

# JAGANNATH BANERJEE

Sr. Data Scientist & Program Manager

Cards & Payments Leader – 10+ Years

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## Skill Highlights

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<b>Programming</b>	: Python (Scikit-learn, Pandas, NumPy, Statslib, Matplotlib and Seaborn), Jupyter Notebook, SQL, Microsoft Excel (VBA Programming).
<b>Machine Learning</b>	: Supervised (Regression & Classification), Unsupervised (Clustering, Associative Mining and PCA), Natural Language Processing (NLP) and Text Analytics
<b>Algorithms</b>	: Linear Regression with Regularization, Logistic Regression, KNN, SVM, Decision Tree, Random Forest, K- Mean Clustering
<b>Statistics</b>	: Exploratory Data Analysis, Data and Sampling distribution, Confidence Interval, Statistical Testing - A/B Testing, Hypothesis Testing
<b>Data Wrangling</b>	: Web scrapping, data imputation, encoding, formatting and feature creation
<b>Visualization Tools</b>	: Tableau and Splunk
<b>Version Control</b>	: GitHub, SourceTree
<b>Presentation</b>	: Microsoft Power Point (Advanced)
<b>Domain Knowledge</b>	: Card & Payment Processing – Settlement, Authorization, Statements, Data Encryption

## Work Experience

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**Cognizant Technology Solutions | Sr. Data Scientist & Program Manager** **July 2015 to Present**

*Project - Settlement Monitoring and Analytics system (SMAS)*

*Tech Stack – Machine Learning, Python (Pandas, Scikit-learn, NumPy, SciPy, Matplotlib, Seaborn), SQL, Tableau*

SMAS is an enterprise analytics tool responsible for predicting merchant funding, billing and settlement, analyzing transaction authorization approval and declines, customer segmentation, customer churn analysis, transaction profiling, predict loan defaulters, detect fraudulent transactions and analyze customer feedback.

- In my current role, I manage release-based development, implementation and maintenance of SMAS leading 10 + members and managing clients across geography.
- Understand and interpret detailed business case from executives and convert into technical requirements.
- **Build end to end profitable data science and machine learning platform saving \$850 million in SLA fines, increase revenue by 15%, prevent fraud related losses by more than 40%.**
- Collect, clean, analyze and process complex structured dataset. Perform feature engineering for optimum results.
- Apply machine learning regression models to predict merchant funding and billing amount Saved approx. \$850 million in SLA fines.
- Apply machine learning classification models like logistics regression, Bayesian model, random forest classification for transaction profiling, predicting loan defaulters, detecting fraudulent transactions based on the tenure, product usage and spending pattern thereby help in increasing revenue by 15% and decrease fraud by more than 40%
- Presenting technical results and details to nontechnical audiences like Executives and VPs.

## Cognizant Technology Solutions | Data Scientist

June 2013 – June 2015

Project – *Insightics Analytics*

Tech Stack - Python (Pandas, NumPy, Matplotlib), SQL, Splunk

*Insightics Analytics* is a customer facing analytics tool responsible for showing trending and benching business performance, tracking customer shopping locations, understand buying habits and spending pattern for small and medium business (SMB) thereby target focused marketing and bringing new business for customer and.

- Built master data source for machine learning consolidating 23 most import features for the analytics tool.
- Leveraged advanced analytic knowledge and statistical/data mining model to predict customer behavior and segment customer clusters using machine learning classification and clustering algorithm.
- Analyzed information on customers, competitors and market place and consolidated information into actionable items, reports and presentations
- Presented technical results and details to nontechnical audiences like Executives and VPs.

## Cognizant Technology Solutions | Technology Leader

Dec 2007 – June 2013

Project – *Merchant Posting, Billing & Settlement*

Tech Stack - Cobol, JCL, DB2, Datacom, VSAM, MQ, Easytrieve, Excel VBA, VB script, MS-Office

Posting and Fee Billing team was responsible to create and maintain financial invoice of transactions, fee, merchant statement and funding invoice post receiving feeds from merchant POS terminals, associations and other associated feeds.

- Designed, developed and managed merchant posting and fee billing application.
- Built data mapping and billing procedures for merchant demography, fees and equipment details
- Created transaction and authorization insights and analytics for C level executives.
- Trained new developers on technical and domain competencies

## Kaggle Experience

### Telco Customer Churn Analysis

Sep 2018

Performed exploratory data analysis and built classification model to predict customer churn with 65% F1 Score based on 24 customer attributes. [Kaggle Kernel](#)

### UCI Wine Quality Prediction

Aug 2018

Performed exploratory data analysis and built regression model to predict wine quality score based on 12 physiochemical attributes. [Jupyter Notebook](#)

## Education

### Machine Learning A-Z™: Hands-On Python & R in Data Science

41 hours of Machine Learning

Udemy

July 2018

### Stanford

Certificate in Machine Learning; Grade – 95.6%

Coursera

Apr 2017 - Aug 2017

### Sikkim Manipal Institute of Technology

Bachelor in Technology (Electronics & Communication) ; First Class with Distinction

Sikkim, India

June 2003 - June 2007

## Rewards & Recognitions

- Associate of the Year
- Guiding Star
- eKnowvator
- Star Award
- Kudos