REPRORODUCIBLE RESEARCH WITH BITCOIN FORECASTING

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2023-09-05

BITCOIN TIME SERIES

Bitcoin is the longest running and most well known cryptocurrency, first released as open source in 2009 by the anonymous Satoshi Nakamoto. Bitcoin serves as a decentralized medium of digital exchange, with transactions verified and recorded in a public distributed ledger (the blockchain) without the need for a trusted record keeping authority or central intermediary. Transaction blocks contain a SHA-256 cryptographic hash of previous transaction blocks, and are thus "chained" together, serving as an immutable record of all transactions that have ever occurred. As with any currency/commodity on the market, bitcoin trading and financial instruments soon followed public adoption of bitcoin and continue to grow.

I will also diivide my document into two parts

- Data exploration. -Time series analysis.

Taking my time series further i will use

-ARIMA -SARIMA -PROPHET -To further the study my data is upto date to 2023 august.

THE NEWLY ADDED MODELS From my analysis am trying to improve the auhors work by adding the following two new models. 1. SARIMA 2. WAVENET MODEL