

Malireddi Pandavulu

Data Scientist || Machine Learning || NLP || Python || SQL

Professionally qualified Data Scientist with overall 3 years of experience in Analytics including Machine Learning, Deep Learning, Data Mining, Statistical Analysis and Java application development.

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Profile Summary

- A dynamic professional with 10 years of experience in **Machine Learning, Deep Learning, NLP, Python, SQL, Probability & Statistics, Data modelling, Data visualization, Java application development**
- In-depth knowledge in **Statistics and Probability**, DBeaver, Toad/SQL Developer for Designing SQL Statements
- Engaged in **Data Analysis, Statistical Model Building**, Predictive Analysis, Hyper parameter Tuning, Visualization in Python
- A keen planner, **strategist & implementer with proven success** in project management and effective management of various resources to meet project specifications
- Hands-on experience on executing the projects in **Agile and Scrum development Methodologies**
- Proficiency in writing complex **SQL queries** to validate complex business logics



Core Competencies

Spring Boot
Apache Airflow
Machine Learning
Openshift cloud
Natural Language Processing (NLP)
Deep Learning
Java
Python
Research and Development



Technical Skills

- **Data Science:** Machine Learning, Deep Learning, NLP, Probability and Statistics
- **Big Data Technologies:** Hadoop Eco Systems (HIVE, SQOOP),
- **Programming Languages:** Python, Java
- **Cloud Technologies:** OpenShift, Apache airflow, Docker, Kubernetes
- **Database:** Oracle, MySQL & SQL Server
- **Version Control Tools & GUI:** GitHub, Jupyter Hub, Spyder, PyCharm and Eclipse
- **Query Languages:** SQL, HiveQL
- **Frameworks:** REST, Spring boot



Notable Accomplishments and Certifications

- Received recognition for the machine Learning successfully implemented over the Optum Rx on 17th October 2017
- Received recognition from onshore CIO for Best performance on 13th Jul 2018.
- Received award from onshore director for innovation on DevTest
- Received Recognition for the soft PA suggestion.
- Received Best Agile Team award



Soft Skills



Organizational Experience

- From Oct 12th, 2016, associated with **United Health Group (OPTUM)** as Data Scientist
- Since Aug 13th, 2012, to Oct 10th, 2016 associated with **Alacriti info systems Pvt. Ltd** as Java Developer

Timeline

Since - 2016

United Health Group as
Data Scientist

2012 - 2016

Alacriti info systems Pvt.
Ltd as a Java Developer

Key Result Areas:

- Executing data driven solutions to increase efficiency, accuracy, and utility of internal data processing
- Designing data regression models, using predictive data modelling, and analyzing data mining algorithms to deliver insights and implement action-oriented solutions to complex business problems
- Engaged in performing Exploratory Data Analysis (EDA) to summarize their main characteristics, often with visual methods
- Working on:
 - Machine Learning (Predictive Analytics, Regression Techniques, Linear Regression, Logistic Regression, SVM, Naive Bayes, KNN, K-Means, Ensemble Models, Decision Tree, Random Forest, Dimensionality Reduction (PCA and TSNE), Boosting algorithms (GBM, XGBoost and Cat boost))
 - Deep Learning (Artificial Neural Networks, Convolutional Neural Networks, Recurrent Neural Networks and LSTM)
 - Natural Language Processing (NLP)
 - Importing data from Oracle, MySQL into HDFS and Hive using Sqoop
- Performing all phases of machine learning project lifecycle such as data extraction, data cleaning, transform, feature development, statistical analysis, build solutions and deploy machine learning models
- Developed Java application for international transfers for HSBC

Academic Details

- MTech CSE from JNTU Hyderabad
- B. Tech CSE from JNTU Kakinada
- Intermediate from Siddhartha Junior college, Tuni
- S.S.C from Zilla parishad high school, Tuni

Projects Executed

Project: 1

- **Title: Claim Routing Prediction**

Client: UMR Product

Employer: UHG

Tools/Technologies: python, Data Lake, Jupyter hub, Flask, Apache airflow, hive

Description: While claim processing time UMR is sending different vendors to check for the discounts associated for the claim. Earlier to our model it will go to different vendors and get the best discounts sequentially. This process takes long time to process the claim. Our model correctly predict the partner and it directs directly to the partner to save time lapse to complete claim process.

Project: 2

- **Title: Advanced Claims Forecasting**

Client: UMR product

Employer: UHG

Tools/Technologies: Data Lake, Flask, python, Jupyter hub, Apache airflow, hive

Description: UMR (United Medical Resources) is a web interface to check customer claims and his profile information, and it acts as a TPA. In this we can see the status of claim which customer initiated already. Based on historical data we built one model to give the probabilistic percentage of approval of the claim. Hence customer can be taken care well advanced based on the probability.

Project: 3

- **Title: ConversationalAIBot**

Client: UMR Product

Employer: UHG

Tools/Technologies: NLP, python, Data Lake, PyCharm

Description: At present user contact UMR portal through Contact us section for their queries. It requires human intervention to resolve user queries. Different type of users includes members, providers, employers, producers, partners. Currently every query is going to customer support team, and they are answering queries either through email or chat. Here we developed a machine Learning (NLP) model which can answer automatically without human intervention. The NLP model will use historic users question data and provide suggestions.

Project: 4

- **Title: softPA**

Client: Product

Employer: UHG

Tools/Technologies: Flask, python, statistical models, Spyder, OpenShift cloud environment

Description: softPA can be either approve or reject Prior authorization. For every cashless treatment needs prior authorization with the insurance provider. we were implemented a model that can automate approve or reject the prior authorization.

Project: 5

- **Title: FXOW (Foreign Exchange Order Watch)**

Client: HSBC

Employer: Alacriti Info systems Pvt Ltd

Tools/Technologies: Java, IBM MQ, REST services, IBM WebSphere, Spring framework

Description: Before FXOW customer can place foreign exchange at current rates. But after FXOW customer can place the order at his convenient rate and FXOW engine keep on watching external markets and it will fulfil the order when rate reaches.

E.g.: current rate of USD-INR is 1USD-65 INR. But as a customer I want 1USD-70INR so that whenever market reaches to 70 INR for 1USD then FXOW automatically matches the order and executed transfer.

Project: 6

- **Title: Global View Global Transfers**

Client: HSBC

Employer: Alacriti Info systems Pvt Ltd

Tools/Technologies: Java, IBM MQ, REST services, IBM WebSphere, Spring framework

Description: GVT focus mainly on the international transfers between two countries. It also involves currency exchange. It has 3 flavors of transfers 1. Immediate transfers 2. Future dated 3. Recurring transfers.