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(57) Abstract :

TITLE: METHOD, SYSTEM AND APPARATUS FOR FORECASTING SOLAR IRRADIANCE ON PHOTOVOLTAIC PANELS
ABSTRACT A method (201) of forecasting solar irradiance on a photovoltaic (PV) panel comprising: collecting (202) primary dataset from a region of interest, normalising (204) data in the collected dataset, segregating (206) plurality of variables from the normalised data into an input and output categories, employing (208) a primary regressor for predicting a first set of values, initialising (210) a secondary regressor with a relative error dataset obtained from the first set of values, deploying (212) a reinforcement learning based RNN for kernel selection of the secondary regressor used to check for error mapping, and predicting (214) overall outcome in real-time using combination of the primary and the secondary regressors output, wherein the method reduces overall memory requirements by minimizing number of feature variables in the input dataset and provides flexibility in prediction interval with increased accuracy of the forecasted values.

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