

|| 5+ year Python & Machine Learning | |NLP || Deep Learning || SQL ||

Lekhraj Dewangan

lekhraj9191@gmail.com

8123482425

GitHub: <https://github.com/lekhraj-d>

LinkedIn:

<https://www.linkedin.com/in/lekhraj-dewangan-8999397b/>

BRIEF SUMMARY

I am intermediate level machine learning and deep learning Engineer, who is working on NLP & Computer Vision related project to optimize business process. Many things I do not know in data science field, but I am consistently learning and whenever business need, I can deliver.

SKILLS

Python and AI	Python 3.x, NumPy, Pandas, Machine Learning, Deep Learning, Keras, Image Processing, LSTM, CNN, NLP, Tensor Flow, Sklearn, Decision Tree Based Model, XGBoost, LightGBM, CatBoost, RandomForest. , BERT.
Additional skills	PySpark , SparkNLP, Core Java, Regex, Algorithms, Data Structures, Basic Linux Command, Oracle, Database, RDBMS. SQLs , Flask

WORK EXPERIENCE

18 Mar-2019– Till now	UST-GLOBAL, Trivandrum
Sr. Software Developer	Involved in end to end NLP based solution for clients.
18 Sep-2017 – 14 Mar-2019	Aricent Technologies, Bangalore
Sr. Software Engineer	Involved in Data modelling, Data Cleaning, CDR processing, Automation scripting, Python Development.
24 Mar-2015 – 08 Sept-2017	(IKYA Human Capital Solution)
Client	Huawei Technology India Private Limited, Bangalore
Associate Software Engineer	I was part of Python based automated data migration solution project.

PROJECT DETAILS

- 1. Project Name:** Blue-pencil Product development
Location: client location
Project Duration: - 6 months
Description: - Extracted text data from pdf and words files and find out if there any legally risky words present in sentence.
Blue-pencil is one of the AI based advanced Automated product, which client uses to validate various business files again various business rule and I have worked to make few rules using NLP
My Contribution: -
 1. Extracted data from pdf and words using pdf-miner and docx python packages.
 2. We got initially around 1000 labelled legally risky and 20000 non-legally risky data set
 3. Manged full data clean and reprocessing, used spacy for NLP related task like Co-reference and stemming,
 4. Build machine learning Classification model using TFIDF vectorization.
 5. Tried various classification ML model and hyper tuning parameter and deployed in production.
 6. Later we got some more data then again rebuild model as customized NER, other ML approaches and got more good result.
 7. Using Flask API and Docker, deployed in production**ML Tools:** - spacy, TFIDF, Glove, Genism, Balanced Random Forest, XG-Boost, Light-GBM, Keras SMOTE, imblearn, LSTM.

2. **Project Name:** - R&D related to unstructured text data and Machine learning model building
Location: client location
Project Duration: - 4 months
Description: - finding out structured data from unstructured business documents and making those data train supervised learning.
My Contribution: -
1. find out nonparallel sentence using POS tag and Dependency parsing
2. make rule based on POS tag and Dependency Parsing for non-complete and complete bullet sentence using StanFordNLP.
3. find out client endorsement sentence in pdf file text data
4. For client endorse, we did various text pre-processing and cleaning using spacy and solved this challenge as **Binary Text Classification** problem.
ML Tools: - spacy, StanFordNLP, Genism, Light-GBM, Keras, SMOTE, imblearn, LSTM, RNN.
3. **Project Name: SmartOPS Delivery project**
Location: - In house project
Role: ML Developer
Project Duration: 5 months
Description: - **Text Similarity** based solution for benefit coding and benefit validation for Insurance process automation. Extracted useful data from source of truth documents.
My Contribution: -
1. Used various text processing approaches to extract data from text.
2. Automated Data cleaning and processing task using python.
3. Analysis of business requirements and convert as NLP based problem.
4. Extracted various benefit values from text using text similarity.
5. Using Spacy NER, extracted various medical terms present in text comments.
Used Tools: Python, Pandas, NLTK, Spacy.
4. **Project Name: CDR (Call Description Record) Processing and Data modelling**
Location: - Client
Role: ML Developer
Project Duration: 8 months
Description: 1) **CDR** is csv file which having detailed records for user calls, based on CDR data, need to make Machine leaning model which can predict users is going to renew existing Service or not.
2) Based on call voice call data usage and other parameter need cluster user on five Group.
My Contribution: -
1. Docker image creation for Machine leaning pipeline.
2. Used various supervised and unsupervised machine leaning model
3. Engaged in Feature engineering.
4. Automated Data cleaning and processing task using python.
5. Engaged in Automation Framework development, enhancement and maintained.
6. Extensively used **Python scripting and Shell Scripting**.
ML Tools: Python, Pandas, Linear Classifier models, **Tree based models**, Sklearn, **CatBoost**, Keras for NN.
5. **Project Name: Employee promotion Prediction (Aricent internal project)**
Role: ML Developer
Project Duration: 4 months
Description:
Based on Employee's past and current performance along with demographics. The task is to predict whether a potential promote at checkpoint in the test set will be promoted or not after the evaluation process.
Problem statement: Binary Classification Problem to predict employee's promotion.
My Contribution:
There are total 13 feature present in data set including categorical and numeric data. Target feature have two type data 0(not promote) and 1(promote). So, our task is to predict employee promotion for future test data.
ML Tool: Python, Pandas, Linear Classifier models, **Tree based models**, Sklearn, **CatBoost**, Keras

6. Project Name: Product: - VPN and NTS Service

Role: Core Java and Python Developer

Project Duration: 2.6 year

Project Detail: - Products VPN (Virtual Private Network) **and NTS** (Number Transfer Service)

Product VPN: - It's one of product provided by Huawei deployed under NGIN platform Next Generation Intelligent Network) for Enterprise where Call charges will be less with in Enterprise or more outside enterprise as per requirements. This service enables Mobility for users (landline and mobile) across state or country.

My Contribution: -

1. Extensively used **Python scripting, Pandas and SQLs** for **Data Migration, Data Cleaning, and Data Processing.**
2. Used Core Java Concept like **OOPs, Collection, Multithreading**, and Data-Structure. Exception Handling, SQL, Basic Linux Commands etc.
3. Involved in Bug Analysis, Bug fix, Log analysis, Unit Testing.

Used Technology: - Python, Pandas, Core java, Linux command, Oracle SQL.

Clients - Involve in various VPN Project for sites i.e.: -

1. **Brazil Claro (VPN) (Mar2015-Sep2017):-** Made Subscriber Data Migration and Data Analysis, script in **python**. Analysis, design, Coding and testing of Service call feature Call Forwarding, Call Hunting, BW list, Profile Call Type and Provisioning feature like Enterprise Holiday List, Group Carrier Code, and Time Based Forwarding, Destination Address Number, ADR number and Service call feature.

EDUCATION DETAILS

Degree/Course	Percentage/ CGPA	Year of Passing
BE (Electronic and Communication) SSITM /CSVТУ, Bhilai	74.5 %	2014
12th Govt. Higher Secondary School, Saja /CG Board	90 %	2010
10th GOVT Higher Secondary School, Saja /CG Board	79.5 %	2008

AREAS OF INTEREST

Artificial Intelligence, Data science, Big data.

Strength and HOBBY

1. Excellent skill of quick learning new think and adapting it.
2. Having good Problem Solving and Logical Thinking skills.
3. Preform well as Team member and whenever require individual also
4. Positive Attitude, Hard Work and Curious to learn new things.

Hobby: - Use free time to keep me fit (Gym), Playing Cricket.

DECLARATION

I hear by declare that the information provided above is true to the best of my knowledge.

Place: - Trivandrum

Lekhraj Dewangan