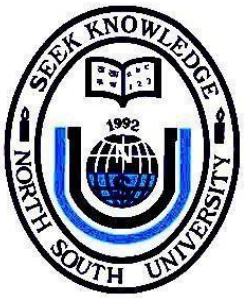


North South University

Department of Electrical and Computer Engineering

Senior Design Project

Driver's Iris Tracker

Team Members:

Md. Asaduzzaman Sakib - 1521705642

Shawon Howlader - 1520851642

Mitu Rani Das - 1512383642

Project Advisor:

Mohammad Ashrafuzzaman Khan

Professor

Department of ECE

Summer 2020

LETTER OF TRANSMITAL

July , 2020

To

Dr. Rezaul Bari

Chairman,

Department of Electrical and Computer Engineering

North South University, Dhaka

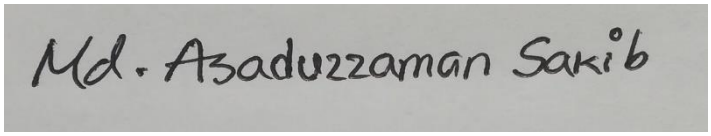
Subject: Submission of Capstone Project on **"Driver's Iris Tracker."**

Dear Sir,

With due respect, we would like to submit our **Capstone Project Report** on **"Driver Iris Tracker"** as a part of our BSc program. The report deals with tracking our eye to prevent accident in road . This project was very much valuable to us as it helped us gain experience from practical field 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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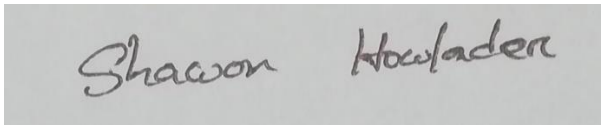
Md. Asaduzzaman Sakib
ECE Department
North South University, Bangladesh



.....
Shawon Howlader
ECE Department
North South University, Bangladesh

.....
Mitu Rani Das
ECE Department
North South University, Bangladesh

APPROVAL

Md. Asaduzzaman Sakib (ID # 1521705642), Shawon Howlader (ID #1520851642) and Mitu Rani Das (ID #1512383642) from Electrical and Computer Engineering Department of North South University, have worked on the Senior Design Project titled "Driver's Iris Tracker" under the supervision of Mohammad Ashrafuzzaman Khan partial fulfillment of the requirement for the degree of Bachelors of Science in Engineering and has been accepted as satisfactory.

Supervisor's Signature

…….

Mohammad Ashrafuzzaman Khan

Professor

Department of Electrical Engineering & Computer Science

North South University

Dhaka, Bangladesh.

Chairman's Signature

…….

Dr. Rezaul Bari

Associate Professor& Chair

Department of Electrical Engineering & Computer Science

North South University

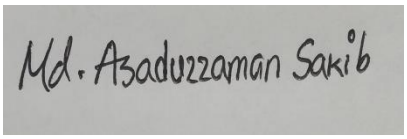
Dhaka, Bangladesh.

DECLARATION

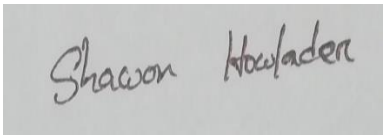
This is to certify that this Project is our original work. No part of this work has been submitted elsewhere partially or fully for the award of any other degree or diploma. Any material reproduced in this project has been properly acknowledged.

Students' names & Signatures

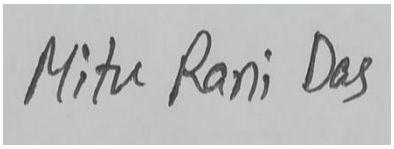
1. Md. Asaduzzaman Sakib



2. Shawon hawlader



3. Mitu Rani Das



ACKNOWLEDGEMENT

By kindness of the Almighty we have successfully completed our senior design project entitled "Driver's Iris Tracker"

Our deep gratitude goes first to my faculty advisor Mohammad Ashrafuzzaman Khan, who expertly guided us in our senior design project throughout the whole CSE499A and CSEE499B. His guidance helped us in all type of research, writings and completing the project.

Our sincere thanks also goes to North South University, Dhaka, Bangladesh for giving us such a platform where we can have an industrial level experience as a part of our academics.

Last but not the least, we would like to thank our family as their inspiration and guidance kept us focused and motivated.

Abstract

Distraction drowsiness, and fatigue are the main factors of car, bus accidents recently. To solve such problems, an Eye-tracking system based on camera is proposed in this paper. The system detects the driver's Distraction or sleepiness and gives an alert to the driver as an assistance system. The system is added in real-vehicle and tested in an outdoor environment. Whenever the system detects the distraction or sleepiness of the driver, the driver will be alerted through a displayed message on a screen and an audible sound for more attention.