### **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

#### 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

#### Index

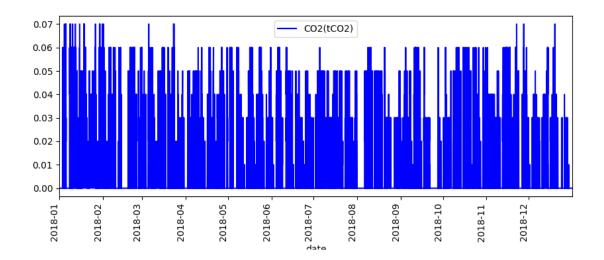
date - datetime64[ns]

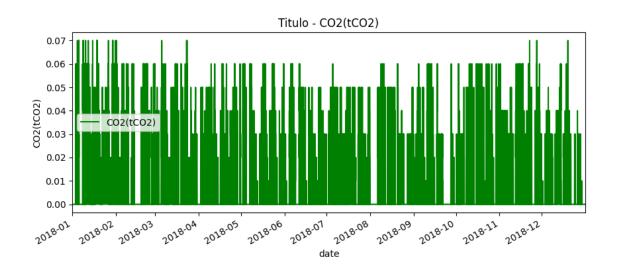
Day\_of\_week - object Load\_Type - object

Column - Types
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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

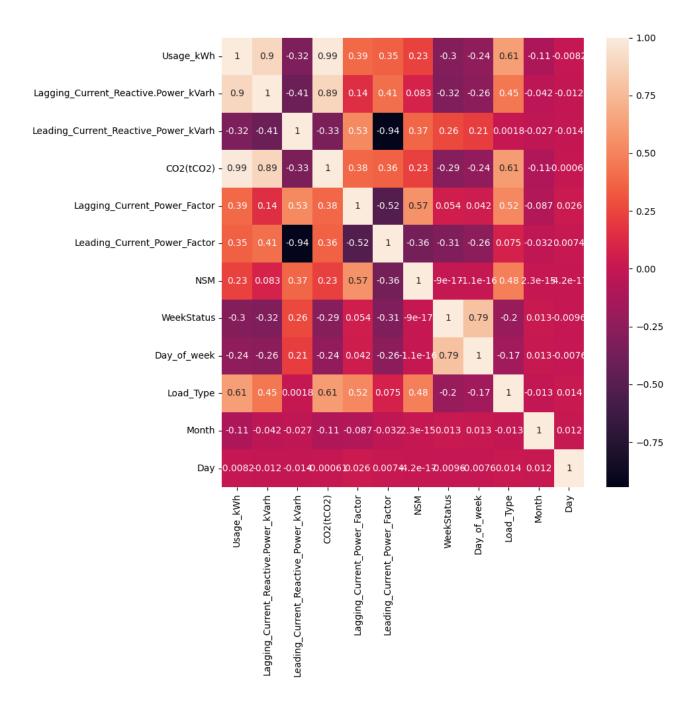
Dados após tratamento:.

## Emissão de CO<sup>2</sup> (ppm)

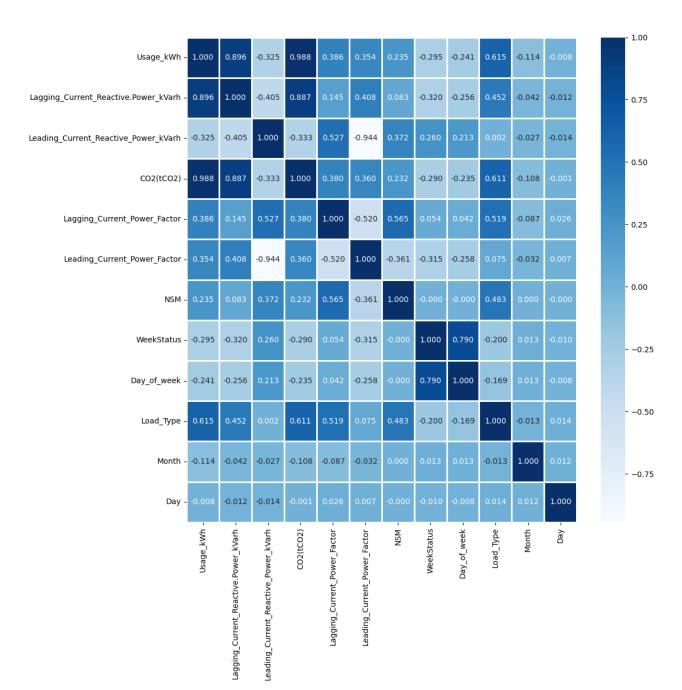




### Heatmap - Gráfico de Correlação



### Heatmap - Gráfico de Correlação



## Gráfico - Test Set

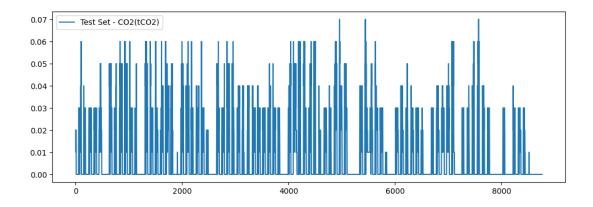
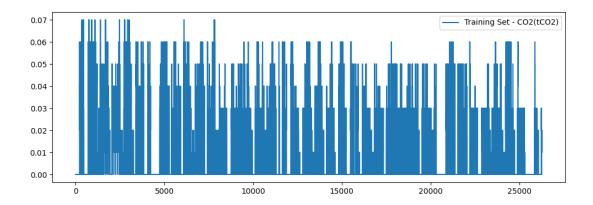


Gráfico - Training Set



## Gráfico - Boxplot

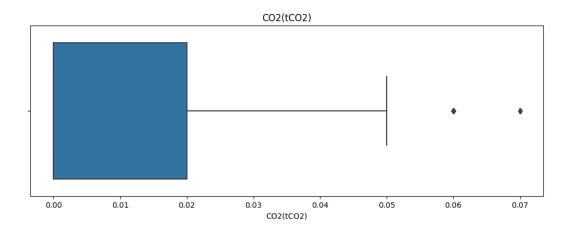
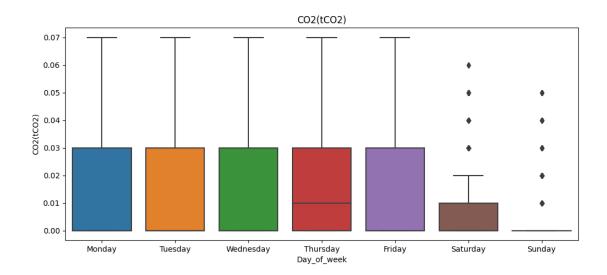


Gráfico - Boxplot - Day of Week



## Gráfico - Training data prediction

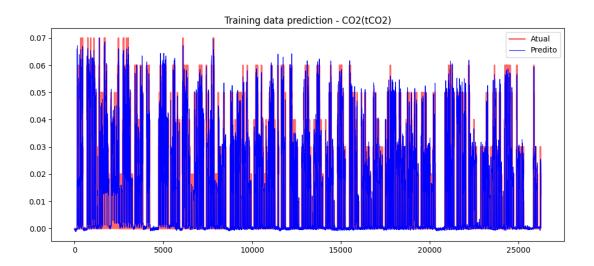


Gráfico - Test data prediction

