Department of Electrical and Computer Engineering
North South University

Senior Design Project

3D PRINTER

Tauhid Rahman **ID # 1510449042**

Ibtehaz Ahmad **ID # 1510438643**

Saiful Islam Maruf **ID # 1521827042**

Syed Tofazzal Hossain **ID # 1521381642**

Faculty Advisor:

Dr. Shahnewaz Siddique

Assistant Professor

ECE Department

Spring, 2020

DECLARATION

This is to declare that no part of this report or the project has been previously submitted elsewhere for the fulfilment of any other degree or program. Proper acknowledgement has been provided for any material that has been taken from previously published sources in the bibliography section of this report.

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Tauhid Rahman

ECE Department

North South University, Bangladesh

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Ibtehaz Ahmad

ECE Department

North South University, Bangladesh

.....

Saiful Islam Maruf

ECE Department

North South University, Bangladesh

.....

Syed Tofazzal Hossain

ECE Department

North South University, Bangladesh

Approval

The Senior Design Project entitled "**3D Printer**" by TauhidRahman(ID#1510449042), Ibtehaz Ahmad (ID#1510438643) , Saiful Islam Maruf (ID#1521827042) and Syed Tofazzal Hossain(ID#1521381642) has been accepted as satisfactory and approved for partial fulfillment of the requirement of BS in CSE degree program on October , 2020.

Supervisor's Signature

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Dr. Shahnewaz Siddique
Assistant Professor
Department of Electrical and Computer Engineering
North South University
Dhaka, Bangladesh.

Department Chair's Signature

_____

Dr. Rezaul Bari
Associate Professor
Department of Electrical and Computer Engineering
North South University
Dhaka, Bangladesh.

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3D PRINTER

Abstract:

If we all try to imagine a world where the production of a given solid object would be in your home rather than some factory in china or USA which contribute heavily in global warming. Imagine a world where we can have tangible goods as well as intangible services delivered to our PC over the Internet. A future in which the everyday "atomization" of virtual objects into hard reality has turned the mass pre-production and stock -holding of a wide range of goods and spare parts into no more than an historical legacy. This sounds like a far-fetched theory to some, almost sounds like too good to be true but 3D printers can turn it into a reality. 3D printers are capable of outputting physical solid objects. This has been in practice for a two decades. For the rapid development of technology, the usage & utilization of 3D Printer in industries have increased greatly. 3D Printer has brought a revolutionary change in the field of production engineering. 3D printing is a processes in which materials are joined or solidified layer by layer under computer control to create a three-dimensional Object. 3D Printer is a highly accurate machine. 3D printer is used in both rapid prototyping and additive manufacturing**.** In this project, we will be building a low cost 3D printer using FDM model from the ground up to show everyone what it is capable of in producing quality objects. For better quality and accuracy, we will be implementing few algorithms and tricks on the 3D printer. So the idea is to show people, the true potential of a 3D printer using low cost products then everyone can understand and appreciate the advancement 3D printer can make in all fields in modern world. The use of 3D printer will only increase as we move to the future and it