PREDICTING ENERGY OUTPUT OF WIND TURBINE BASED ON WEATHER CONDITION

Literature survey:

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