**ABSTRACT**

1. About bitcoin and bitcoin price prediction.

2. About our approach.

3. Previous approaches to solve the problem.

4. How is our approach different.

5. 1 line about our results.

**INTRODUCTION**

1. About bitcoin and its price volatility.

2. Discuss about the complexity of this problem.

3. Some explanation about our approach and how is it better than all the previous work.

**RELATED WORK**

1. Discuss about the previous work done in detail.

2. Talk about all papers and codes we have referenced.

**METHODOLOGY**

1. Univariate time-series analysis using time2vec using transformer.

2. Discuss about this in detail.

3. Include the mathematics behind the algorithm.

4. Make a diagram in draw.io about the architecture.

5. Discuss about the data using diagrams drawn during data analysis.

**DATA**

1. Dataset - FREE HISTORICAL DATA from <https://www.cryptodatadownload.com/data/>.

2. Discuss about the website and the volatility in the data.

PREPROCESSING

1. Discuss about the preprocessing – local outlier factors and median replacement based on IQR score.

2. Power transformation – e ki power wala.

3. Include diagrams – plots from pandas, matplotlib, etc.

4. About univariate time series analysis – why multivariate is not feasible.

**MACHINE LEARNING MODEL**

1. About the model and concepts used – univariate time series, transformers, lstm.

2. Explain the architecture, hypertuning of the parameters.

**RESULTS**

1. Discuss about the evaluation metrics.

2. Include the equations for these metrics.

3. Explain our results and the values (loss, accuracy) obtained.

4. Include diagrams.

**CONCLUSION**

1. About future work that can be done.

2. Improvements which can help getting a more accurate model.

3. Talk about our results (how they are satisfactory when compared to the previous works).