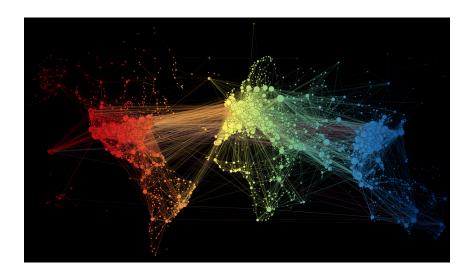# Time Series Project Proposal

Web Traffic Time Series Forecasting

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• Description

We decided to work on one of the most burning time series problem of today's day and era, "predicting web traffic". We believe that this forecasting can help website servers a great deal in effectively handling outages. The technique we implemented can be extended to diverse applications in financial markets, weather forecasts, audio and video processing. Not just that, understanding your website's traffic trajectory can open up business opportunities too!

• Dataset

The dataset consists of 145k time series representing the number of daily page views of different Wikipedia articles, starting from July 1st, 2015 up until September 10th, 2017 (804 data points). The goal is to forecast the daily views between September 13th, 2017 and November 13th, 2017 (64 data points) for each article in the dataset. Traditional moving averages, ARIMA based techniques

• Proposed approach

- Traditional moving averages, Holtwinters, ARIMA based techniques and other techniques learned in the class

- **Would also try to do:** Recurrent Neural Networks — Long short-term memory (LSTM)