

BeatCoin

Predicting Bitcoin price and daily price change using sentiment analysis of Twitter



March 5, 2020

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Overview

Part 1: Using Neural Networks to predict the sentiment (negative, neutral, positive) of Bitcoin related Tweets.

Part 2: Using the predicted sentiments to analyse the bitcoin price change.



PART 1: SENTIMENT ANALYSIS

What is Sentiment Analysis



How it works

“Bitcoin is
amazing!”

Numberize

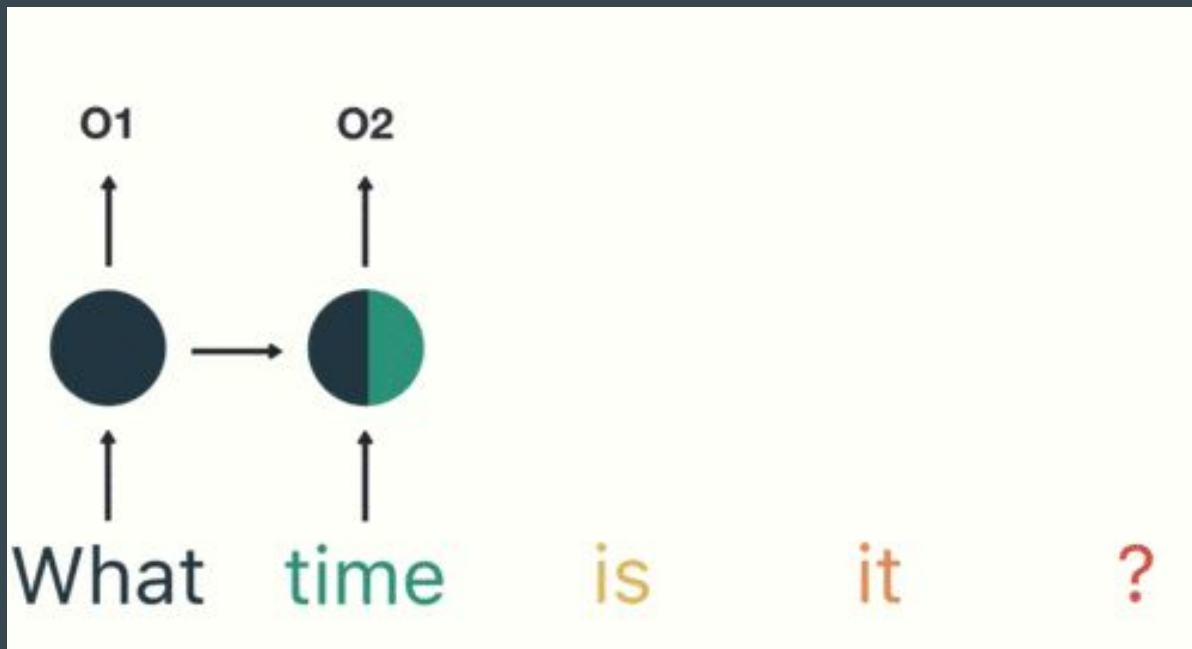
“20, 3, 34, 1”

Classification
(deep learning)

Positive

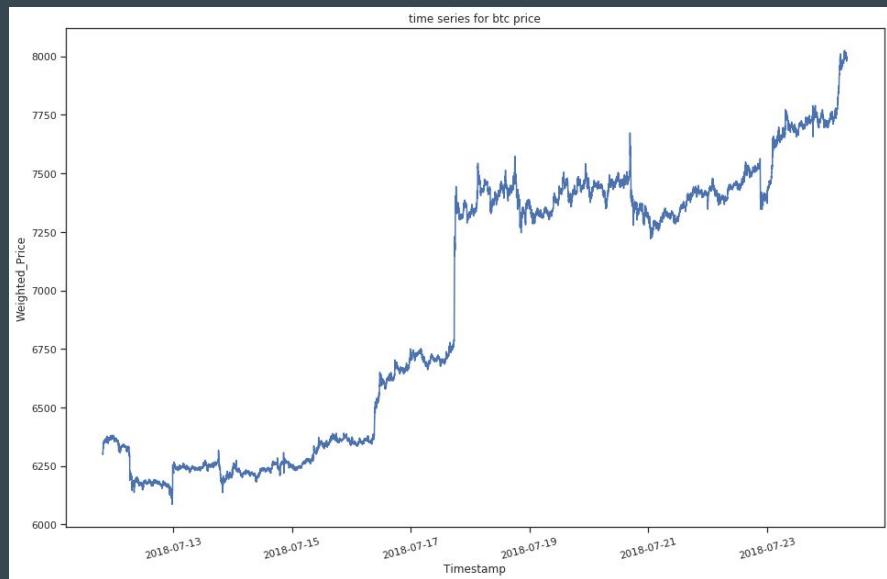
Accuracy: 98%

How does Deep Learning work

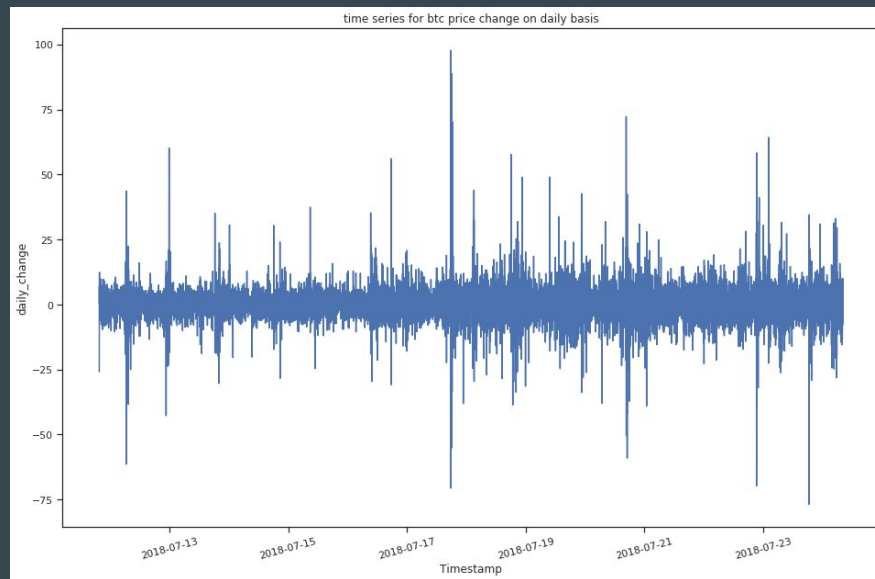


PART 2: TIME SERIES PREDICTION

Time series charts



Bitcoin price during
2018.07



Change in bitcoin price
during 2018.07

Models

ARIMA Model

Facebook Prophet

Deep Learning model



Summary

Reasons for low accuracy:

1. Bitcoin price is affected by many different factors, twitter is just one of them.
2. Need more information from other social media posts.
3. Need more data from other languages (Japanese, Chinese etc)

Thank you