



**North South University**  
**Department of Electrical and Computer Engineering**

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**Senior Design Report**  
**Smart Voting System**

**Submitted by**

**Mahmudur Rashid #1511966042**  
**Md. Aowrongajab Uaday #1512918043**  
**Md. Nazmul Islam Shuzan #1511783043**

**Faculty**

**Dr. Shazzad Hosain**  
**Associate Professor**  
**Department of Electrical and Computer Engineering**

**Spring, 2019**

# LETTER OF TRANSMITTAL

May, 2019

Dr. K. M. A. Salam  
Professor and Chairman,  
Department of Electrical and Computer Engineering  
North South University, Dhaka

**Subject:** Submission of Capstone Project on “Smart Voting System”.

Dear Sir,

With due respect, we would like to submit Our **Capstone Project Report** on “Smart Voting System” as a part of our BSc program. The report deals with a smart voting system which ensure the secured voting. We tried our level best to make the report meaningful and informative.

The Capstone project was very much valuable to us as it helped us to gain experience from practical field. It was a great learning experience for us. We tried to the maximum competence to meet all the dimensions required from this report.

We will be highly obliged if you are kind enough to 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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Mahmudur Rashid  
ECE Department  
North South University, Bangladesh

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Md. Aowrongajab Uaday  
ECE Department  
North South University, Bangladesh

.....  
Nazmul Islam Suzan  
ECE Department  
North South University, Bangladesh

# APPROVAL

The capstone project entitled “**Smart Voting System**” by Mahmudur Rashid (ID #1511966042), Md. Aowrongajab Uaday (ID # 1512918043) and Md. Nazmul Islam Suzan (ID # 1511783643), is approved in partial fulfillment of the requirement of the Degree of Bachelor of Science in Computer Science and Engineering on April, 2016 and has been accepted as satisfactory.

**Supervisor:**

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**Dr. Shazzad Hosain**  
**Associate Professor**  
Department of Electrical and Computer Engineering  
North South University  
Dhaka, Bangladesh.

## DECLARATION

This is our truthful declaration that the “**Capstone Project Report**” we have prepared is not a copy of any “**Capstone Project Report**” previously made by any other team. We also express our honest confirmation in support of the fact that the said “**Capstone Project Report**” has neither been used before to fulfill any other course related purpose nor it will be submitted to any other team or authority in future.

.....  
Mahmudur Rashid  
ECE Department  
North South University, Bangladesh

.....  
Md. Aowrongajab Uaday  
ECE Department  
North South University, Bangladesh

.....  
Nazmul Islam Suzan  
ECE Department  
North South University, Bangladesh

## **ACKNOWLEDGMENTS**

First of all, special thanks to our honourable supervisor Dr. Shazzad Hosain giving us an opportunity to prepare this thesis paper. This paper provides huge practical knowledge along with theoretical knowledge. We will pay humble gratitude to the Almighty for giving us ability and patience to complete this paper. We are grateful to our honourable supervisor to give us guideline to prepare this report. Without his proper guideline it might be very difficult to prepare this report.

## ABSTRACT

In this project, we design a novel type of electronic voting system. With the help of live image processing technology, this system becomes more secure and effective. Besides the advancement in hardware, web, and application-based voter sorting system is introduced by which a voter can choose to vote from anywhere of a country which makes a hundred percent participation of voters. Four connected machines work together to accumulate each successful vote. Before counting the final vote by the fourth machine, NID, biometric fingerprint and image of the voter are verified by the other three machines simultaneously. While voting, if multiple faces detected by the camera module, the vote will not be counted. Corrupted situations can be easily reduced by this inexpensive and effective system.

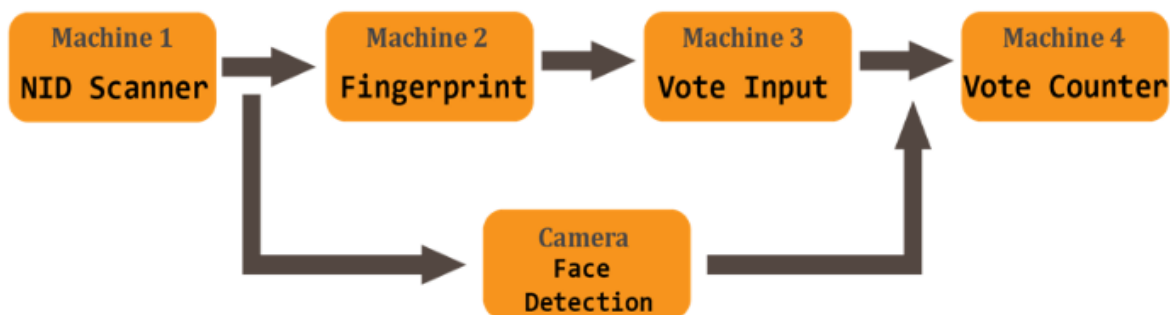


Fig: System Flow Diagram