TIME SERIES FORECASTING & DATA VISUALIZATION

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Abstract

Prophet is a time series library developed by Facebook, which utilizes a Bayesian based curve fitting method to forecast the time series data. The cool thing about Prophet is that it doesn't require much prior knowledge or experience of forecasting time series data since it automatically finds seasonal trends beneath the data and offers a set of 'easy to understand' parameters. Hence, it allows non statisticians to start using it and get reasonably good results that are often equal or sometimes even better than the ones produced by the experts.

Data visualization is an extremely important part of data analysis. For getting the best result in understanding the hidden patterns and layers in the data, we need the visualization techniques. With use of statistical graphical techniques we will explore in different kinds of data, which can help us in effectively interpreting and understanding the data.

We can visualize our raw data in interactive plots or Non-interactive plots. Matplotlib and Seaborn are robust Non-interactive plotting libraries which allow us to have control over every component of our graph. With these libraries we can create simple yet powerful visualizations.

Plotly and Bokeh allow us to create interactive, web ready and dynamic plots. They are JavaScript based data visualization tools and offering to its users a great level of interactivity.

Biography:

Mohammadtaghi Sarebanhassanabadi Post-Doctoral (PDF) in cardiac critical care.An educator with 30+ years' experience that includes delivering English language coursework as per CBSE and ICSE curricu- lums to middle and senior classes, curriculum planning, teach- er training and school administration. Through my journey, I have facilitated various student exchange programmers, led student groups for such programmers to USA and Singapore. I have also been coordinating the ISA award, British Council since 2009.

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