



Naresh Balamurugan
Metallurgical Engineering and Materials Science
Indian Institute of Technology Bombay

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B.Tech.
Gender: Male
DOB: 6/15/2000

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2023	

Pursuing Minor degree at the **Centre for Machine Intelligence and Data Science**, IIT Bombay

PROFESSIONAL EXPERIENCE

Quant Strategist Intern | Alpha Alternatives Holdings LLP (May'21-Jul'21)

Received a **Letter of Recommendation** from the **Head of Quant Business**

- Overhauled the development of financial results strategy and engulfed direction using options **OI** with **1.3** sharpe
- Assessed Minimum variance portfolio and subsumed shrinkage covariance matrix for **3** Indian tickers in NSE500
- Executed the code of collecting live bid-ask data using **XTS** API and optimized by reducing disk usage by over **70%**
- Researched on the **IV term structure** of options to obtain information on **IV** rise solely due to result declaration

Algorithmic Trading Intern | SMC Global Securities Limited (Dec'20 – Jan'21)

- Modelled a functional python-based Options **Back-testing** Model feeding valuable insights on past performance
- Optimized the strategy based on **volatility** and developed an Algorithmic trader for automated weekly execution

FINANCE

Sector Head | Institute Investment Team (May'21 – Present)

Orchestrating a team of **21** enthusiastic students focused in finance and investment with a vision to create student run fund

- Delivering actionable insights from analysis of **5** sectors supported by Technical and Fundamental analysis
- Gaining Industry exposure on Indian financial markets in the form of professional training from **Zerodha**
- Co-ideated a revamped **3-tier** hierarchy team structure to ensure efficient management of the team's fund

Neutral Ratio Spread Strategy | Self-Project (Jun'20 -Nov'20)

- Engineered a **quantitative** weekly trading strategy using bank-nifty derivatives generating **42%** annualized ROI
- Back-tested for combinations of holding period for a **1-year** duration and analyzed the condition of best returns
- Optimized the strategy to suppress maximum drawdown to **2%** of initial capital and retain risk-reward ratio

Machine Learning in Technical Analysis | Guide: Prof. Piyush Pandey (Aug'20 – Nov'20)

- Researching on various methods of **Machine Learning** that enhance returns through Technical Analysis
- Training an **LSTM** recurrent neural network to predict future stock prices from patterns in historical data

POSITIONS OF RESPONSIBILITY

Core Team Member | Student Alumni Relations Cell, IIT Bombay (May'21-Present)

Leading Design Portfolio; Part of **11** core team members to foster professional relations between **60k+** Alumni and the Institute

- Chairing a team of **4 Design Coordinators** to supplement the association working in coherence with Dean ACR
- Assisting in aggressive expansion of SARC's social envelope to capture platforms like Facebook, LinkedIn and Twitter by creating visual content for publicity of various events and initiatives, with a budget of **INR 1.2M**
- Ideated and facilitated theme-based publicity of Annual Phonathon generating a **50%** y-o-y rise in volunteers

Design Convener | Institute Technical Council (Jun'20 – Apr'21)

Part of a **2-member** team responsible for publicity of technical activities catering to students on campus

- Ideated and executed the massive publicity of **11+** technical clubs to increase contribution towards Technology
- Delivered quality content creation in the form of videos and posters on social media with **10k+** campus audience
- Assisted the social media campaign with an astounding reach of **20k+** highest ever on our Facebook page

EXTRACURRICULARS

Trading	<ul style="list-style-type: none">Managing portfolio worth INR 1.2M using options strategies and positional strategies in equitiesPursued 'Equity Portfolio Management' course offered by Alphabeta and NSE Academy
Sports	<ul style="list-style-type: none">Endowed with Gold Medals for rapid chess and football in annual department sports daySemi-finalist in Inter hostel football General Championship amidst 10+ competing hostels
Music	<ul style="list-style-type: none">Level 2 honors in practical examination in Electronic Keyboard Grade 5 by Trinity College London
Others	<ul style="list-style-type: none">Received the International FIS Scholarship worth 3000 USD for top 300 students worldwideAbacus & Arithmetic: National Runner-up 5 State Champion International Ordinary Grade 4Accorded runner-up 1 in National Handwriting Olympiad and rewarded with cash prize INR 25kBestowed with Best Dramatic Video in Silver Edit competition among 9 participating IIT'sLanguages: Python, C, C++, R Softwares: Photoshop, Premiere Pro, AutoCAD, Solidworks, Eagle