Cheat sheet Tensorflow Probability Structural Time Series

Tensorflow Probability (TFP)

TensorFlow Probability (TFP) is a Python library built on TensorFlow that makes it easy to combine probabilistic models and deep learning.

Structural Time Series (STS)

A framework where a time series is decomposed into at least 3 components: Trend, Seasonality, and External Regressors. Facebook Prophet also decomposes into Holiday effects.

TFP STS

A forecasting model that decomposes the time series in Trend, Seasonalities, Exogenous Impacts, and Autoregressive terms.

Hamiltonian Monte Carlo

Method for obtaining a sequence of random samples that converge to being distributed according to a target probability distribution for which direct sampling is difficult.

Bayesian Inference

Bayesian inference is a method of statistical inference in which Bayes' theorem is used to update the probability for a hypothesis as more evidence or information becomes available.

