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# Stock Movement Prediction Using Price Factor and Deep Learning

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**Abstract :** The development of machine learning methods and techniques has opened doors for investigation in many areas such as medicines, economics, finance, etc. One active research area involving machine learning is stock market prediction. This research paper tries to consider multiple techniques and methods for stock movement prediction using historical price or price factors. The paper explores the effectiveness of some deep learning frameworks for forecasting stock. Moreover, an architecture (TimeStock) is proposed which takes the representation of time into account apart from the price information itself. Our model achieves a promising result that shows a potential approach for the stock movement prediction problem.

**Keywords :** classification, machine learning, time representation, stock prediction
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