Reshma R

✆ : (+91) 9496294382

✉ : reshmarabi29@gmail.com

Career Objective:

Experience as a Data Scientist in Artificial Intelligence and Cognitive Computing. Worked extensively in Computer vision, Text mining, Natural Language Processing, Machine learning and Deep learning technologies. Seeking a position with opportunities in to use my skills in Artificial Intelligence, Machine learning, Deep learning and Analytics to the utmost benefit of the organization and to expand my own skillets.

Professional Summary:

- 2 years experience in building applications based on Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing(NLP), Cognitive Computing and Data Mining.
- Experience in building Chatbot applications using natural language processing (NLP).
- Experience in web scraping and data extraction from different formats eg. html, image, pdf, doc
- Worked in sentiment analysis, machine learning algorithms like SVM, Naive Bayes, KNN, K Means etc. in banking domain.
- Experience in building image processing, object detection ,face recognition applications & products
- Worked on deep learning algorithms like CNN, LSTM.
- Experience in building sample data set and creating data models.
- Skilled in validating the data model with different testing terminologies.
- Effective in working independently and collaboratively in teams.

Skills Summary:

Operating Systems	Windows, Ubuntu
Programming Languages	Java, Python, R
Database	MySQL, Redis
NLP Tools	NLTK, protégé, Jena API, CRF++, SVM, YamCha, Spacy, Glove, WEKA, GATE, MALLET, scikit-learn, Stanford CoreNLP, fastText, TextBlob
Deep Learning	Tensorflow, Keras, DeepLearning4j, YOLO
Computer Vision	OpenCV, scikit-image, PIL, Tesseract
Other Tools	Hadoop, JSP, Selenium, OR-Tools
IDE	Eclipse, Pycharm

Work Experience:

Company (Current) : **GI Finserv , Chennai**
Designation : Data Scientist
Duration : From Oct 2017 to till date

Company(Previous) : **CogniCor Technologies , Kochi**
Designation : Junior NLP Engineer
Duration : From Dec 2016 to Oct 2017

Project Experience:

Project : **Question Answering System**
Technology : Spacy, Regular expression, fastText, docx4j, Elasticsearch, NLTK K Nearest neighbor (KNN), Python, Java

Description:

The intent of the application is to answer queries related to banking. The data extracted from different file formats are used to populate the knowledge base. The application consisted of two modules - The first is Supervised machine learning model(KNN) model for creating and showing FAQs and the second module is for full text search from the documents using elasticsearch and NLP methods.

Project & Organization : **Authentication System using Face Recognition**
Technology : Dlib, OpenCV, Python, SQL

Description:

The application takes real time videos from the CCTV and recognizes each persons images by comparing it with the database. Worked as an individual contributor to develop and test the deliverables.

Project : **Vehicle Type Detection**
Technology : YOLO, OpenCV, Python

Description:

The product is intended to predict the vehicle type. The CCTV footage are fed as input. After doing necessary image enhancements like resizing, the image frames are trained using yolo for vehicle classification model to predict the type of vehicle.

Project : **Chatbot & Messenger Bot for Tour Planning**
Technology : SQL server, Flask, Regular expression, NLTK, Redis, Heroku, Python

Description:

An intelligent conversational interface for tourism domain. It is designed and deployed both as a chatbot and messenger bot. Reusable modules are created and shared across both the chatbot and messenger bot.

Project : **Document Extraction**
Technology : OpenCV, PDFMiner, PIL, Tesseract, Regular expression, Python

Description:

The application was built to A platform to analyze the bank statement and payslip to predict the financial status of a customer for loan processing. Worked on text extraction from scanned and digital bank statement/payslip, pattern analysis and report generation from the same.

Project : **Text Classification using Convolutional Neural Network**
Technology : Tensorflow, Glove, Numpy, Regular expression, NLTK
Description:
The application is used to classify the sentiment of the chat of the customer using deep learning architecture called Convolution Neural Network(CNN). The application uses the huge size of chat log data and predicts the customer satisfaction by the sentiment class as More positive, Positive, Neutral, Negative, More Negative. This also helps to improve the chatbot performance.

Project : **Chatbot using Ontology**, **GATE & Machine Learning**
Technology : Java, MALLET, Regular expression, Stanford NLP, Protégé-5, JAPE, GATE, Jena, WEKA, NER
Description:
The artificial intelligence-powered chatbot provides potential customers with a convenient, fast and accurate channel to get their questions addressed for a renovation loan, insurance claiming. From the data provided by the client website and other documents, data is extracted for creating and populating the ontology. The chatbot can ask for your suggestion or directly answer the query. Worked on the machine learning model for direct answering phase with Naive Bayes Classifier. Involved in ontology and knowledge base population. Tested NLP models for Named entity recognition(NER), spell correction. Participated in chat flow integration and machine learning model creation using SVM.

Awards and Publications:

- **GATE** recipient 2014.
- **"Sentiment Analysis Tools And Techniques"**, in proceedings of NCCLAIR-2014, pp. 24-31 - Indhuja K, Reshma R.
- **"Sentiment Analysis for Malayalam movie reviews Using YamCha and Fuzzy Logic"**, in proceedings of NCILC, pp. 15-18, CUSAT, Cochin, 2016 - Dhanaraj V, Reshma R, Sreetha S, Binu R.
- Appreciation from management for deliverables on Face Recognition.

Educational qualifications:

Degree	Board/University	Year	Percentage/CGPA
M.Tech in Computational Linguistics	Calicut University	2016	8.01
B.Tech in Computer Science	Calicut University	2012	69
X II Board	Kerala state Board	2009	86
X th Board	Kerala state Board	2006	89

Personal Details:

Date of Birth : 29 January 1991
Nationality : Indian
Marital Status : Single
Languages Known : Malayalam, Hindi, English
Present Address : Thamarachira House, Kacherimedu, Chittur Post, Palakkad, Kerala. 678101