

NORTH SOUTH UNIVERSITY



THIRD EYE

**Student Attendance & Behavior
Monitoring in Classroom through Facial
Recognition by analyzing Live Video Data**

A DISSERTATION
SUBMITTED TO THE DEPARTMENT OF
ELECTRICAL AND COMPUTER ENGINEERING
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FOR THE DEGREE OF
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SENIOR DESIGN PROJECT I & II

Declaration

It is hereby acknowledged that:

- No illegitimate procedure has been practiced during the preparation of this document.
- This document does not contain any previously published material without proper citation.
- This document represents our own accomplishment while being Undergraduate Students in the North South University.

Sincerely,

Student 1: MD Raihan Khan

1831118042

Student 2: Zannatul Islam Proma

1911916642

Approval

I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation.

Approved By:

Supervisor

Dr. Mohammad Ashrafuzzaman Khan

Assistant Professor

Department of Electrical and Computer Engineering

North South University, Dhaka, Bangladesh

Department Chair

Dr. Rajesh Palit

Professor

Department of Electrical and Computer Engineering

North South University, Dhaka, Bangladesh

Abstract

We are more drawn to automated systems because of rapid technological advancements. For the majority of issues, we find automated systems to be the answer. Therefore, we came up with an automated system for student behavior monitoring in the classroom. This system captures and makes a summary of student behavior in the classroom. The faculty is in charge of overseeing student attendance, attention, and activities including entering and exiting the classroom in addition to making sure that lessons go well. Manual observation of these could affect the teaching and learning process of the faculty and students and causes a distraction from the main syllabus. The system records the entire session and identifies when the students pay attention in the classroom, and then reports to the faculties. Students' performance can be recorded, and the data can be used for continuous assessment in the future. There are mainly two objectives of our project: First, to detect faces and recognize them for attendance and to detect students' attentiveness and behavior in the classroom during lectures.