Time Series Glossary

Term	Definition
Time Series	A sequence of data points collected over time, often at regular intervals.
Trend	The general direction (upward, downward, or flat) of the data points in a time series over time.
Seasonality	The systematic, calendar-related movement in a time series that is often repeated with a fixed and known period.
Forecast	A prediction of a future value of a variable based on an analysis of its past behavior.
Model	A mathematical function or algorithm used to describe the pattern in a time series and make forecasts.
Residual	The difference between an observed value and the value predicted by a model.
Autocorrelation	The correlation between a time series and a lagged version of itself. This measures the degree of dependence between observations in a time series.
Additive Model	A time series model that expresses the data as the sum of trend, seasonal, and random components.
Exponential Smoothing	A type of forecasting model that applies weighting factors that decrease exponentially as observations get older.
ARIMA Model	An "Auto-Regressive Integrated Moving Average" model used to analyze and forecast time series data.
Stationarity	A property of a time series where the statistical properties (mean, variance, autocorrelation, etc.) are constant over time.
Nonstationarity	A property of a time series where the statistical properties change over time, often due to the presence of a trend or seasonality.