

# JAGANNATH BANERJEE

Lead Data Scientist | Medline Industries

Healthcare | Cards & Payments

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## Skill Highlights

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- **Programming:** Python (Scikit-learn, Pandas, NumPy, Statslib, Matplotlib, Seaborn, Dask, Flask, Streamlit), Jupyter Notebook, SQL
- **Machine Learning:** Regression, Classification and Clustering models
- **Demand Forecasting:** Facebook Prophet, Neural Prophet, LSTM, Statistical Models
- **Chatbot:** Kore.ai, Microsoft Power Virtual Assistant
- **Cloud:** Microsoft Azure, Google Cloud
- **Database:** IBM DB2, Teradata, Oracle, MS SQL Server, Azure SQL DB, HANA
- **Version Control:** Azure DevOps, GitHub, Bitbucket
- **API:** Real-Time and Near Real Time
- **Data Presentation:** Tableau & Microsoft Power Point (Advanced)
- **Others:** Excel (Advanced for Data Analysis)
- **Operating System:** Linux, Windows

## Work Experience

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Medline Industries | Lead Data Scientist

Mar 2019 to Present

- Built **demand forecasting system** that optimizes and predicts monthly demand of 350K materials having intermittent, erratic and lumpy demand patterns using 61 statistical model variations. Able to reduce forecasting error from 67% to 32% leading to saving of over **\$5 Million/Year** in excess inventory.
- Developed **warehouse inventory audit application**, using random forest model, that smartly picks item for audit across 50 warehouses on a daily basis leading to estimated savings of **\$ 4M/Year** in labor save, theft and misplacement.
- Implemented helpdesk **chatbot** with kore.ai to enable customer order placement and tracking which is estimated to save **over \$50,000** a year.
- Developed **Optical Character Recognition** application to read cheques and invoices for finance team using Google Vision API. This will replace existing Abby OCR and save **\$50K/Year** in **licensing cost** and over **\$100K** in **manhour validations**.
- Implemented **Expected time of arrival (ETA)** application to predict when a backorder item will arrive into warehouse and be shipped to the customer using Gradient Boosting Machine Regressor and logical model in Azure Classic. This application is heart of online order system.
- Built **customer churn analysis application** to identify acute care and post-acute care customer having high probability of leaving, using random forest classifier model with 85% accuracy.
- **Founded Data Science team**, built Machine Learning & Cloud Infrastructure and grew to 6-member team.

## Cognizant Technology Solutions | Data Scientist

July 2015 to Mar 2019

- **Built 7 member data science team** (2 onsite, 5 offshore) that delivered end to end data science applications.
- **Created Transaction Settlement Analytics** tool responsible for predicting merchant funding using Decision Tree Regressor which saved \$85 million in SLA fines over 2 years.
- Architected and Implemented end to end **Google and Samsung Pay** application for client with 40-member team over 8 months that delivers over \$70 M in revenue combined every year.
- Built **real time credit line increase decision engine** application using Random Forest Regressor and Classifier which enabled credit line increase approval decision and amount in real-time and saved previous 3-5 business day processing time.
- Implemented **customer churn analysis** application using decision tree classifier that pre-detected churn and led to aggressive follow-ups by customer service thereby retaining many customers and saving revenue.

## Cognizant Technology Solutions | Lead Data Analyst

June 2013 – June 2015

- Designed and migrated 2700 merchants from Whitney Bank to Client. Performed detailed data analysis, data mapping of transactions and fee billing, automate mapping and generate data models for successful conversion. Lead 8-member team over 14 months. Generated over \$2M in revenue per year
- Migrated 1200 Chemical Bank merchants, 900 Moneris Bank merchants and 1100 BMO Harris Bank merchants to client over 1 year with 8-member team leading to \$1.5M in revenue per year.
- Implemented Insightics Analytics tool for Clover point of sale terminal responsible for showing trending and benching business performance, inventory analysis, customer shopping pattern and buying habits. Minimum Viable product was implemented using 12-member team for Clover launch.

## Cognizant Technology Solutions | System Analyst

Dec 2007 – June 2013

- Built and enhanced Merchant Posting and Fee Billing application responsible for creating and maintain financial invoice of transactions, fee, merchant statement and funding 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

## Education

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**Sikkim Manipal Institute of Technology**

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

**Sikkim, India**

*June 2003 - June 2007*

## Certification

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**Deep Learning Specialization**

Deeplearning.ai / Coursera

**Oct 2019**

**Machine Learning Specialization**

Stanford / Coursera

**Aug 2017**