

Results of machine learning without features

Andreas Borup Joergensen, Mette Koch Moeller, Robert Hostrup

Contents

Downloading the packages

```
library(magrittr) #For advanced piping  
library(tidyverse)
```

Downloading the data

```
Vestas <- read_csv("D:/Hyper_test/Vestas_single/Results_Vestas_Single") %>% select(Model, RMSE, MAPE)  
Genmab <- read_csv("D:/Hyper_test/Genmab_single/Results_GenmanU") %>% select(Model, RMSE, MAPE)  
Carlsberg <- read_csv("D:/Hyper_test/Carlsberg_single/Results_Carlsberg_Single") %>% select(Model, RMSE, MAPE)  
JyskeBank <- read_csv("D:/Hyper_test/JyskeBank_single/Results_JyskeBank_Single") %>% select(Model, RMSE, MAPE)  
MaerskB <- read_csv("D:/Hyper_test/MaerskB_single/Results_MaerskB_Single") %>% select(Model, RMSE, MAPE)
```

The RMSE for each model and stock

```
FALSE # A tibble: 7 x 6  
FALSE   Model   Vestas Genmab Carlsberg JyskeBank MaerskB  
FALSE   <chr>   <dbl>  <dbl>    <dbl>    <dbl>    <dbl>  
FALSE 1 ANN      8.05   29.2     7.00     4.72    177.  
FALSE 2 RNN     12.0   41.0     9.81     6.33    264.  
FALSE 3 LSTM     12.2   44.6    11.6     6.63    287.  
FALSE 4 biLSTM   14.9   57.8    12.4     8.59    288.  
FALSE 5 GRU      12.0   41.0    10.8     6.28    260.  
FALSE 6 biGRU    12.6   48.3    10.4     7.67    265.  
FALSE 7 Average  11.9   43.6    10.3     6.70    257.
```

The MAPE for each stock and model

```
FALSE # A tibble: 6 x 7  
FALSE   Stock      ANN   RNN   LSTM biLSTM   GRU biGRU  
FALSE   <chr>   <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>  
FALSE 1 Vestas  1.44  2.03  2.04  2.48  2.00  2.14  
FALSE 2 Genmab  1.75  2.52  2.84  4.04  2.48  3.30  
FALSE 3 Carlsberg 0.707 1.02  1.19  1.32  1.13  1.10  
FALSE 4 JyskeBank 1.02  1.49  1.59  2.02  1.45  1.86  
FALSE 5 MaerskB  1.75  2.51  2.82  2.84  2.52  2.56  
FALSE 6 Average  1.33  1.91  2.09  2.54  1.92  2.19
```