Cyrpto Currency Price Predictor

# **Name Brett Sutow Semester Summer 2021 GitHub Portfolio:** <https://bsutow.wixsite.com/bsutow>

<https://github.com/bsutow/BSutowPortfolio>

# Which Domain?

What domain is this data going to come from? Please list 10 references (with a brief annotation) to use to make sense of what you’re doing with these data.

[***https://www.youtube.com/watch?v=HiDEAWdAif0***](https://www.youtube.com/watch?v=HiDEAWdAif0)

***The above link provides a good understanding how to predict ETH pricing. It allows me to gain a good basis to work with the other crypto currency’s. It also puts it very simple and for my easy understanding.***

[***https://www.youtube.com/watch?v=OcpAkACOwW0***](https://www.youtube.com/watch?v=OcpAkACOwW0)

***The link above also looks at predicting and understanding ETH pricing through machine learning. It again provides me with the understanding necessary to work through this project. It gives good basis to work through.***

[***https://www.youtube.com/watch?v=FMKnvsKoQxE***](https://www.youtube.com/watch?v=FMKnvsKoQxE)

***The above link gives a good understanding how to work with Doge Coin, which is a newer crypto currency. It provides a simple understanding how to work through Python and use machine learning. It gives a good understanding about investment strategy for Doge Coin.***

[***https://daviescoin.io/blog/a-short-history-of-cryptocurrencies.html#:~:text=In%201983%2C%20the%20American%20developed,was%20coined%20was%20in%201998***](https://daviescoin.io/blog/a-short-history-of-cryptocurrencies.html#:~:text=In%201983%2C%20the%20American%20developed,was%20coined%20was%20in%201998)***.***

***The above link gives a little bit of history on crypto currency. This will allow me to provide a good basis of it’s importance and why I want to predict the price movement.***

[***https://levelup.gitconnected.com/predicting-bitcoins-price-with-recurrent-neural-networks-a27b4d2d839***](https://levelup.gitconnected.com/predicting-bitcoins-price-with-recurrent-neural-networks-a27b4d2d839)

***The above link gives details about utilizing neural networks to predict bitcoin. I think this is a good understanding how to work with bitcoin pricing. It allows me a basis to work with this crypto currency.***

[***https://medium.com/analytics-vidhya/predicting-bitcoin-prices-with-lstm-19e578d389c4***](https://medium.com/analytics-vidhya/predicting-bitcoin-prices-with-lstm-19e578d389c4)

***This article gives a breakdown on how to utilize the LSTM model to predict Bitcoin pricing. As I have worked once before with LSTM modelling this gives me some details how to work through the predicting process for crypto.***

[***https://www.analyticsvidhya.com/blog/2021/05/bitcoin-price-prediction-using-recurrent-neural-networks-and-lstm/***](https://www.analyticsvidhya.com/blog/2021/05/bitcoin-price-prediction-using-recurrent-neural-networks-and-lstm/)

***This is another article to reference for price predictors. I want to reference as many as possible that way I can truly predict the various crypto currency prices. This gives more understanding of neural networks.***

[***https://towardsdatascience.com/cryptocurrency-prediction-with-lstm-4cc369c43d1b***](https://towardsdatascience.com/cryptocurrency-prediction-with-lstm-4cc369c43d1b)

***This goes into details how to use the LSTM model again when predicting crypto currency prices. It allows for more detailed understanding of the prediction process.***

[***https://www.forbes.com/sites/billybambrough/2021/07/08/crypto-price-warning-goldman-sachs-issues-surprise-future-of-bitcoin-and-ethereum-prediction/?sh=39dd300942ea***](https://www.forbes.com/sites/billybambrough/2021/07/08/crypto-price-warning-goldman-sachs-issues-surprise-future-of-bitcoin-and-ethereum-prediction/?sh=39dd300942ea)

[***https://www.news18.com/news/business/bitcoin-to-fall-ether-to-rise-what-analysts-say-about-crypto-future-3941006.html***](https://www.news18.com/news/business/bitcoin-to-fall-ether-to-rise-what-analysts-say-about-crypto-future-3941006.html)

***The final two links provided above discuss the future of crypto currency. This is a good reference point for discussing the future of crypto and investing. I think this is good for the final presentation as it will provide something to base predictions off of.***

# Which Data?

What is the dataset you’ll be examining? Please provide a codebook if there is one or a link to the dataset as well as a detailed description.

[***https://coinmarketcap.com/***](https://coinmarketcap.com/)

[***https://www.nasdaq.com/market-activity/cryptocurrency***](https://www.nasdaq.com/market-activity/cryptocurrency)

***I will be pulling the most current crypto data from one of the above links. I haven’t decided yet which to use, but I am leaning toward the Nasdaq as it is typically more accurate.***

# Research Questions? Benefits? Why analyze these data?

How are you proposing to analyze this dataset? This is about your approach. Here, you’ll be proposing your research questions as well as justifications for why you’d offer these data in this way.

***Do we have the ability to accurately predict crypto movement? Can we improve our investment strategy through the use of predictive analytics? What does the future of investing look like when using crypto?***

# What Method?

What methods will you be using? What will those methods provide in terms of analysis? How is this useful?

***For this study I will be utilizing a predictive analytics method through Python. Right now I am thinking that the LSTM model may be the best to utilize. I will work through other methods as well to see what I think works best for this study. I will also utilize Tableau for the visuals.***

# Potential Issues?

What challenges do you anticipate having? What could cause this project to go off schedule?

***The main issue that may come from this is the fact that the crypto currency market is extremely volatile. This means at any moment a price can increase or decrease by a significant amount. Due to this it may cause problems with the predictive method.***

# Concluding Remarks

Tie it all together. Think of this section as your final report’s abstract.

***Overall, the goal of this study will to be the improvement of investment strategy. Through the usage of predictive models we could better and more safely create investments. Thus, getting ahead of various trends and improving our financial success. We can also gain a better understanding of the future movement of crypto currency. As someone who is interested in investments this is a study that will create a wealth of knowledge.***