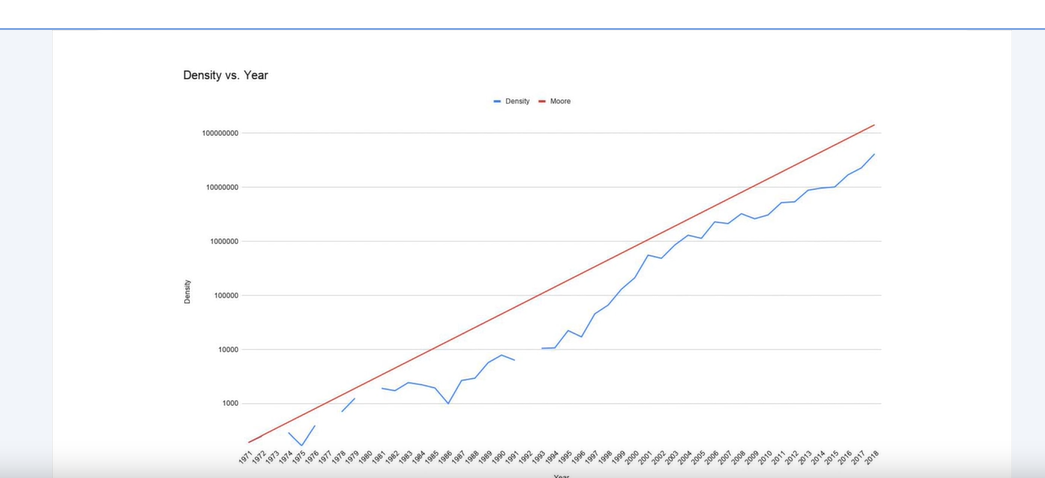
**Time Series – Forecasting**

**Common Patterns**

**Trend (Tendência)**



**Sazonality (sazonalidade)**

A graph showing a wave

Description automatically generated

**White Noise**

A graph showing a sound wave

Description automatically generated

**Autocorrelation**

A graph on a white background

Description automatically generated

A graph showing a trend

Description automatically generated with medium confidence

With machine Learning we can predict patterns but not the noise. Of course we need to becarful with big example.

A graph on a screen

Description automatically generated

**Prediction – How can we build our baseline?**

A screen shot of a graph

Description automatically generated

**Naïve Forecasting = The next value is gonna be the same as the actual value.**

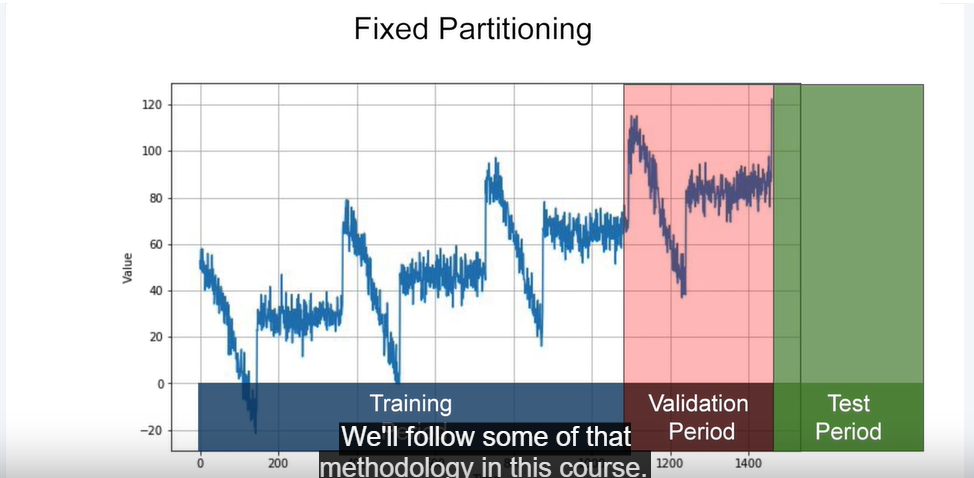
A graph showing a wave of a wave

Description automatically generated with medium confidence

**Performance – How can we measure?**

A screen shot of a graph

Description automatically generated



A graph of a training

Description automatically generated with medium confidence

**Metrics –**

A screen shot of a computer

Description automatically generated

A graph with blue lines and white text

Description automatically generated

A graph showing a sound wave

Description automatically generated with medium confidence

**Preparing fetures and labels**

**Feature X – Window size**

**Target Y – Value to predict**

A screenshot of a graph

Description automatically generated

**Trailing Window (Média Móvel Simples)**

**Centered Moving Average (Média Móvel Centralizada) – better for trends**

**Statistical Models – Forecasting**