Arghyadeep Sarkar

👤 Professional Summary

I am a machine learning engineer with big interest in how data shapes our lives. I mainly work on NLP(Natural language Processing) but am curious about all fields where data has a big impact. I possess an extensive analytical skill, strong attention to detail, and a significant ability to work in a team environment.

🧑‍💻 Employment history

DataVal Analytics (A Sam Pitroda Initiative)
Role - Machine Learning Engineer
Oct. 2018 – Present

Chatbot
Responsibilities -
- Developed chatbot from scratch of both types
  - conversational bots: using rasa and wit.ai
  - flow based bots: user replies with text or select options
- Stored user details and chat history
- Integrated and fine tuned SQUAD v-2 for answering questions based on a text document.
- Monitored the overall functioning of processes, identifying improvement areas and implementing adequate measures to maximise client satisfaction

Match My Talent
Responsibilities -
- Used Solr to create search engine which searches all keywords and attributes
- Extract information about multiple requirements by analysing sentence structures
- Extract information about the requirements in the query using solr and nlp.
- Extract keywords like talents, specializations, specifications, language, location from the queries
- Extract number/color attributes like height, weight, skin type, complexion, eye and hair color etc from the queries
- Deployed it in production for handling concurrent requests using Docker.

Personal info

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Address:

7th Main, 20th Cross,
2nd Stage, BTM Layout,
Bangalore, 560076 (IN)

Skills

Python, NLP, Neural Network, Deep Learning, Data Structures and Algorithms, HTML/CSS, Javascript

Modules well-versed in

numpy, pandas, sklearn, tensorflow, plotly, matplotlib, keras, flask, Django, bert_serving, bert_summarizer, rasa_core, rasa_nlu, spacy, nltk, xgboost, urllib

Technical Experience

Python - 2 yrs

Flask - 2yrs

Django - 1 ys

Solr - 1.5 yrs

Tensorflow - 1.5 yrs

NLP - 1.5 yrs

Bert - 1 yr

Rasa / wit.ai / Dialogflow - 1 yr

Vessel Detection

Responsibilities -

- Worked with a defence/space client to predict the vessel movement.
- Preprocessed data using Apache Spark and visualised geo coordinates using qGIS, geopy.
- Developed vessel type and vessel route prediction model using Random Forest, SVM and Seq2Seq (LSTM).
- Worked on data entry, data auditing, creating data reports and monitoring all data for accuracy on daily basis
- Performed data systems check

Social Media Analysis

Responsibilities -

- Collected and scrapped data from a social network platforms like Twitter using tweepy and beautiful soup
- Dashboarding of analysis on tweets
- Analysis report showing the sentiment of tweets and comments.
- Analysis report of most used words, phrases and hashtags on tweets
- Heat map of tweets based on sentiments, locations
- Analysis report of twitter handles

Emotion Analysis

Responsibilities -

- Analysed / plotted data based on length, most often words, punctuations, vader score, textblob score, n-grams etc.
- Extracted features which disentangle the hidden factors of variations
- Fine tuned Bert multi classification for better results
- Carried out specific data processing and statistical improvements

Dataval Chatbot

Responsibilities -

- Improve the core NLU engine for intent understanding/entity resolution
- Simplifying the NLU architecture to add more domain easily
- POS handlings such as preposition, conjunction and pronoun
- Revised, modularized and updated old code bases to modern development standards, reducing operating costs
- Built a question module which fetches relevant information from data stored in MongoDB, Orient DB, MySQL databases using Java.
- Developed multiple JAVA APIs for extracting information
- from databases based on query

Technical Experience

Jinja 2 - 1.5 yr

Pandas - 2 yrs

Numpy - 2 yrs

Keras - 1.5 yrs

Plotly /

Matplotlib /

Seaborn - 1.5 yrs

SQUAD - 0.5 yrs

Interests

- Being an active member of the group BINB, I am highly involved in organising events like sports, artworks and various festivals.
- Games - Cricket, Chess, PC and Mobile games
- Reading Books/Novels
- Painting - Certified for painting by Kala Kendra, Shantiniketan

Vital Laboratories Pvt Ltd

Apr. 2018 – Oct. 2018
Research and Development Engineer

Project Name - BlueTalon
Role -Software Developer
Responsibilities :
-        Research, Design and Implement scalable interfaces, classes and methods.
-        Fixing Bugs and Issues
-        Collaborate closely with other team members to plan, design and develop robust solutions.

Project Name - Nimesa
Role - UI Developer, Automation Testing
Responsibilities :
-        Creating angular js scripts
-        Adding new features
-        Automating Test Cases
-        Automating Nimesa AWS

Deuglo Technologies Private Limited

Oct. 2017 – April 2018

Project Name - RFID based Film reel tracking & Management
Role - Intern Java Backend Developer
Description - It's a project from National Film Archive of India. It is an asset management project. This project will help them store , maintain, verify validate millions of records of films, also keep a record of the reels.

Project Name - Human Resource Management
Role : Java Backend Developer
Description : This project is to help the admin electronically manage the organization, employee recruitment, onboarding and retention, job role assignment, compensation, performance management, learning and training and succession planning, employee engagement and recognition

Education

JIS College of Engineering,
Kalyani, West Bengal
Jun. 2017
B-Tech
Computer Science and Engineering
GPA - 70.2