

ABHISHEK GUPTA**Mobile: +919868206688 | Email: abhi555shek@gmail.com | DOB: 23-July-1988****Professional Synopsis**

- An astute performer with 8+ years of experience in total (6+ years of experience in Finance+Analytics+Statistics role combined with pre-MBA 2 years of experience in Software Development Role.).
- ***Presently working with Barclays as Associate Vice President (Quantitative Finance) in Quant Modelling Team.***
- Adept in end-to-end pricing analysis and recommendations on future decisions using appropriate statistical and analytical tools.
- Advanced knowledge of Machine Learning Algorithms – **Classifiers, Feature Engineering, Text Analytics, Regression Techniques, Clustering, Segmentation**
- Worked with broad range of financial products – **Equities, Derivatives (OTC and Exchange Traded), Fixed Income** and modelling same using Python Libraries.
- An effective communicator with excellent relationship building & interpersonal skills. Strong analytical, problem solving & organizational abilities having experience of working in global teams.
- Good finance domain knowledge coupled with extensive experience in designing and modelling the analytical platform.
- FLIP certified in Financial and Capital Markets with All India Rank of 17

Academic Qualifications**Master of Science in Financial Engineering (MScFe)****CGPA:** 83%**Subjects:** Econometrics, Statistics, Python, Algorithms, Data Science, CART techniques, Neural Networks, Linear Algebra, Mathematical Programming, Pricing Models for Fixed Income and Derivative instruments**University:** World Quant University (WQU), Los Angeles, United States**MBA, Finance (2012 - 2014) with CAT Score of 99.4 percentile****CGPA:** 8.1 (on a 10-point scale)**University:** Indian Institute of Technology, Delhi**Bachelor of Technology, Electrical and Electronics Engineering (2006 - 2010)****Percentage:** 75.4% (on a 10-point scale)**University:** Guru Gobind Singh Indraprastha University, Delhi**Schooling with Bio and Maths****Xth:** 86.6%, **XIIth:** 74.2%**HPS Rohini, Delhi, CBSE****Technical Skills**

- **Statistical Techniques:** Time Series Analysis, Causal Inference, Predictive Analytics, Machine Learning, Monte Carlo Simulation
- **Python (Numpy, Scipy, scikit-learn, pandas, statsmodels, QuantLib, matplotlib):** Advance
- **SAS EG:** Intermediate
- **R:** Beginner
- **Advanced Excel:** Advance
- **SQL:** Intermediate
- **Spotfire:** Advance
- **VBA:** Advance
- **DevOps (Git, BitBucket, TeamCity, JIRA):** Advance

Professional Experience

<u>Tenure</u>	<u>Company Name</u>	<u>Designation</u>
Sep 2019 – Till Date	Barclays Investment Bank (Noida, UP)	Associate Vice President
Jan 2018 – Aug 2019	CRISIL Research & Analytics (Wroclaw, Poland)	Senior Research Analyst
April 2014 – Jan 2018	The Royal Bank of Scotland (Gurgaon)	Senior Analyst
July 2010 – July 2012	Infosys Technologies Ltd (Pune)	Software Engineer (C++,Perl)

Current Project: Barclays Investment Bank, Noida

Title: Model Development and Execution

Domain: Risk Analytics

My Role:

- ✓ Responsible for the delivery of fully automated, optimised and tested quantitative model implementations with Python environment
- ✓ Work within the modelling teams (based globally across UK, US and India) on model development focusing on end to end predictive model delivery
- ✓ Implementation of statistical analysis pipeline used for descriptive and predictive analysis of financial data including equities, fixed income instruments, derivatives

Technologies used: Python, DevOps

Company: CRISIL Global Research & Analytics, Poland

Title: Strategic Expected Positive Exposure (SEPE) for Internal Model Method (IMM)

Domain: Counterparty Credit Risk (CCR)

My Role:

- ✓ Advised client on Model implementation and validation activities for change from historical valuation to forward-looking models which resulted in multi-billion dollar savings on client's end.
- ✓ Quantitative Analysis of Financial Models for Derivative (FX Forwards, Interest Rate Swaps etc.) Exposures using Python and SQL.
- ✓ Worked on models for calculation of Credit Valuation Adjustments (CVA) involving PD, LGD and exposure models.
- ✓ Verification of Data and Model Integrity using Statistical Techniques and plots.
- ✓ Implementation of Monte Carlo simulation for calculation of exposures and development of associated simulation tools using Machine learning techniques.
- ✓ Compiling and presenting road shows for management covering regulatory impacts (PRA and FINMA), key methodology features & capital implications
- ✓ Liaising with Risk Managers, FO and IT on the methodology and its implementation
- ✓ Delivering training around new methodology implementations
- ✓ Understanding the business requirements and driving projects towards them by communicating to different teams and carrying data analysis

Technologies used: Python, SQL, VBA

Regulators: PRA and FINMA

▪ Company: The Royal Bank of Scotland

Title: Credit Risk Quantitative Analysis on BASEL II measures- Probability of Default, Loss Given Default

Domain: Wholesale Credit Risk

Scope: All financial products extended to the wholesale clients of bank.

My Role:

- ✓ Credit Risk modelling and statistical validation of models for RWA calculation
- ✓ Documentation Review, Data Quality verification, Model fit assessments and visualisations.
- ✓ Process and analyze daily risk control activities covering credit and market risk business processes which include transaction management, collateral/netting exposures.

- ✓ On boarded multiple KDEs like Probability of Default (PD), Loss Given Default (LGD), Exposure at Default (EAD) within the Risk Data Aggregation principle of BCBS 239
- ✓ Supporting the calculation of RWA based on the risk measures
- ✓ Financial Risk modelling with SAS, Excel and VBA
- ✓ Statistical analysis using R and Python

Technologies used: SAS EG, Python, Excel, VBA, Spotfire, SQL

Company: Infosys Ltd.

Domain: Banking and Financial Services (BFSI) product development

My Role:

- ✓ Managed and Developed end-to-end product for quantitative analytics and reporting.
- ✓ Worked with managers on client end to optimize the analytics practice by writing efficient, simple and maintainable code for modules.
- ✓ Proposed and added new breakthrough features to the product bringing large scale optimization for the end user of quantitative application bringing around 30% savings in man-hours.
- ✓ Directly advised the client on an array of product related developments and issues.

Team Size: 10

Environment: Perl, C++, SQL
