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▼ Generative Adversarial Network for Stock Market price Prediction

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/340a0ba1-0e4c-4078-ba89-7cae3c9d52f5/26259829.pdf

Github: CS230

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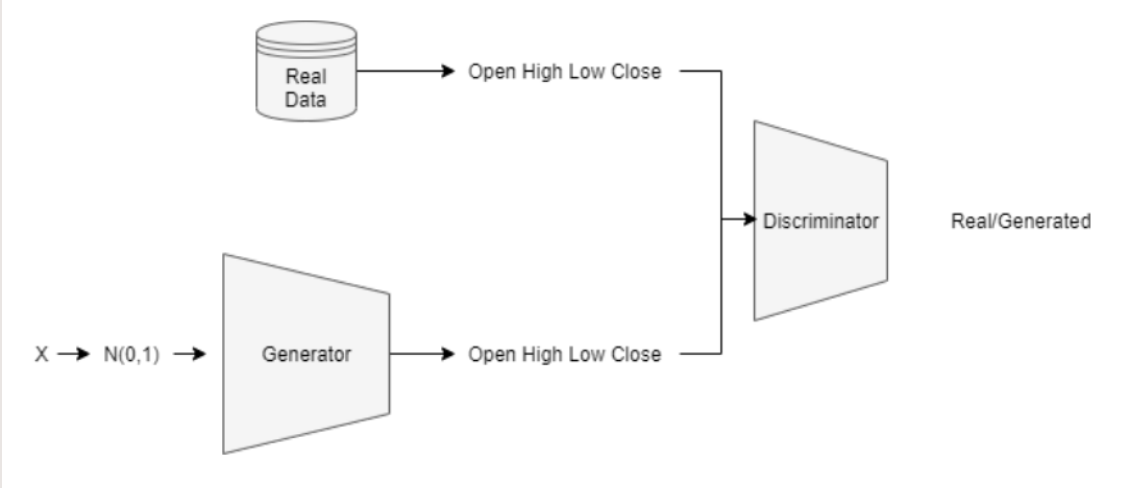
Methos

1. Baseline: ARIMA, five lag value and stationary and moving average of zero
2. Shallow LSTM: dense layer with a linear activation

3. Deep LSTM: The first three dense layers used tanh activation and the final dense unit a linear activation

4. GAN



1. Discriminator: **CNN**

   CNN was implemented with three convolutional layers, followed by a flattened layer and one dense layer with sigmoid activation

2. Generator: **three-layer dense network**

Result

Model	Features	Train Acc.	Validation Acc.	Test Acc.
ARIMA	N/A	N/A	59.16%	N/A
Shallow LSTM	4	59.95%	62.02%	74.16%
Deep LSTM	4	79.26%	88.35%	62.85%
GAN	5	73.04%	72.16%	72.68%