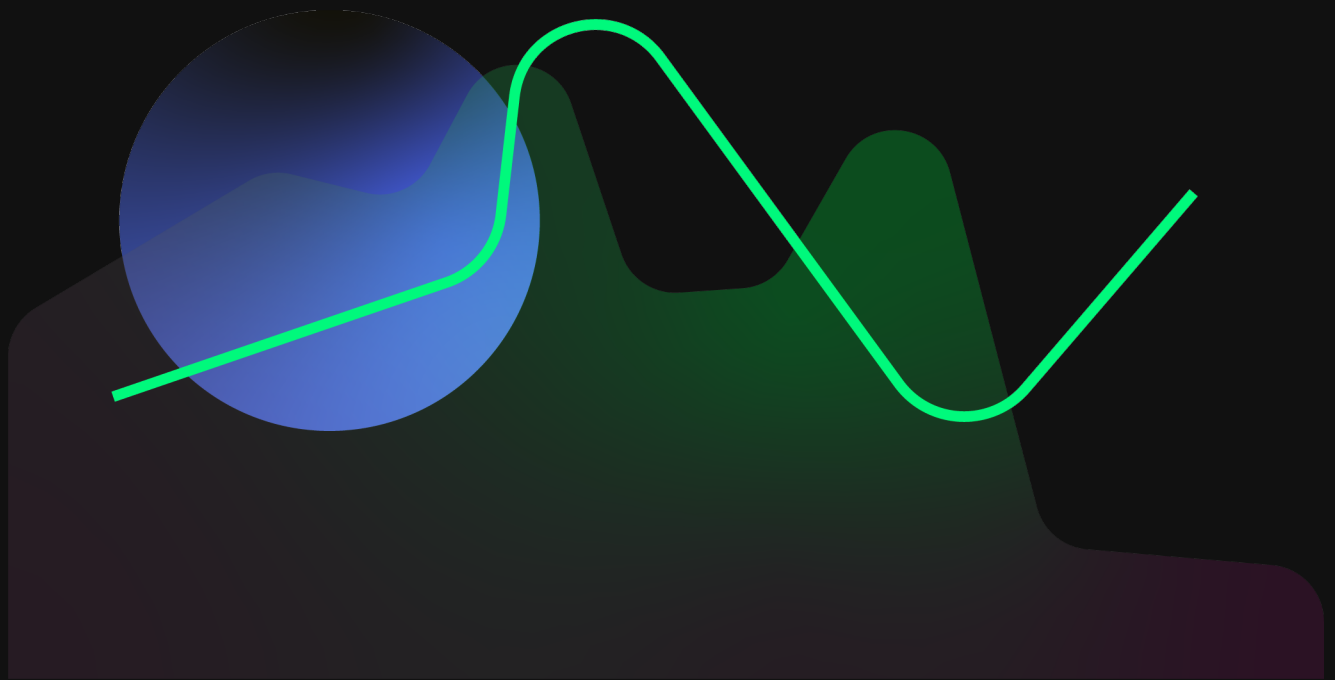




Inter IIT Tech Meet 11.0
IIT Kanpur



● Low Prep

EFFICACY OF PRICE ACTION TRADING STRATEGIES IN THE CONTEXT OF THE INDIAN EQUITIES MARKET

Devise strategies, hypothesize and check if your solution works.



DESCRIPTION

Price action trading strategies are popular trading methods among day traders. It involves forming trading decisions based on recent price movements, excluding (or augmented by) any technical indicators based signals, and without any fundamental analysis. Popular price action tools include technical patterns (reversal and continuation patterns), supports and resistance, Elliot waves, candle sticks, trends study etc. In this exercise, we do the following:

1. Develop (or explore existing) tools/ methods for automatic detections of price action signals (as described above).
2. Form a clear hypothesis to test the profitability of price action based strategies in the context of the Indian equities market.
3. Develop a low frequency trading strategy to test the above hypothesis.
4. Use the Blueshift platform to test the above strategy and accept/ reject the hypothesis based on the results.

GUIDELINES

1. The hypothesis should be clear and unambiguous. Good example: "Head and Shoulder strategies are ineffective for liquid, high momentum stocks" (with definition of liquid and high momentum in the submission). Bad example: "Support and resistance based strategies do not really work."
2. The strategy must not be specific to a single or a few stocks - instead the universe should ideally be selected based on rules (e.g. top 10 liquid stocks or top 20 stocks with the lowest momentum over the past 6 months). This is required so that the results can be generalized.



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3. The strategy must not trade less than 10 times a month or more than 100 times a day. Allowed traded instruments are cash equities and equity and index futures. It must be long-only for equities and can be long-short for futures. The strategy must be written in Python.
4. The backtesting period will be from July 2018 to July 2021.
5. The logic/tools/methodology used for detecting price action and selecting the assets should be clearly stated.
6. All the assumptions should be explicitly specified.
7. Detailed performance output from Blueshift along with transaction logs.

RESOURCES

<https://blog.quantinsti.com/price-action-trading/>

<https://blog.quantinsti.com/candlestick-patterns-meaning/>

<https://blueshift.quantinsti.com/docs/quickstart/>