Department of Electrical and Computer Engineering
North South University

SENIOR DESIGN PROJECT

Dual Axis Solar Tracking System With Reflector And PV Meter

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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' names & Signatures

1. Anisa Binta Kamal

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2. Md. Shihabul Alam

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3. Quazi Nazmus Sakib

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APPROVAL

We, **Anisa Binta Kamal (1420745043)**, **Md. Shihabul Alam (1421719043)** and **Quazi Nazmus Sakib (1320623043)**, members of EEE 499 (Senior Design) from the Electrical and Computer Engineering department of **North South University**; have worked on the project titled **"Dual Axis Solar Tracking System With Reflector And PV Meter"** under the supervision of **Dr. Mohammad Monirujjaman Khan** as a partial fulfillment of the requirement for the degree of Bachelors of Science in Engineering and has been accepted as satisfactory.

Supervisor's Signature

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Chairman's Signature

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ACKNOWLEDGEMENT

By mercy of the Almighty we have completed our senior design capstone project entitled “Title of your project”.

Foremost, we would like to express our sincere gratitude to our advisor **Dr. Mohammad Monirujjaman Khan** for his continuous support in our capstone project progress throughout the whole 499A and 499B, for his patience, motivation, enthusiasm, and immense knowledge. His guidance helped us in all the time of research, writing and completing of this project.

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ABSTRACT

The world is using up all the resources to meet the daily demands of energy and it is quite expectable that in the near future we will run out of any naturally occurring ore/mineral/petroleum. As a result, renewable energy solution has achieved a great
The world is using up all the resources to meet the daily demands of energy and it is quite expectable that in the near future we will run out of any naturally occurring ore/mineral/petroleum. Demand today to save the natural resources and also to tackle the crisis of energy. Solar energy is rapidly gaining its popularity as an important source of renewable energy. But the efficiency of solar panel is a big factor. While the sun keeps following a parabolic path throughout the day, the panels which are used in our country are generally fixed to a pole or the roof of the house and hence, throughout the day, the efficiency decreases significantly. In this thesis, we have constructed a 2 axis solar tracker which can track the sun throughout the day to obtain the maximum efficiency.
This project discuss the design and construction of a prototype for solar tracking system that has a single axis of freedom. Light Dependent Resistors (LDRs) are used for sunlight detection.