



(/teams/avdatafest-rampaging-datahulk/create)



(/contest/avdatafest-rampaging-datahulk/lb)



Registered

|                       |  |
|-----------------------|--|
| <b>Starts at</b>      | Sun Apr 02 2017 18:00:00 GMT+0530 (IST)  |
| <b>Closes on</b>      | Sun Apr 02 2017 23:59:59 GMT+0530 (IST)  |
| <b>Mode</b>           | Online   |
| <b># Participants</b> | 1348   |
| <b>Prizes</b>         | Rank 1: INR 30,000<br>Rank 2: INR 20,000<br>Rank 3: INR 10,000<br>Rank 4: AV branded merchandise<br>Rank 5: AV branded merchandise |

Contest ends in 5hours: 55minutes: 22seconds

Rampaging Datahulk is a mini hackathon which will test your machine learning skills. It is a test of time, knowledge & will. The winners will not only be experts in this age of data but, possess a lot more genius powers than just data management skills.

As a member of the Datavengers, Datahulk will smash the unimaginable problems to smaller pieces, hoping to save the world from uncontrolled data! This mini-hack will awaken the very insightful hero, hidden Datahulk in your genes.

A single winning leap in this competition can get you laurels worth INR 60,000.

**Register now for DATAFEST 2017 (<https://www.analyticsvidhya.com/datafest-2017/>) to attain more powers of a data scientist.**

## Prizes:

Top 5 rankers of the hackathon will be awarded

Rank 1: INR 30000

Rank 2: INR 20,000

Rank 3: INR 10,000

Rank 4: AV branded merchandise

Rank 5: AV branded merchandise

This is not all, top 3 rankers of DATAFEST 2017 (<https://www.analyticsvidhya.com/datafest-2017/>) will take away cash prizes worth INR 1.8L ( ~ \$2750 ).

### For students:

Top 10 students will grab an internship offer from Analytics Vidhya.

Come, participate in this competition and grab a chance to work with us.

Share & Tweet about DATAFEST using #AVdatafest.

Don't miss it !!

## Rules

### Contest Guidelines

1. The hackathon starts at 18:00 (UTC + 5:30 ) on 2nd April, 2017 and closes at 23:59:59 on 2nd April, 2017 (UTC + 5:30)
2. One person cannot participate with more than one user accounts.
3. Appropriate Taxes will be applicable on the prize money.

### Tools

1. You are free to use any tool and machine you have rightful access to.
2. You can use any programming language or statistical software.

### Solution Checker

1. You are free to use solution checker as many times as you want.

2. Adding comment is mandatory for use of solution checker
3. Comments will help you to refer to a particular solution at a later point in time.

#### Final Submissions

1. Setting final submission is mandatory. If you don't make final submission, your entry would be dis-qualified.
2. No submissions would be entertained after the hackathon ends.
3. Code file is mandatory while setting final submission. For GUI based tools, upload zip file of snapshots of steps taken by you, else upload code file.
4. The code file uploaded should be pertaining to your final submission. If we find any discrepancy between the two, your entry would be dis-qualified.

#### Team formation

1. Maximum of 2 people can form a team.
2. In case a team wins, prize would be distributed equally among team members
3. Teams can't be merged.

#### Expected conduct

1. At any point in the hackathon, you are expected to respect fellow hackers and act with high integrity.
2. Slack Live Chat admins hold the right to blacklist / block any participant found to use foul / disrespectful language. Chat forum will be closely monitored.
3. Analytics Vidhya holds the right to disqualify any participant at any stage of competition if found indulged in fraudulent practices.

## Problem Statement

Congratulations! you have been hired as a Chief Data Scientist by “QuickMoney”, a fast growing Hedge fund. They rely on automated systems to carry out trades in the stock market at inter-day frequencies. They wish to create a machine learning-based strategy for predicting the movement in stock prices.

They ask you to create a trading strategy to maximize their profits in the stock market. Stock markets are known to have high degree of unpredictability, but you have an opportunity to beat the odds and create a system which will outperform others.

The task for this challenge is to predict whether the price for a particular stock at the tomorrow's market close will be higher(1) or lower(0) compared to the price at today's market close.

#### Important Points:

- Information derived from the use of future variables is not permitted
- Anyone found using such features will be disqualified from the hackathon

## Data

| Variable  | Definition  |
|---|---|
| ID  | Unique ID for each observation  |
| Timestamp   | Unique value representing one day   |
| Stock_ID  | Unique ID representing one stock  |
| Volume  | Normalized values of volume traded of given stock ID on that timestamp  |
| Three_Day_Moving_Average  | Normalized values of three days moving average of Closing price for given stock ID (Including Current day)  |
| Five_Day_Moving_Average   | Normalized values of five days moving average of Closing price for given stock ID (Including Current day)   |
| Ten_Day_Moving_Average  | Normalized values of ten days moving average of Closing price for given stock ID (Including Current day)  |
| Twenty_Day_Moving_Average   | Normalized values of twenty days moving average of Closing price for given stock ID (Including Current day)   |
| True_Range ( <a href="http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_true_range_atr">http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_true_range_atr</a> )                                  | Normalized values of true range for given stock ID  |
| Average_True_Range ( <a href="http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_true_range_atr">http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_true_range_atr</a> )                          | Normalized values of average true range for given stock ID  |
| Positive_Directional_Movement ( <a href="http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_directional_index_adx">http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_directional_index_adx</a> ) | Normalized values of positive directional movement for given stock ID   |
| Negative_Directional_Movement ( <a href="http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_directional_index_adx">http://stockcharts.com/school/doku.php?id=chart_school:technical_indicators:average_directional_index_adx</a> ) | Normalized values of negative directional movement for given stock ID   |
| Outcome   | Binary outcome variable representing whether price for one particular stock at the tomorrow's market close is higher(1) or lower(0) compared to the price at today's market close |

#### Note:

- Evaluation Metric is log-loss ([http://scikit-learn.org/stable/modules/generated/sklearn.metrics.log\\_loss.html](http://scikit-learn.org/stable/modules/generated/sklearn.metrics.log_loss.html))
- You are expected to upload the solution in the format of "sample\_submission.csv"

- Public and Private split is 30:70

📁 Test File (/contest/avdatafest-rampaging-datahulk/media/test\_zip/test\_6lvBXoI.zip)

📁 Train File (/contest/avdatafest-rampaging-datahulk/media/train\_zip/train\_xup5Mf8.zip)

📁 Sample Submissions (/contest/avdatafest-rampaging-datahulk/media/sample\_submission/Sample\_Submission\_3sH2Dix.csv)

## Solution Checker

Code File

No file chosen

Solution File\*

(.csv or .zip file)

No file chosen

Solution Description

(max : 180 chars)\*

(<https://datahack.analyticsvidhya.com/contest/skilltest-probability/>)

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