UEA - Universidade do Estado do Amazonas

PÓS-Gradução Desenvolvimento de Software em Alto Desempenho

Tipos de Dados Iniciais:.

Dataframe.info()

Column - Types

date - object

Usage_kWh - float64

Lagging_Current_Reactive.Power_kVarh - float64

Leading_Current_Reactive_Power_kVarh - float64

CO2(tCO2) - float64

Lagging_Current_Power_Factor - float64

Leading_Current_Power_Factor - float64

NSM - int64

WeekStatus - object

Day_of_week - object

Load_Type - object

Dataframe.head()

01/01/2018 00:15	3.17	2.95	0.0	0.0	73.21	100.0	900	Weekday	Monday	Light_Load
01/01/2018 00:30	4.0	4.46	0.0	0.0	66.77	100.0	1800	Weekday	Monday	Light_Load
01/01/2018 00:45	3.24	3.28	0.0	0.0	70.28	100.0	2700	Weekday	Monday	Light_Load
01/01/2018 01:00	3.31	3.56	0.0	0.0	68.09	100.0	3600	Weekday	Monday	Light_Load
01/01/2018 01:15	3.82	4.5	0.0	0.0	64.72	100.0	4500	Weekday	Monday	Light_Load

Dados após tratamento:.

Dataframe.info()

Index

date - datetime64[ns]

Column - Types

Usage_kWh - float64

 $Lagging_Current_Reactive.Power_kVarh - float64$

Leading_Current_Reactive_Power_kVarh - float64

CO2(tCO2) - float64

Lagging_Current_Power_Factor - float64

Leading_Current_Power_Factor - float64

NSM - int64

WeekStatus - int64

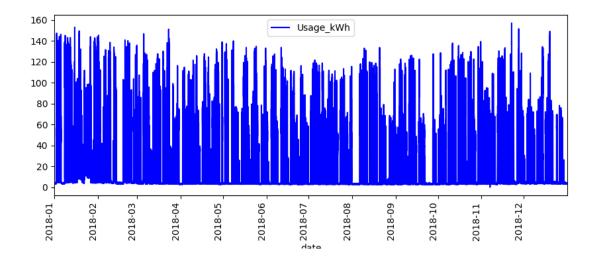
Day_of_week - int64

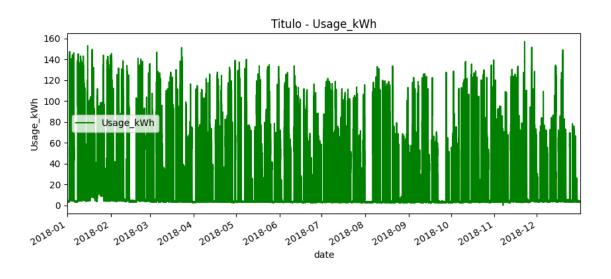
Load_Type - int64

Month - int64

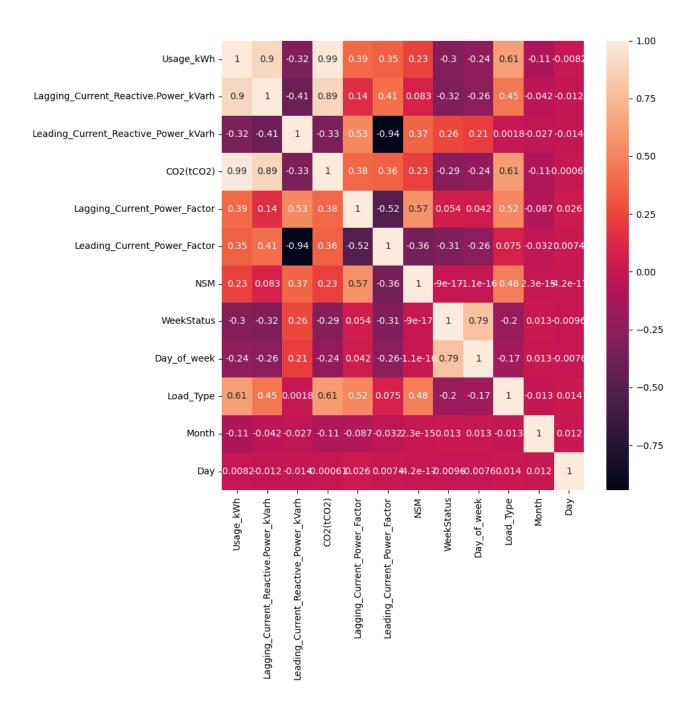
Day - int64

Consumo de Energia (kWh)





Heatmap - Gráfico de Correlação



Heatmap - Gráfico de Correlação

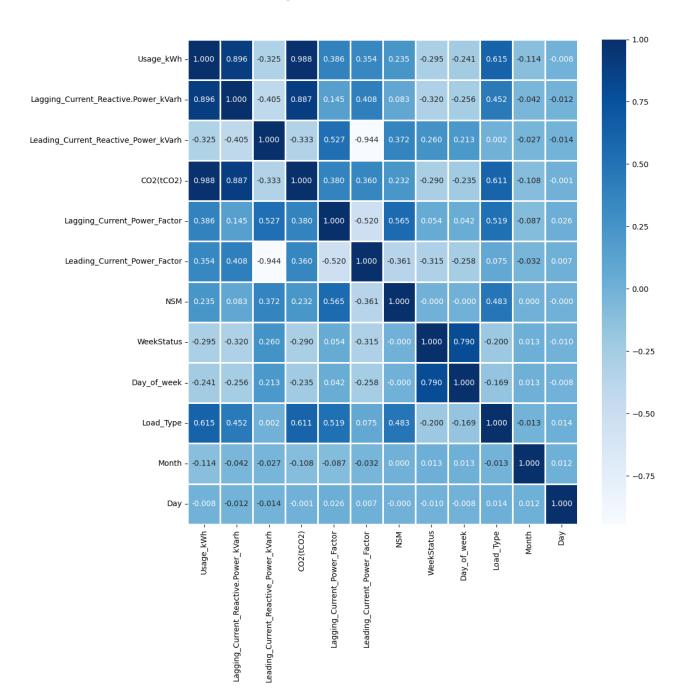


Gráfico - Test Set

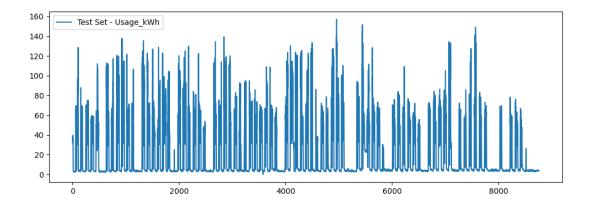


Gráfico - Training Set

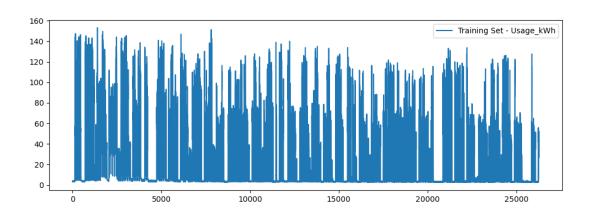


Gráfico - Boxplot

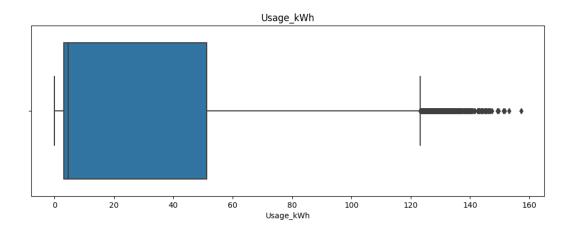


Gráfico - Boxplot - Day of Week

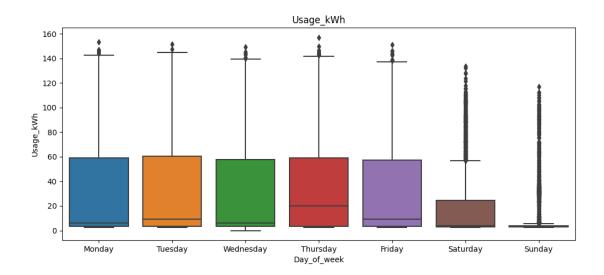


Gráfico - Training data prediction

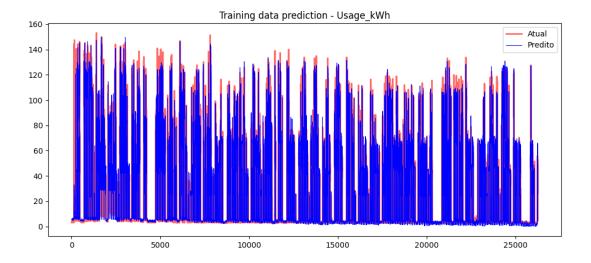


Gráfico - Test data prediction

