



**Ahmedabad
University**

CSE523: Machine Learning

Weekly Report-7

Submitted to: Prof Mehul Raval

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**Group No.4
Optimizers**

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Work done this week:

- Added existing approaches, models and research work published in the domain of volatility prediction in the presentation slides.
- Incorporating the suggestions given at the time of presentation, we further read on using ARIMA model on our dataset.
- ARIMA is an autoregressive model. It tends to forecast the non-stationary data with high accuracy.
- This model gives higher preference to recent values in contrast to older values.
- Testing ARIMA on the Optiver dataset.

Work to be done next week:

- Read about Light GBM and its use in volatility prediction.
- Try and test Light GBM model on our dataset.