Anshul Goel

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EDUCATION

IIT KANPUR
BS + MS in Economic Sciences
Oct 2020 | Kanpur, India
PG CPI: 9.5 / 10.0
UG CPI: 8.4 / 10.0

S.D. VIDYA MANDIR, PANIPAT
Grad. May 2015| Panipat, India
Senior Secondary (CBSE): 95.4%
Secondary (CBSE): 10/10

TECHNICAL SKILLS

Programming Languages & Tools:
C++ • Python• R • MATLAB • STATA

Data Query:
SQL • PySpark• HIVE

Web Scraping:
Selenium • BeautifulSoup

Open Source:
Contributed to various R packages

COURSEWORK

GRADUATE
Probability & Stochastic for Finance (A*)
Foundation of Finance
Financial Econometric
Machine Learning

UNDERGRADUATE
Applied Stochastic Process
Econometric I & II
Bayesian Econometric
Financial Engineering
Applied Probability & Statistics
Mathematical Economics
Microeconomics I & II
Macroeconomics I & II
Linear Algebra

CERTIFICATIONS

Qualified CFA Level 1
December 2018

EXTRA CURRICULAR

Competitions:
• Top 10 in La Trobe University Challenge, received AUD250 for prototype
• 1st in Case Study Challenge, Decrypt

Involvements:
• Core Team Member, ECONS (2015)
• Internship Coordinator, SPO (2017)

RELEVANT PROJECTS

TOPCODER: CORPORATE FINANCIAL DATA FORECASTING
- Won 3 international competitions & one of the two participants selected **worldwide** to work for one of the UK's biggest Telecom Company
- Iteratively improvising the existing models and developing new models by employing **Statistical Analysis**, **Outlier Treatment** and ensembling **Time Series** & **Deep Learning** models to create **robust** forecasts and avoiding bias developing **automatic hyperparameter selection** methods

CORPORATE PREDICTION MARKETS: DESIGNING AN INFORMATION AGGREGATION MECHANISM
- Proposed Corporation Prediction Market as Information Aggregation Mechanism for institutional setup & designed the same for IIT Kanpur considering aggregation media, incentive,etc
- Analyzed probabilistic & non-probabilistic market design, convergence of measures to true probability and created metrics for picking the right method as per the market requirements

ROBUST ESTIMATES OVER SEMIPARAMETRIC ORDINAL MODEL
- Developed understanding of Semiparametric Ordinal Models, Bayesian Quantile Regression, MH & Gibb's Sampling Methods

PRICE DISCOVERY IN INDIAN FOREX MARKET (USD-INR)
- Employed **Hasbrouck Information Share** Model to determine the information Share of USD-INR Futures & Spot market
- Verified the dominance of Futures over Spot markets with range of $73.4\% - 92.5\%$ and $7.5\% - 26.6\%$ respectively using R

SOLAR RADIATION OVER INDIA: DYNAMIC PANEL MODEL
- Predicted daily DHI in **first of its kind study** at every location in India on the basis of geographical & daily weather data from NASA
- Experimented with various Dynamic Panel Models & opted **Arellano Bover estimates** explaining **93%** variation using R & STATA

ECONOMETRIC ANALYSIS OF AIR POLLUTION
- Tested Environment Kuznet's Curve claim, analysed the impact of production & consumption on air pollution for 10 Asian Economies

CORPORATE INVOLVEMENTS

CREDIT SUISSE | Equity Analyst, Prime Services
- Part of Delta One team, responsible for replicating index performance for hedge funds & corresponding risk and PnL management

ACCENTURE DIGITAL | Business Analytics Intern
- Worked on real client project employing **Big Data (10,000,000 X 25,000** entries) & employed various statistical & Machine Learning based Algorithms (**VSURF, XgBoost**) using **PySpark, R** to provide insights on **Tableau**
- Developed an algorithm to match 116M & 56M rows 70 attributes using **HIVE** with **300% increase** in match rates

WORLDQUANT LLC | Part-Time Research Consultant
- Secured **Country Rank 4** & **Global Rank 15** in consultant only competition for June'19 based on alpha(trading strategy) quality
- Combined financial concepts like Black Scholes Pricing, Fundamental & Technical Analysis to create **100+ viable trading strategies**