



# North South University

Department of Electrical and Computer Engineering

Summer 2019

Senior Design Project

## Smart Helmet

Project Supervisor:

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Lecturer

Department of Electrical and Computer Engineering

### Submitted By

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## Agreement Form

We take great pleasure in submitting our senior design project report on “SMART HELMET” This report is prepared as a requirement of the Capstone Design Project. Senior Design Project involves multidisciplinary teams of students who build and test custom designed systems, components or engineering processes. We would like to request you to accept this report as a partial fulfillment of Bachelor of Science degree under Electrical and Computer Engineering Department of North South University.

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## Statement of Originality

This is to certify that to the best of my knowledge, the content of this project and its report here is our own work.

We certify that the intellectual content of this report is the product of our work and that all the assistance received in preparing this report and sources have been acknowledged.

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## Abstract

There is nothing more important to anyone over his or her own safety. Every day fresh ideas and strategies are brewed and implemented to ensure that we are well protected from all kinds of danger, which may be caused by (but not limited to) natural disaster, faulty equipment, accident, etc. One of the most common ways people die is through road accidents. Each year nearly 1.25 million people die in road accidents, which means on average 3,278 people, are dying every day. As a result, an alarming 20-50 million people, aged 15-44, are injured or disabled. To even imagine that 30% of the youth is a target of road accident not only decreases the chance of having a positive outlook on the society but also threatens the growth of a nation. Our project targets one particular area of these road accidents, which is the safety of bikers. Through our project, we aim to save these bikers from severe head injuries, send the accident's location to the nearest hospital for a prompt response and send an immediate notification to their loved ones to make them aware of the situation. We came across many occasions where the doctors said only if we had more time on our hand we could have saved his or her life, or could have saved his or her limbs. Our project puts emphasis on saving time, as we all are aware of the fact that time could be of great value in this type of scenarios.

*Key Words: time, road accident, death, safety, quick responses*