Aarsh Shah

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Education

BITS Pilani K K Birla Goa Campus — Goa, India
MSc. Economics, Department of Economics and Finance CGPA-8.1 — 2018-2023

BITS Pilani K K Birla Goa Campus — Goa, India
B.E. Electrical and Electronics Engineering CGPA-8.1 — 2018-2023

Work Experience

PricewaterhouseCoopers (PwC) — Bangalore
Associate, Advisory (FSTRM) — Jan'2023-Present

Golden Data Creation for IRB

- Involved in the creation of a historical data repository (Golden Data) to streamline and standardize IRB-related exercises, including PD master scale, monitoring, and model testing.
- Integrated multiple data sources on a quarterly basis to facilitate capital calculation, IRB monitoring, and rating model development.
- Extended the population by including data for short-term movements and incorporating the latest data points within each quarter, enhancing the granularity of analysis.
- Managed data consistency by accounting for database purges and revisions, ensuring backward compatibility and accurate rating history across periods.

Segment-Specific PD Calibration

- Supported the implementation of a segment-specific PD calibration framework for wholesale exposures, ensuring compliance with EBA Guidelines.
- Preprocessed and cleaned input data by implementing exclusion criteria, filtering, and applying data quality checks to ensure accurate segmentation and calibration results.
- Automated counterparty-to-segment mapping using Python, based on firm-accepted segment mapping rules, including template names and GICS 4 classification.
- Prepared granular segment-level data, including obligor counts, default counts, and grade-wise default rates across years and quarters, serving as key inputs for Long Run Average Default Rate (LRADR) calculations.

Credit Risk Model Development/Validation

- Involved in development of a logistic regression-based Probability of Default (PD) model for Consumer Loans Portfolio using Python for a leading UK based multinational bank, aligning with IRB regulatory standards.
- Conducted advanced data preprocessing, including fine and coarse classing, creation of dummy variables, and feature selection using WoE and IV metrics.
- Validated model accuracy and predictive power through ROC-AUC, Gini coefficient, K-S statistic, and PSI analysis for population stability.
- Created a comprehensive scorecard framework, translating model coefficients into risk scores for streamlined decision-making processes.

Credit Suisse — Mumbai
Quantitative Risk Analyst Intern — July'2022-December'2022

- Migrated an R implementation of a credit risk model that decomposes creditworthiness into systematic (economic conditions) and idiosyncratic (borrower-specific) components, enabling credit rating transition analysis, to Python.
- Translated statistical computations and matrix manipulations using Python libraries (NumPy, pandas, SciPy), preserving accuracy and performance.
- Validated outputs by reproducing historical analyses and ensuring alignment with original R results.
- Enhanced the model with visualization capabilities for Z-factor trends using Matplotlib and Seaborn.

Jainam Share Consultants — Surat
Research Trainee — July'21-August'21

- Worked in partnership with Senior Analyst and developed a product basket consisting of platform-based companies.
- Filtered and identified stocks with high growth potential and strong fundamentals.
- Proactively worked with research analysts to include best investment ideas in portfolios.
- Maintained coverage of upcoming IPOs and make buy/sell recommendations to the clients.
- Collected financial data and maintained databases.

Positions Of Responsibility

Volunteer for the 2nd International Conference on Economics and Finance, The Department of Economics, BITS Goa
In association with Trulaske College of Business, University of Missouri, USA 2020

- Led the registration process for conference presenters, ensuring efficient check-in and seamless logistical coordination.
- Coordinated logistics for guest lectures and presentations, collaborating with speakers and participants to ensure smooth event execution.

Institute Wall Street Club Member|Finance Club, BITS Goa 2018-2020

- Gained comprehensive knowledge of fundamental analysis and technical indicators applied in equity markets, as well as Futures and Options trading.
- Developed an understanding of various equity trading strategies and quantitative finance techniques for market analysis.
- Secured 3rd position in a campus-wide paper trading competition.

Technical Skills

Programming: Python, R Studio, SQL, MATLAB, C/C++
Softwares: Microsoft Office