and almost in every sector. As the women are working in different sectors alike men, the women also have to work in odd times and situations in order to prove their worth and this leads to the fact that they have to leave their workspaces late hours at night, some may have to go to school, college and universities through some roads which are deserted even during at noon or afternoon. Most of these times, the woman or girl is being teased, even physically harassed or abused. Some of them are also being abused even in crowded places like the bus stands, rail stations, even in the rented taxi or cars they take to come home.

These reasons leave a woman to be feared and not go out in the streets. They along with their parents always have these haunting thoughts in their mind that if they step out of their home will they be able to reach home safe and sound. At present even during these worst times of COVID-19, the rate of physical abuse has also been increased at an alarming rate in Bangladesh, so it has become a demanding issue for every woman that if there had been some device or something that would have helped the women or ask for help in the time of harassments.

Keeping these things in mind, in this research paper we will be proposing a smart system using IOT and hardware, by which a woman would be able to ask for help and alert the nearby police stations without even alerting the attacker. In the first part of this paper, there will be a discussion about the problems that are faced by the women and the existing systems to help the women in need of help, then there will be the statistics of rate of harassment issues over the past few years.

In the second part of our paper, there will be discussion on the proposed system using IOT and different hardware, besides we have also tried to keep the cost minimum so that this system is cost efficient for every woman. We have kept the call for help as the main priority because there might be some time even when the women are able to get her out of the situation, there might be a chance where she might be physically harmed. As a result, we need to make sure that the help the victims are asking for is received. We-RUS is an app and IOT based smart system which will be able to locate the victim and will send alert messages to the emergency contacts of the victims

and the ones that are using the app nearby to and main and important part to the police station. Now there might be times, when the alert or the help call from the victims are not being received, so we also developed our system such that when the message will be send to the emergency contacts it will be sent as an alarm so it even if the phone of one of the emergency contacts of the victim is silent, the alarm will create vibration and thus one must have to check their phone and thus the help asked is received.