Web Traffic Forecasting

Time Series Analysis

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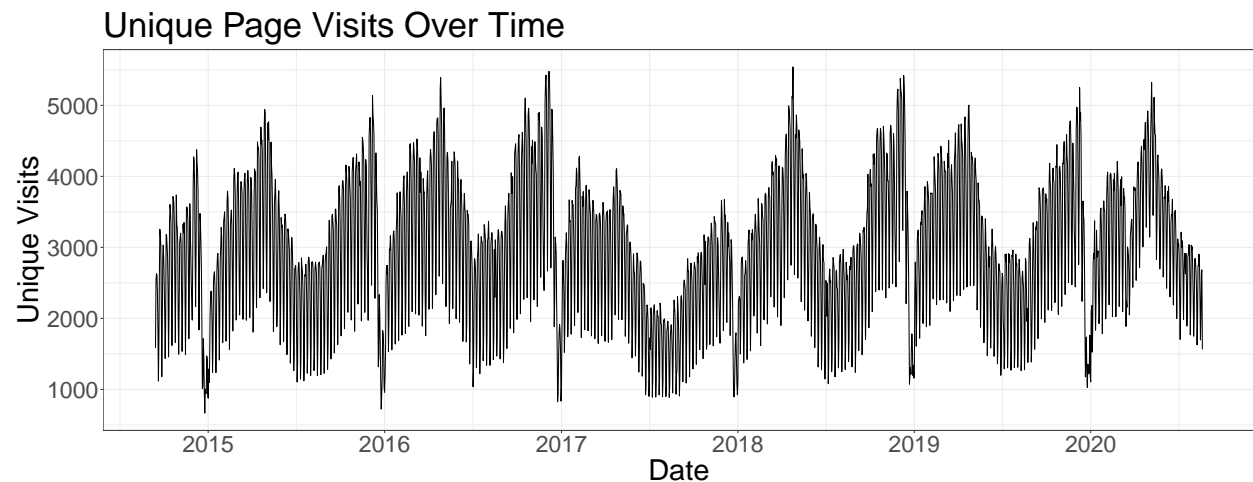   – Major:
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Introduction

Why web traffic forecasting is important:

- optimize web server allocation
- helps enterprises plan their IT infrastructure strategy
- facilitates seamless end user experience and satisfied customers

About the dataset:

- contains 5 years of daily time series data of user visits to an academic website
- Recorded variables:
  - Number of page loads
  - Number of unique visitors (unique visitors are identified through IP address within a 6 hour window)
  - Number of returning visitors (identified by cookies if accepted)
  - Number of first-time visitors
- Hence number of unique visitors is the number of returning visitors + number of first-time visitors.
- The data was collected through a traffic monitoring service known as StatCounter.

Unique Page Visits Over Time

- strong time of year effect