

WORK EXPERIENCE

Senior Manager, EXL**(May 2022 – Nov 2024)****Client - Lloyds Banking Group, Model Developer**

- Worked on **Model development of Stress-testing portfolio evolution model** (s166 secured book-shape model) which feeds into the **capital (RWA/EL) and impairment (ECL)** engines to predict the forecast compliant to the most **recent usage of ICAAP across base/stress**.
 - Model evolves the **secured book** of LBG which constitutes **~2.4 mn** accounts with an exposure of **~320bn**.
- Developed **Capital suite** (capital emulator- **PD,EAD,LGD**) implemented on portfolio evolution model to predict future credit risks. This suite employed techniques such as **linear/logistic regression** to ensure robust and precise risk predictions, enhancing both the reliability and interpretability of the model's outputs.
- **Engineered a comprehensive Impairment Emulator**, integrating **Forward-Looking (FL) - PD, EAD, LGD** atop an advanced secured portfolio model to analyze potential impairment losses on future secured assets.
 - Enhanced the emulator with specialized sub-models, including **Probability of Possession given Default (PPD) and Forced Sale Discount (FSD)**, to deliver a granular and forward-looking assessment of impairment risks, significantly improving the accuracy and depth of financial forecasting.
- **The implementation** of stress-testing modelling happened on **PyCharm** as it is more equipped and efficient in handling huge datasets.

Assistant Manager, Barclays Bank**(June 2019 – May 2022)**

- **BUK Home Finance Hybrid PD** model to calculate Regulatory Expected Loss, Economic Capital & Risk Weighted Assets
- **Income** Generating Models for **Unsecured loans** and **Overdraft** facilities on current account
 - Analysed the **predictability** and **recalibration** of the model, along with possible **strategy** change. Guided **~1.2 mn** accounts' affordability, constituting exposure of **~£6bn**
- **House Price Index** indicates the level & percentage of **UK property price**
 - Investigated changes in **HPI** and the consequent impact on the **collateral value** of Barclays. Measured the impact of the new version of HPI on the UK property price. Studied the **fluctuation** in property **valuation** of **~£150bn** and ultimately the security Barclays holds.
- **Risk Weighted Asset Forecasting Model** for **BUK Home Finance Portfolio**
 - Monitored calculation of capital matrices for **internal & external regulatory stress test**, along with forecasting & planning processes. Monitored RWA requirement for **~1mn** account with **exposure of ~£150bn**.

EDUCATION

Delhi School of Economics, Delhi**(June 2017 – June 2019)**

M.A., Economics

Kirori Mal College, University of Delhi**(July 2012 – May 2015)**

B.A., Economics (Honours)

SKILLS & INTERESTS

- **Tools:** SAS, SQL, Excel, PyCharm, Python, GIT & MS Office
- **Certificate:** Google Machine learning Course - ML Modelling with Neural Networks
- Experience in Painting: Abstract, Sketch & Modernism
- Reading interest: Astrophysics and Historical fiction