

TECHFEST 2023-24 Algorithmic Trading Competition

About Us:

Welcome to Techfest Algo Trading Challenge.

Teams have to create their trading strategies, test on a reliable platform for back-testing, and compete to establish oneself as a name. Develop practical skills and professional knowledge of the sector to position yourself as a future-proof algo-trading expert.

Competition Description:

1st Round (Ideate):

Registered teams needs to create Presentation with no more than 15 slides that includes:

- Description of Trading Idea
- Logic
- Details of Implementation

No coding is required in this round.

2nd Round (Flowchart/Diagram Competition):

Herein participants have to set up the infrastructure of a hedge fund and thus have to lay-out a plan and express it as a flowchart diagram. Some points to consider

- Data Warehousing
- Analysis
- Strategy selection/rejection
- Data Streaming
- Order Routing
- Portfolio Management / sizing

You can add anything you feel will help you in the round.

With this we want to tap into participating teams creativity and knowledge of the domain. Teams should focus on the minutest of details and try to cover as many facets as possible. Extra points for novelty in the approach.

No coding required for Round 2 as well



Note: After Round 2 we will have a Demo session (Online Briefing Session & Backtest Engine Introduction) where participants will be made familiar with the online portal and shown a demo trading strategy for the contest.

Round 3 (Testing):

The code will be submitted after teams have coded their trading algorithm and tested it on our back-testing engine.

We will then backtest the trading algorithms for return, volatility, robustness and practicality to select advancing teams.

Final Round (Compete):

- Each team needs to compete in out-sample forward test and live paper trading.
- Live paper trading will last for 1 month
- Teams will present trading plan to judges in a 5-minute pitch session in Finale

Judges will select winners in each of these categories:

- Best Risk Adjusted Return
- Best Consistency of Returns
- Best Approach

AWARDS:

The winning teams from each category will be entitled to:

- Cash Prize
- Employment Contract
- Certificate

RESOURCES

- Datasets:
 - Unknown Data Series (can be stock, currency, commodity)
- System:
 - Virtual Machine Access with Back Testing Engine and Data series

RULES:

- This Challenge is open to the public.
- Each individual contestant is only allowed to be in one team.
- Each team must elect one representative to liaise with the organisers.
- All entries must be the original work of the contestant team.
- Any form of plagiarism is prohibited and the contestant team will be disqualified from the Challenge.

Techfest Office Students' Activity Centre, IIT Bombay, Mumbai - 400076



- Each individual contestant is required to sign a Non-Disclosure Agreement with the organisers.
- Finalists must present valid ID cards and provide a copy for verification.
- The judging panel's decision of the Challenge results is final. The organisers reserve the right to the final decision in all other areas.
- An online briefing session will be arranged after registration period to answer any inquiries about the Challenge.

COMPETITION TIMELINE:

Date	Event
15th September	Deadline of Registration
18th September	Online Briefing Session
3rd October	Deadline of 1st Round: Idea and Strategy Proposal Submission
10th October	Announcement of 1st Round Qualifiers
20th October	Deadline of 2nd Round
25th October	Announcement of 2nd Round Qualifiers
26th October	Backtest Engine Introduction
26th November	Deadline 3rd Round: Back-testing Completed and Code Submission
28th November	Announcement of 3rd Round Qualifiers
27th December	1-month Live Paper Trading Completed
28th December	Finale and Award Ceremony