

# Vala Yash Vipulbhai

3rd Year Undergraduate  
Department Statistics and Data Science

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## Academic Qualifications

Year	Degree	Institute	CPI/%
2021 - Present	B.S. in Statistics and Data Science	Indian Institute of Technology, Kanpur	6.72/10
2021	CBSE(XII)	Modi School, Rajkot	95.6%
2019	GSEB(X)	G.T. Sheth Vidyalavya, Rajkot	83.5%

## Achievements

- Bagged **Bronze Medal** in **Inter-IIT Tech Meet 11.0** conducted by IIT Kanpur, in **QuantInsti's** problem statement *[2023]*
- Secured All India Rank **3926** in Joint Entrance Examination Advanced 2021 among **2.5 Lakh** shortlisted candidates *[2021]*
- Secured All India Rank **4218** in Joint Entrance Examination Main 2021 among **12 Lakh** eligible candidates *[2021]*

## Work Experience

FundU | *Data Science Intern* (Dec'22 - Jan'23)

Objective	● Developed a ML model to assign badges scores to tags, similar to the system used on the Stack Overflow platform
Approach	● Studied and implemented decision trees and clustering on a random dataset, demonstrating practical ML skills ● Created a comprehensive list of <b>50+</b> tags to be added to the model for assigning badges and reputation points
Result	● Contributed to enhancing the user experience on by implementing a more engaging and rewarding badge system

## Inter-IIT Tech Meet 11.0

Efficacy of Price Action Trading Strategies in the Context of Indian Equities Market | **QuantInsti** (Jan'23-Feb'23)

Objective	● To generate a trading model based on <b>price action trading strategy</b> and backtesting on Blueshift platform
Approach	● Analyzed strategies in the Indian Market, studying <b>4+</b> chart patterns such as Head & Shoulders and Engulfing ● Succeeded in <b>hypothesis testing</b> to predict the returns of futures by using <b>INDIAVIX</b> and <b>NIFTY50 Futures</b>
Result	● Implemented the hypothesis and achieved returns of over <b>90%</b> for a <b>3-year</b> time period with Sharpe Ratio <b>1.31</b>

## Projects Mentored

Introduction to Quantitative Trading | *Finance and Analytics Club, IIT Kanpur* (May'23-Jul'23)

Mentored 30 selected students out of 350+ application for the same

Objective	● Develop a <b>Quantitative Trading Model</b> from scratch and also learn about various <b>Financial tests</b> and <b>terms</b>
Approach	● Taught about Sharpe Ratio, Z Score, Moving averages and their impact and application in Quantitative Trading ● Analyzed <b>10+</b> stationary & non-stationary pairs using <b>ADF test</b> and implemented the Mean Reversion strategy
Result	● Deployed the strategy after coupling with <b>Intra-Day</b> and backtested to generate a <b>return of 80 % annually</b>

## Key Projects

ML Applications in Financial Markets (Jun'23-Jul'23)

Mentor: Prof. Tushar Sandhan | Course Project: EE798Q

Objective	● To build a model and <b>predict</b> the <b>closing stock price</b> data of next <b>2 days</b> , on a given sample of past 50 days
Approach	● Studied temporal data analysis, models ( <b>RNN</b> , <b>LSTM</b> and <b>GRU</b> ) and their application in time series forecasting ● Tested LSTM and GRU models on data of past <b>10 years</b> , and optimized using metrics such as <b>MSE</b> , <b>R2Score</b>
Result	● Implemented the LSTM model and achieved an <b>R2Score</b> of <b>97.3%</b> and a <b>RMSE</b> less than <b>1.5%</b> of the mean

## Positions of Responsibility

Manager, Alumni Relation | *Outreach Cell, IIT Kanpur* (Apr'23 - Present)

Leadership	● Leading a <b>3 Tier</b> team of <b>35+</b> secretaries collaborated with <b>DoRA</b> office, for smooth conduction of cell activity ● Organized <b>3+ reunions</b> with <b>1000+</b> alumni and acted as point of contact for <b>10+</b> alumni during campus tours
Initiatives	● Initiated the event <b>Time Capsule</b> in the <b>56th convocation</b> for the graduating batch receiving <b>500+</b> responses ● Conducted Open House in <b>10+</b> cities to introduce <b>1000+</b> students to the culture and academics of IIT Kanpur ● Introduced a series of mock interviews by Alums for students, <b>Mock-en-Joy</b> , getting responses from <b>60+</b> Alums
Impact	● Facilitated <b>200+</b> mock interviews to help students prepare themselves for the upcoming internship drive 2023-24

Secretary, Finance Committee | *Hall Executive Committee, Hall 2, IIT Kanpur* (Mar'23 - Present)

Leadership	● Managing an annual budget of <b>INR 10 lakhs+</b> for Hall 2 catering to a diverse community of <b>600+ residents</b> ● Elected by <b>400+ students</b> , representing students on the Finance Committee, contributing to financial decisions
Initiatives	● Secured <b>INR 3 lakhs</b> from Dean's Capital Fund for renovation of guest house and procured new washing machines ● Managed a budget of 1 lakh for the Hall 2 in the General Championship 2023, ensuring proper allocation of funds

## Relevant Courses

Introduction to Probability Theory	Data Science Lab - I & II	Theory of Statistics
Fundamental of Computing	Data Structure and Algorithm	Foundations of Inferential Statistics
Matrix Theory and Linear Estimation	Elementary Stochastic Processes - I	Statistical Computing