# Mahesh kumar katakam

#### Associate Data Scientist

Data Scientist familiar with gathering, cleaning and organizing data for use by technical and non-technical personnel. Advanced understanding of statistical, algebraic and other analytical techniques. Highly organized, motivated and diligent with significant background in Machine Learning and NLP.

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Nellore, India

### **WORK EXPERIENCE**

# **Associate Data Scientist** ANTWORKS, Bangalore

06/2020 - Present

AntWorks' is an Al-based RPA software product designed to understand structured as well as semi-unstructured data types such as handwriting and forms.

# Intern - Congnitive Machine Learning ANTWORKS, Bangalore

12/2019 - 05/2020

Signature Detection and verification

- Detection of signature is developed using object detection model of FASTER-RCNN with TENSORFLOW library
- One-shot learning with Siamese neural networks is used for verification and identification of signatures
- Applied TRANSFER LEARNING technique to generate best model with comparatively small amount of data collected from client and as well as outside sources

### **EDUCATION**

# **B.TECH, Computer Science** SASTRA, Than javur

06/2016 - 06/2020

CGPA 8.0

# Intermediate, MPC Sri Chaitantya, Nellore

05/2013 - 06/2015

percentage 97.4

## SKILLS



## **PROJECTS**

## Classification Module of Business Document types

- Instead of following traditional Document Classification model we developed a System where we incorporate knowledge of patterns trained by user by following Closed Domain Question and Answering
- Achieved maximum accuracy of 94% by classifying Mostly relevant paragraphs by learning important features in patterns provided by client instead of classifying entire document
- Provided training module for training new patterns to store in to our knowledge base required for future processes

#### Extracting Essential Entities from Document

- Extraction of data from images using TESSERACT and improved its accuracy by applying pre-processing techniques like removing Junk characters etc.
- Person names, addresses are extracted using SPACY module and Improved accuracy by using post processing techniques.
- Developed multiline address extraction by using traditional programming and uses SPACY, PYAP for further validation.

#### Sentence Comparison API

- API is developed by using FLASK which outputs similarity of input sentences.
- Provided various option to user by passing arguments to select various text processing techniques like TF\_IDF, WORD2VEC, GLOVE and GOOGLE SENTENCE ENCODER.
- For Numeric datatype used REGEX to extract numeric data to compare between the inputs.

#### Table Extraction Module

- A generic module that covers detection of variety of tables and extract unstructured enterprise contents to a serialized form.
- Mutli page table extraction, Data Validation is also covered based on traditional programming.
- The architecture is a blend of image processing algorithms and traditional engineering techniques.

## **CERTIFICATES**

#### Machine Learning course

Completed Andrew Ng Machine learning course on Coursera which teaches Basics of All Machine learning Algorithhms