

**Job title: Trade Finder Quant Analyst/Developer Location: Mumbai**

## **JOB SUMMARY**

- Mumbai Centre is Global MNC bank's global platform for front-office & aligned functions to create value by utilizing non-traditional locations, exceptional talent and a collaborative culture.
- Mumbai Centre is looking for extremely bright candidates for the role of TradeFinder Quant Analyst. TradeFinder is MNC Bank's award winning platform delivering product and services to internal and external clients by enabling quant driven development on scalable infrastructure.

## **ROLE RESPONSIBILITIES**

- Drive projects that offer high end quantitative, business driven solutions for complex problems
  - Quantitative Analysis on Large Datasets such as Time series analysis, rich cheap analysis, P&L/Business Drivers Analytics etc
  - Design & Development of executable pricing tools for cross asset derivative products
  - Portfolio Analysis Engine to calculate MTM, Greeks, VaR, RWA, CVA Charge & Funding Charge
  - Implementation of regulatory projects such as CRD4 Balance Sheet reduction using optimizations, market data engine for Dodd-Frank Initial margin calculations etc
- Projects are characterized by cross-silo counterparties, large data volumes and sophisticated analytical requirements.

## **Technical Skills:**

- Strong educational background in Engineering/Science (IIT candidates).
- Quant/Analytical Skills
  - Experience with applied econometrics (Hypothesis testing, PCA, Linear/Non-Linear Regression etc)
  - Knowledge of Numerical Optimization Techniques (BFGS, Levenberg-Marquardt etc)
  - Knowledge of applied linear/Integer linear programming, dynamic programming & greedy algorithms
  - Experience/Knowledge of working with big data (data science)
- Programming Skills
  - Advanced knowledge of any one modern programming knowledge (C/C++, Java, Perl, Python, Scheme etc)
  - Experience with relational database design (oracle, mysql, postgresSQL, DB2 etc)
  - Experience with Statistical Tools (Matlab, SAS, R etc) and Unix Shell Scripting
  - Basic knowledge of User Interface design & Implementation (JSP, Javascript, jQuery, HTML etc)
- Financial Analytics
  - Advanced knowledge of Value At Risk calculations methods (Historical, parametric & Simulations)

- Advanced knowledge of portfolio exposure calculations (RWA, CVA, CSA charges)
- Advanced knowledge of yield curve construction and vol calibration (bootstrapping, interpolation techniques, sabr/local vol models, smile/skew calibration)
- Knowledge of Derivative Pricing Methods (Monte Carlo, PDE/Tree Models)
- Knowledge of instrument specific features and properties of Bonds, FRAs, Swaps, Cross currency swaps, Swaptions, Default swaps, Options
- Advanced Knowledge of margin calculations for listed derivatives and other exchange traded products
- Basic knowledge of valuation, booking, settlement, collateral management and clearing mechanism

## **Behavioral Skills:**

- Strong communication skills and presentation ability with attention to detail.
- Good problem solving instincts and strong analytical skills