

# Package ‘WeightedEnsemble’

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**Type** Package

**Title** Weighted Ensemble for Hybrid Model

**Version** 0.1.0

**Author** Dr. Ranjit Kumar Paul [aut],  
Dr. Md Yeasin [aut, cre]

**Maintainer** Dr. Md Yeasin <yeasin.iasri@gmail.com>

**Description** The weighted ensemble method is a valuable approach for combining forecasts. This algorithm employs several optimization techniques to generate optimized weights. This package has been developed using algorithm of Armstrong (1989) <[doi:10.1016/0024-6301\(90\)90317-W](https://doi.org/10.1016/0024-6301(90)90317-W)>.

**License** GPL-3

**Encoding** UTF-8

**Imports** stats, metaheuristicOpt

**RoxygenNote** 7.2.1

**NeedsCompilation** no

**Repository** CRAN

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## Description

Weighted Ensemble for Hybrid Model

**Usage**

```
WeightedEnsemble(df, Method = "PSO", test_data = NULL, forecast = NULL)
```

**Arguments**

df	Data set (training result) with first column as observed value
Method	Method of optimization
test_data	Test result
forecast	Forecast result

**Value**

- Weights: Optimized weight
- Optimized\_Result: Optimized result

**References**

J. S. Armstrong. Combining forecasts: The end of the beginning or the beginning of the end? *International Journal of Forecasting*, 5(4):585–588, 1989.

**Examples**

```
y1<-rnorm(100,mean=100,sd=50)
y2<- rnorm(100,mean=100,sd=50)
y3<- rnorm(100,mean=100,sd=50)
y4<-rnorm(100,mean=100,sd=50)
y<-rnorm(100,mean=100,sd=50)
data<-cbind(y,y1,y2,y3,y4)
OptiSemble<-WeightedEnsemble(df=data)
```

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