# PREDICTING ENERGY OUTPUT OF WIND TURBINE BASED ON WEATHER CONDITION

**Literature survey:**

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| **SI.NO** | **TITLE** | **ABSTRACT** | **MERITS** | **DEMERITS** |
| 1. | Predicting The Energy Output Of Wind Farms Based On Weather Data: Important Variables And Their Correlation | The energy output of the wind farm is highly depend on the weather conditions present at the wind fram. | Wind energy output can be predicted from publicly available weather data with accuracy at  best 80% | Default settings to run the symbolic regression experiments as well as variable importance. |
| 2. | Wind power forecasting based on time series model using deep learning algorithms. | Wind energy is created due to uneven heating of the earth surface  and coriolis acceleration | To minimize risk and to improve performance. | Concerning to predict difficult operation problems. |
| 3. | Using machine learning to predict wind turbine power output | In this work, new aerostructural simulations of a generic 1.5 MW turbine are used to rank atmospheric influences on power output. | Simulations of a utility-scale wind turbine have been used to develop a database | Application of the data to wind turbine deployment sites does not require any new instrumentation compared to what is currently  used. |

**Reference link:**

<https://hpi.de/friedrich/docs/paper/RE1.pdf> <https://iopscience.iop.org/article/10.1088/1748-9326/8/2/024009/pdf>