

EDUCATION

Year	Qualification	Institute	Performance
2016 - 2020	Bachelor of Science in Economics	Indian Institute of Technology, Kanpur	9.63/10
2016	Class XII(CBSE)	Ch.Chhabil Dass Public School, Ghaziabad	95.0%
2014	Class X(CBSE)	Ch.Chhabil Dass Public School, Ghaziabad	10/10

SCHOLASTIC ACHIEVEMENTS

- Secured AIR-3691 (**top 1%**) in JEE (Advanced) 2016 and AIR-2662 (**99.75 percentile**) in JEE (Mains) 2016 among 14 lakh aspirants
- Awarded **General Proficiency Award** for best academic record across graduating students in Economics department Convocation 2020
- Received **Academic Excellence Award** thrice and attained **10 SPI** for **3 semesters** with **A*** in **11 courses** for notable performance
- One of the **6 members** nominated by IIT Kanpur for **Youth Exchange Programme** of the **Ministry of Youth Affairs and Sports**

CORPORATE EXPERIENCE

Dolat Capital | *Quantitative Research Analyst* Sep'21-Present

- Developed mathematical and statistical models using tick by tick data for **market making** in Indian equity markets using **python**
- Improved market making execution by including feature for **mod-factor** and modified **order placement and cancelling logic** with **cpp**
- Worked on **server management** and researched on **model validation, quantity automation, and signal sampling** of model signals

American Express | *Analyst EDA* Aug'20-Aug'21

- Provided custom business-insights to strategic **US merchants** of American Express across travel, lodging and retail portfolios
- Spearheaded customer acquisition, covid-tracker and marketing insights for clients leveraging **clustering, boosting** and other **ML** algos
- Performed analysis for Ecomm-shift, customer profiling, and competition bench marking using **hive, spark and other big data tools**

Qualitative Financials | *Quantitative Researcher* Mar-Aug'20

- Designed, implemented and deployed robust **algorithmic trading** strategies for live trading in **US equity and derivative market**
- Back-tested **50+** trading strategies based on **technical indicators** like Alligator, MACD, FPP, etc., stock, options, news headlines data
- Analyzed market sentiments, financial reports for trading signals and coded strategies using **python API** from Interactive brokers

Fidelity Investments, Chennai | *LEAP Intern* May-Jul'19

- Developed an intelligent resume scanner from unstructured text of **1000+** resumes using **NER** extraction, **EDA**, **TFIDF** and **Guided LDA**
- Recorded **92% accuracy** in classifying resumes across job profiles using **deep learning** and tracked **10+** ML models with **H2O, MIFlow**
- Implemented an end-to-end UI with **Flask, Kibana and Elasticsearch** and reduced recruitment time by **25%** and saved **₹24 lakhs**

Shree Tech Solutions: Complete Web Solutions, Delhi | *Social Media Analyst Internee* Nov-Dec'18

- Created one-stop solution for **6** social media platforms including Twitter, Instagram and Youtube to provide boost for client's business
- Visualized insights for client's growth using **EDA** and **15+** natural language processing algorithms in **python** from their social handles
- Performed **sentiment and time series analysis** for **10+** years of client's profile and published it on a **python-django** integrated website

PUBLICATION

R-Package on Bayesian Quantile Regression for Ordinal Models | *Mentor: Prof. Arshad Rehman* May'19-Feb'20

- Developed a globally used, **CRAN** accepted R-package (**bqror**), on Quantile regression for OR models to benefit the global R-community
- Underlying methodology, use-cases, and package details, etc. are submitted to **Journal of Statistical Software** as a research paper

TECHNICAL SKILLS

Skills	Modelling, Machine learning, Data Analysis, Financial Modelling
Languages	Python, C++, C, R, Matlab, Octave, STATA, \LaTeX

KEY ACADEMIC PROJECTS

SURGE IIT Kanpur | *Mentor: Prof. Debayan Pakrashi* May-Jul'18

Objective	Impact of using System of Rice Intensification (SRI) Technology in Bangladesh - a rocky road to success
Approach	<ul style="list-style-type: none"> Performed Impact and Interaction analysis of SRI adoption on food security and well being of farmers using STATA Untreated Effects analysis demonstrates benefits of SRI adoption spread to non-treated farmers in Bangladesh Evaluated the Causal Effects on treatment and training groups using TOT and ITT analysis with IV and OLS
Conclusions	<ul style="list-style-type: none"> SRI adoption demonstrated spillover effect and correlation of over 90% with production, food security and well being

NYU-RTE: New York University | *Mentor: Prof. Nasir Memon* May-Jul'18

- Investigated the existence of master voice prints using **text-independent speaker verification** to prevent bio-metric phishing attempts
- Ranked **7000+** celebrities based on the uniqueness of their voice signature by training and testing all the models on **Vox-Celeb data set**
- Proved that **Neural networks** based models surpass all other **4 customized state-of-the-art** implementations of speaker verification

EXTRA CURRICULAR ACTIVITIES

Coordinator FAC, IITK	<ul style="list-style-type: none"> Revived the latent club, managed a team of 20 members, and an annual budget of ₹50k, to promote financial literacy Organized 10+ sessions, competitions, published newsletters to address and promote the fin appetite of campsites Organized a 2-day non-core weekend with talks, workshops by experts and competitions sponsored by ICICI
Social	<ul style="list-style-type: none"> Student Guide: Mentored 5 students on emotional and academic fronts for an easy transition to IITK Company Coordinator: Assisted companies in conducting internship interview process for over 500 students