

**Decision & Data Scientist • Machine Learning Specialist • Quality Analyst**

IT professional with 4+ years of experience in Data Science, Machine Learning and Quality Analysis. Helps organization to develop data driven technical solutions using predictive data modelling. Strong background in Syndicated and Bilateral Lending domain.

**EDUCATION:**

WBUT University - Pailan College of Management and Technology, Kolkata,  
Bachelor of Engineering in Electrical & Electronics

GPA: 7.6/10.0

2012-2016

**TECHNICAL COMPETENCE:**

Python | scikit-learn | Natural Language Processing | Flask | SQL | HTML-5 | Excel | Microsoft Office | J-meter | Robot Framework | Postman | Hp QC | JIRA | Agile | Syndicated Lending | Bilateral Lending

*Problem Solving* - Structural Thinking | Hypothesis Testing

*Data Processing* - Data Modelling & Management

*Descriptive Analytics* - Visualizations | Profiling | IQR

*Supervised Learning* - Regression | Classification and Regression Trees | Ensemble Learning – Bagging, Boosting | Support Vector Machines | KNN | Naive Bayes

*Unsupervised Learning* - Recommender Systems - Collaborative filtering | K-Means Clustering | Hierarchal Clustering | Principal Component Analysis

*Prescriptive Analytics* - Business Decision Modeling, Sensitivity, Optimizations, Simulation | Business Process Modeling

*Project Management* - Client Relationship | Agile – Scrum

*Data Collection* - Web Scraping | Web API

*Deployment* - Flask

**INDUSTRY EXPERIENCE:****Finastra Software Solutions Pvt. Ltd*****Data Scientist:***

2018 - present

- Developed algorithms based on statistical analysis and predictive data
- Manipulating, cleansing & processing data using Excel and SQL.
- Responsible for loading, extracting and validation of client data.
- Analyzing raw data drawing conclusions & drawing recommendations.
- Advising on the suitability of methodologies and suggesting improvements

**Projects:**

- **Customer Segmentation:**

**Problem Statement:** Identifying Customer Segments with high likelihood of Conversion for Loan offers.

**Insight:** Gathered data from multiple sources including sales and customer databases to create integrated view that helped in increasing that accuracy from 88% to 93%.

**Libraries:** numpy, pandas, matplotlib.pyplot, seaborn, scikit-learn

**Exploratory Data Analysis:**

Categorical attributes visualization using countplot

Numerical attributes visualization using distplot

**Model:** LogisticRegression and DecisionTreeClassifier

**Interpretation:** Confusion Matrix, roc\_curve

- **Loan Prediction Analysis:** Accuracy 83%

**Problem Statement:** A classification problem where we have to predict whether a loan would be approved or not.

**Libraries:** numpy, pandas, matplotlib.pyplot, seaborn, scikit-learn

**Preprocessing the dataset:**

Find the null values

Fill the missing values for numerical terms – mean and for categorical terms - mode

**Exploratory Data Analysis:**

Categorical attributes visualization using countplot

Numerical attributes visualization using distplot

**Feature Engineering:** Log Transformation, Correlation Matrix, Label Encoding,

**Model:** LogisticRegression, DecisionTreeClassifier, Random Forest, Hyperparameter tuning

**Interpretation:** Confusion Matrix

## Quality Analyst

2017 - 2018

- Working closely with Business Analyst and onshore team to understand the requirement, analyze and get clarification.
- Attending different meeting as 'Daily Standup Meeting', 'Sprint Planning Meetings', 'Grooming Sessions', 'Defect Triage Meeting' and 'Retrospect Meeting' etc.
- Helping and guiding new members of the team.
- Involved in The Enhancement and maintenance of the Automation Testing framework.
- Involved in Client Demos of the product and prepared PPT's for the same

## Projects:

### CME-LoanIQ Integration:

Fusion Banking Loan IQ and CME, developed by Misys, are used by leading financial institutions worldwide to optimize, automate and develop their lending business. From highly structured syndicated lending to high volume bilateral lending, Loan Portal can meet all loan processing system requirements.

- Worked on end to end Loan Origination and servicing, where CME is front end and Loan IQ is back end.
- Worked on Rest API testing for Loan IQ.
- Worked on CME UI automation using Robot framework.
- Automated Loan IQ APIs using J-meter.
- Worked on the testing of Asset-based lending functionality as part of CME-Loan IQ integration where loaning money in an agreement that is secured by inventory, accounts receivable, equipment, or other property owned by the borrower.

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## KAGGLE PROJECTS:

- **Email Spam Classifier: Accuracy 95%**  
**Dataset:** Total number of input mails 5172 containing 1083821 words.  
**Preprocessing the dataset:** Deleting the blank spaces  
**Exploratory Data Analysis:** Selecting most common 3000 words  
**Model:** Naive Bayes
- **Zomato Price Predictor: Accuracy 85%**  
A regression problem statement to find Average Cost for two.  
**Exploratory Data Analysis:**  
Finding which all countries have most of the restaurants and removing all other countries.  
Taking cities which shows the most variation.  
Replacing the string with number.  
**Feature Engineering:** Correlation matrix, LabelEncoder, OneHotEncoder  
**Model:** LinearRegression
- **Fashion MNIST dataset using PCA and KNN: Accuracy 85%**  
Data of 70000 clothing images with 784 features we are getting an accuracy of 85% using KNN but after using PCA, we selected only the top 50 features which were showing the most variation, then get an accuracy of 84% and saved a lot of training time.
- **Implementation of Adaboost Algorithm with hyperparameter tuning:**  
Housing dataset, when using Adaboost with decision tree, getting an *Accuracy of 61%* but after tuning the hyperparameters (learning\_rate and n\_estimators) using GridSearchCV, the *accuracy increased to 87%*.

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## LEADERSHIP/AWARDS:

- Participated in Ethical Hacking course in Hack-track
- Certification in Spanish language by Ramakrishna mission Kolkata
- Team Award @ Finastra for an exceptional contribution to the successful before time product delivery with zero backlogs (2019)
- Spot Award @ Finastra Sigma for delivering high quality deliverables (2018)
- Organize and Participated in Flash Mobs @Finastra
- Participated in Robotic events organized by IIT Guwahati, Techno India Kolkata, Meghnad Saha Institute of Technology Kolkata.