

## Wind Speed Prediction Using Passive Aggregation Artificial Intelligence Model

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**Abstract :** Wind energy is a fluctuating energy source unlike conventional power plants, thus, it is necessary to accurately predict short term wind speed to integrate wind energy in the electricity supply structure. To do so, we present a hybrid artificial intelligence model of short term wind speed prediction based on passive aggregation of the particle swarm optimization and neural networks. As a result, improvement of the prediction accuracy is obviously obtained compared to the standard artificial intelligence method.

**Keywords :** artificial intelligence, neural networks, particle swarm optimization, passive aggregation, wind speed prediction

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