

A PRELIMINARY REPORT ON
SOLAR POWER PREDICTION USING RECURRENT NEURAL NETWORK

SUBMITTED TO THE SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE
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FOR THE AWARD OF THE DEGREE

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2018 -2019



CERTIFICATE

This is to certify that the project report entitled

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ABSTRACT

The non-renewable sources of energy are limited and will get exhausted eventually. Looking at the current need of electric power and its fulfillment, the non-conventional way of generating this energy has become essential.

Climate change and energy crisis have motivated us to make use of renewable non-conventional source of energy. This paper discusses the theoretical assumptions and design aspects of developing a Model which will predict the solar power generation beforehand.

The paper aims at promoting the use of renewable source of energy by developing a model which will accurately predict the solar power generation.

The suggested model uses Recurrent Neural Network Machine Learning (ML) Algorithms to predict the power generation which will be beneficial to both Industries and Residents.

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| | | Published Paper and Certificates: <ol style="list-style-type: none"> 1. Sunil Rathod, Aniket, Mrigais Pandey, Dhananjay Jha, Harjit Singh, “Power forecast of Solar Panels using Machine Learning Techniques: A Survey” in IJSART- Volume 4 Issue 10 – October 2018 2. Sunil Rathod, Aniket, Mrigais Pandey, Dhananjay Jha, Harjit Singh, “Solar Power Prediction using Recurrent Neural Network” in IJRASET- Volume 7 Issue 5 – May 2019 | 53 |

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ABBREVIATION

ILLUSTRATION

| | |
|------|--------------------------|
| ML | Machine Learning |
| RNN | Recurrent Neural Network |
| LSTM | Long Short Term Memory |

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