A diagram of a data processing process

Description automatically generated

Solution

MLP / sample 10s.median() / in-sample 20220103-20230214 / out-of-sample 20230214-20230331 / Use mutual info from sklearn to select 3 variables ['X192', 'X230', 'X119']

Y1 (between 9:45 am and 11:00 am) Load MLP model and forecast

A graph with blue and orange lines

Description automatically generated

MLP / sample 10s.median() / in-sample 20220103-20230214 / out-of-sample 20230214-20230331 / Use mutual info from sklearn to select 5 variables ['X177', 'X233', 'X232', 'X230', 'X52']

Y2 (between 9:45 am and 11:00 am) Load MLP model and forecast

A blue and orange graph

Description automatically generated

MLP / sample 10s.median() / in-sample 20220103-20230214 / out-of-sample 20230214-20230331 / Use mutual info from sklearn to select 5 variables ['X233', 'X232', 'X313', 'X203', 'X205']

Y1 (between 11:00 am and 14:00 pm) Load MLP model and forecast

A blue and orange line graph

Description automatically generated

MLP / sample 10s.median() / in-sample 20220103-20230214 / out-of-sample 20230214-20230331 / Use Lasso to select 5 variables ['X65', 'X182', 'X76', 'X183', 'X88']

Y2 (between 11:00 am and 14:00 pm) Load MLP model and forecast

A blue and orange line graph

Description automatically generated

MLP / sample 10s.median() / in-sample 20220103-20230214 / out-of-sample 20230214-20230331 / Use r value from sklearn to 9 select variables ['X78', 'X31', 'X160', 'X32', 'X184', 'X185', 'X158', 'X34', 'X228']

Y1 (between 14:00 pm and 16:00 pm) Load MLP model and forecast

A graph of a sound wave

Description automatically generated

MLP / sample 10s.median() / in-sample 20220103-20230214 / out-of-sample 20230214-20230331 / Use mutual info from sklearn to select 7 variables ['X120', 'X313', 'X174', 'X175', 'X176', 'X177', 'X202']

Y2 (between 14:00 pm and 16:00 pm) Load MLP model and forecast

A blue and orange line graph

Description automatically generated