

# Vala Yash Vipulbhai

3rd Year Undergraduate  
Department of 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

|  |   |
|--|---|
| Data Science Intern   <i>FundU</i> <span>(Dec'22)</span> |   |
| 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<br>● 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   <b>QuantInsti</b> <span>(Jan'23-Feb'23)</span> |  |
| 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<br>● 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 <b>Quantitative Trading</b>   <i>Finance and Analytics Club, IIT Kanpur</i> <span>(May'23-Jul'23)</span> |   |
| 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<br>● 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 <span>(Jun'23 - Jul'23)</span> |   |
| 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<br>● 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   <i>Outreach Cell, IIT Kanpur</i> <span>(Apr'23 - Present)</span>                        |   |
| 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<br>● 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<br>● Conducted Open House in <b>10+</b> cities to introduce <b>1000+</b> students to the culture and academics of IIT Kanpur<br>● Introduced a series of mock interviews by Alums for students, <b>Mock-en-Joy</b> , getting response 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   <i>Hall Executive Committee, Hall 2, IIT Kanpur</i> <span>(Mar'23 - Present)</span> |   |
| Leadership   | ● Managing an annual budget of <b>INR 10 lakhs+</b> for Hall 2 catering to a diverse community of <b>600+ residents</b><br>● 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<br>● Managed a budget of 1 lakh for the Hall 2 in the General Championship 2023, ensuring proper allocation of funds  |

## Extra-Curricular Activities

|             |   |
|-------------|---|
| Social Work | ● Assisted a group of <b>5</b> freshmen academically and <b>emotionally</b> to get acclimatized with the new environment.<br>● Celebrated <b>Raksha Bandhan</b> with <b>underprivileged children</b> through Techkriti's to Adore social initiative |
| Sports      | ● Completed <b>5 km Run</b> in 27 minutes organised by <b>Counselling Service</b> , IITK on <b>74th Republic Day</b><br>● Represented Rajkot city in team of 12 in <b>Kabaddi</b> at the <b>District level</b> in Rajkot's Sports Fiesta 2017       |