### HIMAI AYA MANDAI

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#### PYTHON | MACHINE LEARNING | DJANGO | REST-API | WEB SCRAPING | NLP | AWS | NEURAL NETWORK | GIT

# **EXPERIENCE**

6<sup>TH</sup> OCTOBER, 2020 TO NOW SENIOR SOFTWARE DEVELOPER, HOMZHUB ADVISORS PVT. LTD JOB ROLE: NLP DEVELOPER & TEAM LEADER.

**2<sup>ND</sup> FEBRUARY 2020 TO 16<sup>TH</sup> AUGUST NLP DEVELOPER,** WSE GAMES **JOB ROLE:** NLP DEVELOPER.

3<sup>RD</sup> JUNE 2019 TO 1<sup>ST</sup> JANUARY 2020

PYTHON DEVELOPER, ECLIPSE TECHNOCONSULTING GLOBAL PVT. LTD

JOB ROLE: PYTHON DEVELOPER.

6<sup>TH</sup> SEPTEMBER 2018 TO 24<sup>TH</sup>APRIL 2019
PYTHON ANALYST, INDIAN CYBER SECURITY SOLUTIONS PVT. LTD.
Job role: PYTHON ANALYST.

#### SKILLS:

## **Programming Language:**

Python, Html, CSS, JavaScript

#### Framework:

Django, Rest-Api, PySpark, Apache-Airflow

#### **Data Science:**

Machine Learning, Data Engineering & visualization, NLP, Deep learning, Neural Network

#### Database:

PostgreSQL, MongoDB, MySQL, Sqlite3, Redis

#### Server:

AWS(ec2, rds, sqs, sns, ses)

#### Packages & algorithm:

Pandas, NumPy, Matplotlib, Scikit Learn, SciPy, Collaborative filtering, Recommendation Algorithm, Clustering Algorithms, Classification Algorithms, request, bs4, scrapy, QT5, Jina, spacy.

#### **Version control, Tools & OS:**

Git, Vs Code, Flake8, Jupyter Notebook, Anaconda, Linux (Debian), Scanning Tools (Netsparker, Accunetix, Nmap, Nessus, Burp Suite, SqlMap)

# **EDUCATION:**

2005-2011

SECONDERY, MASANJHAR ADIBASHI HIGH SCHOOL

PERCENTAGE: 63%

Board: WBSE

2011-2014

HIGER SECONDERY, INDPUR GOENKA HIGH SCHOOL

SPECALIZATION: SCIENCE

Percentage: 63% Board: WBCHSE

2014-2018

**B. TECH,** GURU NANAK INSTITUTE OF TECHNOLOGY SPECALIZATION: COMPUTER SCIENCE AND ENGINEERING

CGPA: 7.10 Board: WBUT

**PROJECT:** 

# 1. User persona Building and recommendation system

Duration: November, 2020 to till now

<u>Description</u>: Here I have to build user persona according their behavior the platform. According their behavior, I have to push notification, advertise, Real estate property, blog, video etc.

Role: Lead Developer

Algorithm: Collaborative filtering, nlp, machine learning, neural network, pytorch

Language: Python language

Client: Homzhub Advisor pvt. Ltd.

# 2. <u>Big bazar future sells prediction according to past sells data using</u> Python

<u>Duration</u>: 6 months (1<sup>st</sup> December ,2017 to 1<sup>st</sup> June 2018)

<u>Description</u>: predict clusters of customers by store location. knowing the set of customers that behave evenly will help them target their product promotions accordingly. In this project data wrangling is the main problem. There is to much error in the data. But after filling the data in particular way I am able to solve the problem. Next problem was the predicting. I have been used pca over gmm and kmeans algorithm to solve the problem.

Role: developer (internship)
Tools: Jupyter notebook, git

<u>Language</u>: Python <u>Client</u>: Future Group

## 3. face recognition using python.

Duration:2 months

<u>Description</u>: To recognize face from picture. In this project at first it will click a picture, then it will match with existing picture in our computer. It will convert the picture into gray scale using open cv and svm algorithm.

Role: Developer

Tools & Technology: Supervised learning, git

Language: python

Client: Indian Cyber Security Solution

## 4. Website vulnerability scanner using python

<u>Duration</u>: Still working on that (1st January to now)

<u>Description</u>: It will scan a website and find out those vulnerabilities which can affect security of that website. At first, we have to bypass the load balancer of a website. So, I have to use change user agent randomly. I used various type of payload to detect those vulnerabilities.

Role: Developer

Tools: Accunetix, apache airflow, git.

Technology: Mechanize, owasp top 10 vulnerability architecture, Json, xml, python, sql

Database: Mongo dB, MySQL

# 5. Mail spoofing

<u>Duration</u>: 1 month (1st January 2019 to 31st January 2019)

<u>Description</u>: By using this, anyone can send mail using any type of mail id. For this project I used a

Aws server to send those mail.

Role: Developer

Tools: Sublime text 3,git

Role: developer

Language: Python & php

Client: Indian Cyber Security Solution

# 6. Arcturus cryptocurrency

Duration: 5 months

<u>Description</u>: Creating a completely new cryptocurrency called arcturus. Developing the website and building the coin was my responsibility. I used ethereum ico base to create this coin.

Website: www.arcturus.com

Role: Lead Developer

Database: Mongo dB, MySQL

Technology: Block chain technology, aws ec2, blockchain, Django,git

<u>Language</u>: Python, html, css, javascript, Solidity

#### 7. StartWrite India

**Duration**: 8 months

<u>Description</u>: It's a desktop software where kids can learn to write "a,b,c,d" which is made using tkinter and matplotlib as main component. There every letter is a dynamic graph using matplotlib.

Website: https://www.startwriteindia.com/

Role: Developer

Technology: python, matplotlib, tkinter, git, numpy, pandas

<u>Database</u>: Sqlite3 <u>Language</u>: Python

## 8. Recommendation System

Duration: 5 month

<u>Description</u>: Here I have to build a system where it will recommend user according their search History, according their post, comment, hashtags etc etc. Here I have built a total word relation Mapping. Their I am scraping total 110 websites for latest news update and saving that news In S3, and later showing those news using the recommendation system according user interest. All of recommendation return back to to user using api endpoint.

Role: Lead Developer

<u>Technology</u>: python, collaborative algorithm, svr, knn, word2vec, karnel approximation, git,

request, Web scraping, s3, sqs, sns, ec2, csv, Django, pandas, numpy

<u>Database</u>: Mongo DB

Website: https://wenaturalists.com/

# 9. Extract, Convert, Rewrite on Image which contain Text.

Duration: 2 week

<u>Description</u>: Here I have to build a system where it will Extract the text from image, Translating the Text into other language, rewrite on the image. I am using yolo algorithm with cnn to detect the Text, Google translate api for translate the text, Image Inpainting

Role: Lead Developer

Technology: python, yolo algorithm, opency, cnn, Django, git

Database: MySQL

# **Internship:**

Company Name: Future Group

PROJECT: Future sell prediction using past sells data.

TimeLine: 1st December 2017 to 30th June 2018

# MY RESEARCH BASED WORK:

# 1. <u>Bezier Curve Algorithm:</u>

It's a Python package which is update by me from previous bezier algorithm package. I have been implanted linear interpolation method on the previous algorithm. Now this package will return points and axes plot as per your requirement. It can ignore some angle like you don't want a curve under 30 degrees.

Git link: https://github.com/xhimalaya/brezier.git

# 2. ICMP Smurf attack detection using neral network.

It's a server side tool. It's can work in real time and also can analysis server log file to identify icmp smurf attack. It's totally made in python with help of keras and tesorflow. I have been created 6 neurons and the accuracy was approx 92% where for this same random forest algorithm was returned accuracy of 78% with 10000 n\_jobs and 1000 nodes with lot more time complexity.

Git link: https://github.com/xhimalaya/ICMP\_smurf\_attack\_detection.git

## 3. TELEGRAM CHAT DUMP WITHOUT AUTHENTICATION:

It's a python tool which can download telegram chats only using phone number without any authentication. I used telethon package and server authentication bypass method which solved the problem of otp verification login. I am not shearing the otp bypass due privacy issue. Here is the main code but one component I am not shearing.

Git link: https://github.com/xhimalaya/telegram chat dump.git

#### **CIRTIFICATE:**

- 1. BIG DATA ANALYSIS FROM CDAC
- 2. Certified by Microsoft on Database Fundamental
- 3. Certified by IIT Mumbai on C programming.

#### **ACHIEVEMENT**

Delivered a speech at IIT Kharagpur on Machine Learning (super vised learning).

#### **HOBBY**

Off road cycling, Photography.

#### **ABOUT MYSELF:**

I am an organized, efficient and hard-working person, and am willing to discover and accept new ideas which can be put into practice effectively.