NITHYA.S

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Professional Summary

Having 4+ years of experience in Python, Machine Learning,Computer Vision, Statistics, NLP, Deep Learning AWS and application development. Seeking an opportunity with a growing organization to improve my knowledge as well as career.

Professional experience

➢ **Senior Machine Learning Engineer, January-2021-Present Quantiphi Analytics Solutions Private Limited, Bengaluru**

- Working on document processing projects,using NLP.
- Worked on Key-Value pair,Entity-Extraction and template based document processing.
- Implementing end-to-end ML pipeline into AWS cloud.

➢ **Machine Learning Engineer, September-2019-January-2021 TensorIoT Software Services, Bengaluru**

1.Palm Print Authentication

- To detection the hand of the employee and extract palm ROI and its features and verify it with palm database.
- Used MobileNetSSD_V2 model for training the hand detection, Gaussian filter and threshold for extracting palm ROI and Gabor filter for Feature extraction.

2. Social Distance Finder

- To detect person using ML model and find the distance between person to check the social distancing
- Used Faster RCNN-Inception model for object Detection and Bird-Eye-View for finding the distance
- Implemented in AWS cloud and used Amazon Sagemaker,Tensorflow,OpenCV, Lambda functions,SNS notifications.

3. Custom Object Detection and Color Identification

- To create Custom Object Detection model for detecting packing boxes from the set of images with its accuracy and find the color of each detected object
- Used COCO Dataset for transfer learning and SSD-Mobilenet architecture for detecting objects
- Identify colors of each object within every bounding box
- Implemented in AWS Cloud and used Tensorflow,OpenCV and Amazon Sagemaker

➢ **Machine Learning Engineer, April-2018 - August-2019 SnipeTech Private ltd, Bengaluru 1. Supervised Machine Learning Model for Identifying Potential Customers**

- The goal of this project is to create a machine learning model that can be used to predict whether a customer will

    buy a product or not.
- Extract and synthesize meaningful and useful information from multiple sources (Excel, sql etc.)
- Used **matplotlib and seaborn** for data visualization
- Used **Decision Tree and Random Forest** algorithms to make a model
- Used **Cross-Validation** to evaluate the accuracy
- Python packages : pandas, numpy, scikit-learn, matplotlib, seaborn
- Role: **ML Engineer**
- Participated in **EDA and building ML model**

- Responsible for status updates, improve accuracy by tweaking the model

2. MMG - Recommendation Pattern Per Franchise

The aim of this project is to build recommendation pattern per franchise conversion rate of business for MMG.It aims to recommend the transporters to identify the location of the industrial trucks in demand to start a new franchise.

- Done Web-scraping using **Beautiful Soup and Selenium**

- Used **Collaborative-filtering and Content-based filtering** algorithms to create a recommendation engine

- Used **Cross-Validation** to evaluate the accuracy

- Python packages : pandas, numpy, scikit-learn, matplotlib, seaborn

- Role: **ML Engineer**

- Participated in **EDA and building ML model**

- Responsible for status updates, improve accuracy by tweaking the model

➤ System Engineer, Nov-2015-Aug-2016 Thomas Innovations Pvt Ltd.,Chennai 1.

Advanced Sentiment Analysis

- The goal of this project is to extract, identify and characterize the sentiment content of a text unit.

- Extract and synthesize meaningful and useful information from multiple sources (Excel, sql etc.)

- Around 1 lac sentences were taken as training set and annotators were used to perfor operations on text.

- Used pandas, numpy, seaborn, matplotlib, statistics, NLP and Naive-Bayes Classifier

- Used **NER** to extract the information from the given comments using labels like people, location, organization.

- Used **POS-Tagging** method to assign parts-of-speech for each word in the given sentence and created a penn-tree

with pos to store in a file.

- Developed a model using **Naive-Bayes Classifier**, to classify the sentiment from the given sentence.

- Role: **System Engineer**

- Participated in **EDA and building ML model**

- Responsible for status updates, demo, improve accuracy

2. Resume Parser

- It is a web application designed for automating the manual resume processing system.

- This process basically involves scrapping of candidate data like name, email id, phone no, address, educational

details and work experience from candidate resumes through automation by leveraging Natural Language

Processing and Machine Learning.

- Multinomial Naïve Bayes, Term Frequency and Inverse Document Frequency (TF-IDF), NER Model, OCR.

SKILLS

- Machine Learning NLP, Linear Regression, Decision Tree, Random Forest, Logistic Regression, Naive Bayes

    Classifier, KNN, etc.,

- Python - NLTK, ScikitLearn, Numpy, Pandas, Scipy

- Deep Learning – CNN,RCNN,Faster RCNN,SSD

- AWS – Amazon Sagemaker, EC2, Lambda function, S3, ECR

- Computer Vision - OpenCV

- Tools – Anaconda, Visual studio code

- Data Analysis
- Web Crawling – Python Beautiful soup, Selenium
- Probability & Statistics
- Hypothesis Testing & Estimation
- Core Java
- SQL, HTML, JavaScript

EXPERIENCE SUMMARY

1. Senior ML Engineer in Quantiphi Analytics Solutions Private Limited, Bangalore Since Jan 2021 to Present.
2. ML Engineer in TensorIoT Private Software Services Pvt Ltd, Bangalore Since Sep 2019 to Jan 2021.
3. ML Engineer in Snipe It Solutions, Bangalore Since April 2018 to August 2019.
4. Systems Engineer Trainee in Customer Technology Solutions, a part of Thomas group of Companies, Chennai since, Nov,2015 to Aug ,2016.
5. Worked as Assistant Professor in PVP Siddhartha Institute of Technology Aug 2007 to Nov 2012.

ACADEMIA

1. M.E CSE from MNM Jain Engineering College, Chennai June-2015 with CGPA 8.24
2. B.Tech Information Technology from V.M.K.V Engineering College, Salem May-2006 with 70%
3. HSC from S.S.V Hr Sec School – Kodumudi - 638 151,Erode(Dt), March-2002 with 83%
4. SSLC from S.S.Girls High School – Kodumudi - 638 151,Erode(Dt), March-2000 with 85%

CERTIFICATIONS

- **Certified as AWS Solutions Architect - Associate**
- **AWSLearning Week in Machine Learning & AI: IITB - UPGRAD**

  - Certification Date : Oct 2018 – Present

  - License : 12029535

  - Completed Python, Machine Learning using python and Clustering algorithm.

PERSONALITY TRAITS

- Self motivated
- Punctual
- Flexible and can work in a team

PERSONAL PROFILE

Date of Birth   :   03-06-1985

Nationality   :   Indian

First Name   :   Nithya

Last Name   :   Subramaniam

Gender   :   Female

Marital status   :   Married

DECLARATION:

I hereby declared that the above mentioned details are true to the best of my knowledge.

Regards,

Nithya S