Ankit Agarwal

Summary

Professional with 4 years of experience in analyzing financial data of Global banks, emphasizing statistical analysis and data visualization. Proficient in using Python to build vectorized econometrics and machine learning models. Well-versed in risk management practices (including BASEL/EBA guidelines) and chartered **FRM** holder.

EDUCATION

Indian Institute of Technology, Kharagpur

June 2015 - June 2020

Integrated MSc in Economics with Minor in Mathematics & Computing; GPA (8.4/10); (IIT AIR 3611)

Area of Expertise

Platforms Python(Jupyter Notebook, VScode), R, C++, SQL, HTML, CSS, Tableau, Flask, Alteryx, Bloomberg Quant/ML Time series, Linear Algebra, Econometrics, OOPS, GLM, ANN, KMeans, SVM, Ensembling, PCA

Risk Model Interest rate risk, VAR, Recovery & Resolution planning, Secured Funding, Credit Risk, Initial Margin

WORK EXPERIENCE

Nomura - Associate, Treasury Risk Management

Nov 2022 - present

- Leveraged Nomura databases using **mySQL** to extract historical funding rate data, and **benchmarked** it with global Japanese banks funding rate data (from **Bloomberg**).
- Employed **Tableau** to perform **monitoring** of models such as Intraday, Commitments, CCP Initial Margin, both at an entity level and at an aggregate level.
- Automated **backtesting** exercise for Intraday model (using python). The backtesting test included calculating the number of breaches and testing their significance (using **Kupiec POF** test).
- Developed a GUI software to automate report writing, based on past reports resulting in 25% extra efficiency.

Credit Suisse - Analyst, Liquidity Risk Management

July 2020 - Nov 2022

- Used **Object Oriented Programming** to create **python modules** which performed **regression tests** such as **normality**, **independence**, and homoscedasticity of residuals, multi-collinearity test and linearity test for wide range of models, and reduced future testing time by **90**%.
- Employed **RStudio** to filter a credit risk dataset comprising over 1.6 million rows & 130 columns.

Ziploan - Data Scientist

May 2018 - July 2018

- Created novel features from SMS data and account statements of NBFC customers by applying **coarse classification on their** Weight of Evidence. **Logistic regression** was used to develop the **Probability of default** model.
- Developed an **NLP model** to parse and categorize bank statements. The approach involved employing a **Artificial Neural Network** architecture with a **softmax activation** function in the output layer to effectively classify bank statements into categories such as monthly transactions, credit/debit entries, etc.

PROJECTS

Ranking of Indian Mutual Fund Houses

Drive

Developed a **gold**-winning analytical framework to rank Mutual Fund Houses. Applied **Vector Auto Regression** (VAR) for quantifying responsiveness of the fund houses against macroeconomic shocks.

Data Scrapping Automation

Github

Created a web scraper using **Beautiful Soup** to extract information from a flat listing website. This data is then automatically entered into an Excel sheet using Selenium resulting in **10x** increase in efficiency

Tableau Dashboard Tableau

Created a dynamic Tableau dashboard showcasing **Key performance indicators** of a retail business.

ACTIVITIES

Lawn Tennis Gold, Water Polo Captain, Data analytics Mentor, Student Welfare Program