# Pankaj Singh (M.Sc. Applied Statistics & Informatics, IIT Bombay)

Senior Analyst | Model Risk Synchrony International Services PVT Ltd Head Office, Stamford Connecticut, United States

Phone number: 7506122625, 8369161236 Email id: psingh.iitb18@gmail.com

Current Location: Hyderabad

Data analyst with 4 years of experience in interpreting and analyzing data for driving business solutions. Proficient knowledge in statistics, mathematics and analytics.

#### Career

Senior Analyst | Model Risk Validation

[JAN 19 – Present]

Synchrony International Services PVT Ltd, Head Office, United States

#### Role:

#### **Credit Risk:**

- Currently validating on ID Analytics Credit Optics Full Spectrum (IDA COFS) model
- Validated Radar 4 model annual review to predict the likelihood that an approved application will become 90+ DPD within subsequent 24 months
- Identified the sources of model risk and comprehensively reviewed all model components
- Presented the work through formal validation reports as well as through presentation to model owners and stakeholders
- Review, validate and manage on-going monitoring model review process for credit risk modeling (validation, documentation, approval, implementation, monitoring and reporting) in collaboration with Risk modeling Team

# **Ongoing Monitoring projects:**

Currently worked on Credit Grade PLCC & DC and CAM behavior ongoing monitoring reports:

- Analyze the PSI (Population Stability Index) for accounts and balances for individual product as well as client
- Analyze the KS statistics, Percentage changes in odds, Bad rate, Exposure, Monitoring threshold, SAS codes and logs on basis of model monitoring plan documents
- Analyze and update all the ongoing monitoring reports in each quarters

Worked on Customer Level Behavior Score monitoring report:

- Created Model Evaluation report on the basis of Model purpose, Methodology
- Created Model Tiering report on the basis of Exposure amount, Reliance and Uncertainty
- Mention rational for changes in the report on the basis of MRM (Model Risk Management)

# Analyst | Secured and Unsecured Ioan HDB Financial Services, Head Office, Mumbai

[AUG 16 - OCT 18]

## <u>Role:</u>

#### Credit:

- Prepared the predictive model of customers who applied for personal loan in Bank.
- Analyzed and preparing decision rules which would help the underwriters to accept and reject the loan application and control of loan delinquency/default based on customer profile
- Model building and validation part done with the some methods such as Random forest, Logistic regression, Multinomial Logistic regression and Machine learning
- Worked with new software (Landing Analytics) for the analysis and provide appropriate suggestion to improve it

# **Collection:**

- Monitored and validated a predictive model (Logistic regression) in order to segment customers based on their payment history and delinquency status to implement recovery strategy
- Made the new Risk priority intervals of ELR, LR, MR, HR, EHR for HDBFS and HDFC data portfolio
- Validated a predictive model for HDFC bank customers in case of First EMI Flow
- Predicting the probability of Cheque Bounces and identifying influential factors which have an effect on Cheque Bounces
- Identifying trends at customer and employee level to identify improvement areas

# Data Analyst | Product Development

[Aug 15 –Aug 16]

Enser Communication Pvt Ltd, Head Office, Navi Mumbai

## <u>Role:</u>

- Formation and development of Key Performance Indicators(KPI)Dashboard
- Made an excel based dashboard to measure and track metrics like Agents Schedule, Active and Waiting Calls, Call Resolution, Average Handle Time, Customer Satisfaction etc.
- Identified trends in the data and helped in improving the performance of agents
- Tried to improve operational efficiency by analyzing the data of First Call Resolution
- Tool and Web development for Olagarage.com
- Helped in improving the design and visuals of the mobile app to make it more appealing

# **Certificate of Excellence in Business Analytics**

[Nov 17-Feb 18]

Edvancer Eduventures, Mumbai

• Certified business analytics professional after successfully completed training and evaluation program on business analytics, **R** [Certificate no.: 0101-200218-02]

# **Academic:**

Examination	University	Institute	Year
Post-Graduation	IIT Bombay	IIT Bombay	2015
Graduation	Banaras Hindu University	Banaras Hindu University	2013
Intermediate/+2	UP Board	C M Anglo Bengali College	2009
Matriculation	UP Board	C M Anglo Bengali College	2007

#### **Technical Skills:**

Programming Languages: C, C++, R, SQL, LA (Landing Analytics), Tableau, SAS, Advanced Excel

#### **Academic Projects:**

Model selection and validation in logistics regression [Guide: Prof Ashish Das] [M.Sc. Project: Aug 14 – Jun 15]

- Predict whether a store should get opened or not based on certain factors such as sales, population, area etc. Coded a classification algorithm in R
- Fitted logistic regression model on training data set and validate it on test data set and got performance matrix AUC more than 0.81

Multiple Linear regression [Guide: Prof. Ashish Das]

[M.Sc. Project: Sep 13 – Dec 13]

- Price of properties is one of the most important decision criteria when people buy homes
- Made multiple linear regression model to predict the price of the properties based on certain factors such as land size, building \_area, No. of bedrooms etc.

C++ Project on Testing of Hypothesis [Guide: Prof. Supratim Biswas]

[Course project: Nov-13]

- Coded in C++ the basic statistical tests for testing of hypothesis on data sets
- Included 3 statistics tests (t-test, F-test, chi-square test) in the code

An Opinion Survey of Brand Awareness and Consumer's Preferences for Moving Consumer's Goods

 Designed a questionnaire which represents an Opinion Survey of Brand Awareness and Consumer's Preferences for Fast Moving Consumer's Goods and compile the data and perform relevant analysis on SPSS

# **Position of Responsibilities:**

Head of Team Logistic in Mathematics Olympiad, IIT Bombay

[Dec 14 – Feb 15]

- Headed a team of 10 core members to conduct logistics operation of Mathematics Olympiad involving 1500+ students
- Core Team (Registration) of Mathematics Olympiad

[Dec 13 - Feb 14]

- Organized the annual Mathematics Olympiad in IIT Bombay for school children across Mumbai region.
- Managed a team of 4 for the registrations and fees for 1500+ participants from more than 600 schools

# **Extra-Curricular Activities:**

<ul> <li>Secured 2nd Prize in Cartoon designing in PG-Cult IIT Bombay</li> <li>Awarded Certificate of Jewels of Hostel 16 IIT Bombay</li> <li>Secured 2nd Prize in Group Dance in PG-Cult IIT Bombay</li> <li>[2013]</li> </ul>	•	Completed a Workshop on C programming organized by Spoken Tutorial, IIT Bombay, funded by		
<ul> <li>Awarded Certificate of Jewels of Hostel 16 IIT Bombay [2013]</li> <li>Secured 2nd Prize in Group Dance in PG-Cult IIT Bombay [2014]</li> </ul>		National Mission on Education through ICT, MHRD, Government of India	[2013]	
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#### **Declaration**

I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Place: - Mumbai

Date: - (Pankaj Singh)