

Saptarshi Ghosal

Data Scientist | Associate - Quantitative Modeling @ JP Morgan Chase

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Examination	University	Institute	Year	CPI/%
Post-Graduation	IIT Bombay	IIT Bombay	2015	9.57/10
Graduation	IEST, Shibpur	IEST, Shibpur	2013	77.87%

SUMMARY

~5+ years of experience primarily in the domain of Financial Risk Management (Fraud Risk, Consumer Credit Risk and Model Risk), currently responsible for leveraging sophisticated **Machine Learning** Algorithms in a **Big Data** platform for mitigating **Fraud** in Chase Consumer Banking Products like **Credit Cards**, **Digital Money Transfers** and **Cheques** with effective **Model Risk Management** as per **SR 11-7** Guidelines. Have hands on experience in **Predictive Modeling** and **Machine Learning** algorithms (**Linear Regression**, **Logistic Regression**, **CART**, **Random Forest**, **Gradient Boosting**, **XGBoost**, **GPU** accelerated **XGBoost** and **Social Network Analysis**) and well versed in tools like **R**, **Python**, **PySpark**, **SAS**, Microsoft **Excel** and Query Languages like **Hive**, **Teradata**, **Microsoft SQL Server**, **Oracle** and **MySQL**. Previously have worked on **Credit Risk Scorecard** Development, **Click Stream Data** Analysis and **Twitter Data** Topic Classification using **Natural Language Processing** techniques (**TF-IDF** and **N-Gram**) and possess excellent communication skills with prior programming experience in **GNU Octave**, **MATLAB**, and **C**.

PROFESSIONAL EXPERIENCE

J.P. Morgan Chase and Co.

Associate: Feb '19 – ongoing

Senior Analyst: Feb '17 – Jan '19

Awards and Recognitions:

H2 '18: Employee of the Year Award (CCB-Risk India)

Q3 '17: Spot Award for significant contribution in SR 11-7 Remediation

Software Usage: R, Python, SAS, PySpark, Teradata, Hive, Oracle, MS SQL Server and MySQL

Currently working as a Fraud Model Developer for Chase Consumer Banking Products and Services, incorporating Adaptive Machine Learning techniques to effectively prevent fraud attacks in a very dynamic environment, with effective management of Model Risk as per SR 11-7 Guidelines.

- Developed a tool for **Anomaly Detection**, recognized as one of the top 3 ideas in an internal Hackathon
- Classification of **Fraudulent Cheque Deposits** using **GPU** accelerated **XGBoost**. (**Impact:** \$6MM/ annum incremental savings)
- Fraud Mitigation in **Digital Money Transfers** using **Hybrid Machine Learning** Models. (**Impact:** \$5MM/ annum incremental savings and SR 11-7 remediation)
- Detection of Fraudulent Credit Cards (**Stolen Identity**) during early months on book using a **Gradient Boosting** Classification Model. (**Impact:** \$4MM/ annum incremental savings)
- **Synthetic Identity** Based Credit Card Acquisition **Bust Out** Fraud detection using **Logistic Regression**, leveraging **Social Network** Variables. (**Impact:** \$12MM/ annum incremental savings)

Organizational Initiative: Replicated existing SAS processes in Python/ PySpark and delivered sessions on Data Manipulation using SQL to campus hires as an instructor.

BRIDGEi2i Analytics Solutions

Analytics Consultant: Jul '16-Jan '17

Business Analyst: Jul '15-Jun '16

Awards and Recognitions:

Q2 '17: Capability Development

Q3 and Q4 '16: Team Contributor

Q2 '15: Readiness to Sell

Software Usage: R and Microsoft SQL Server

Worked with clients in Financial Services, Technology and Automobile industries and was responsible for solving their business problems with sophisticated Analytical Solutions primarily with usage of Predictive Models.

- Acquisition **Credit Risk Scorecard** development using Logistic Regression for Personal Loan Cross Sale business of an Indian NBFC.
- **Topic Classification** of Twitter Feed and **Key Driver Analysis** of Customer Satisfaction for Social Media Team of a Fortune 5 Technology Company using **Natural Language Processing** and **Machine Learning Classification** Models.
- Sale **Price Prediction** Modeling for a US Based Automobile Auction Services Company.
- **Marketing Team:** Email Marketing Campaigns/ Product Story Boarding

Organizational Initiative: Responsible for capability development by means of delivering sessions on **R programming** across the organization as an instructor.

KEY POSITIONS OF RESPONSIBILITIES HELD and ACHIEVEMENTS

- Student Mentor at IIT Bombay
- Core Committee Member of Department Tech Fest at IEST Shibpur

Interests:

Photography, Swimming and Travelling

- **Certificate of Excellence** for contributions as a placement coordinator in IIT Bombay awarded to seven members out of the 160-member team.
- Hosted a quiz competition, in IIT Bombay, as a **Quiz Master** for school students in Mumbai, sponsored by Indian Institute of Metals.
- Presented an **innovative idea** regarding a Carbon Free Iron Making Process and was awarded as one of the top 3 presenters in four conferences.
- Recipient of **National Scholarship** by Govt. of India awarded only to top 1000 rankers in (10+2) exam, West Bengal.