Senior Design Project

Seeing AI App For Visually Iimpaired People

Group 4A

Tabassum Sadia Shahjahan	1931819042
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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' name & Signature

1. Afia Maliha Aysharjo

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2.Tabassum Sadia Shahjahan

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APPROVAL

The capstone project entitled "Seeing AI APP For Visually Impaired People Using Deep Learning by **Afia Maliha Aysharjo (ID #1711418042)** and **Tabassum Sadia Shahjahan(ID #1931819042)** is approved in partial fulfillment of the requirement of the Degree of Bachelor of Science in Computer Science and Engineering on September,2022 and has been accepted as satisfactory.

Supervisor's Signature

Abu Obaidah 10/9/2022

Md. Abu Obaidah
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Department Chair's Signature

Dr. Rajesh Palit
Professor & Chairman
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ACKNOWLEDGEMENT

First of all, we wish to express our gratitude to the Almighty for giving us the strength to perform our responsibilities and complete the report.

The capstone project program is very helpful to bridge the gap between the theoretical knowledge and real life experience as part of the Bachelor of Science (BSc) program. This report has been designed to have practical experience through theoretical understanding.

We also acknowledge our profound sense of gratitude to our respective faculty **Mr. Abu Obaidah** sir who has been instrumental in providing us the technical knowledge and moral support to complete the project with full understanding.

It is imperative to show our appreciation for our honorable faculty member **Mr.Abu Obaidah** for his undivided attention and help to achieve this milestone. Also, our gratitude is divine to the North South University, ECE department for providing us a course such as CSE 499 in which we could really work on this project and materialize it the way we have dreamt of.

We thank our friends and family for their moral support to carve out this project and always offer their support. And we also support those who have been always there for us to provide any sort of support while building our project.

ABSTRACT

This report mainly represents the design and implementation of an Mobile App which will basically work as an assistant for the blind or visually impaired people. Through this application the blind people will be able to detect object and get a feedback about the object through a voice recognition ,the person will also be able to recognize colors through this particular app, and now a days it's quite difficult for people to read books or any instructions with bare eyes this app will also help the blind or visually impaired people to read books or any sort of reading objects for them. This is mainly an mobile based app which will detect objects through Mobilenet SSD algorithm and for speech conversion we have used Google API. This app is mainly an application of Artificial intelligence bringing sight to visually impaired and low vision people by turning the visual world .