NAVEEN BM

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PROFILE

Data Scientist	*September 2020-Present*
Reliance Jio Infocomm Limited	
Computer Vision Developer	*October 2018-March 2020*
Artivatic Data Labs Pvt Ltd	
Software Engineer	*October 2017-August 2018*
Emage Vision India	
Trainee Engineer	*August 2016-June 2017*
Tata Elxsi Ltd	

CAREER OBJECTIVE

Curious and Passionate problem solver to decipher customer journey and empower business growth through data science technology. My current focus is on technologies like Machine Learning and Data Science. My ability is to analyze and interpret unique problems with a combination of training experience and logical thinking to get the right solutions.

EXPERIENCE DETAILS

- Believe in writing maintainable code and to constantly follow PEP8 conventions and GIT.
- Hands on experience in developing Production ready Models, used TF-Serving, Flask and Django for developing RESTful API's.
- Hands on experience in different frameworks like Keras, Tensorflow.
- Experience in Web Scrapping.
- Good knowledge in Computer Science fundamentals, Data Structures, Algorithms and Mathematics.
- Have experience in Big Data Technologies, Hadoop, Map Reduce, Spark, Hive
- Strong Passion for Data Driven Research and working in Fast-Paced environment.

TECHNICAL STRENGTHS

Language	Python, PySpark
Technical Experience	Machine Learning, Image Processing, OpenCV, Deep Learning, TF-Serving, Numpy, Pandas, Scikit Learn, Tesseract, Spacy, NLP
Frameworks	Django, Flask, Tensorflow
DataBase	SQL
IDE	PyCharm, Postman, Jupyter Notebook

PROJECTS

Image Classification for Defect Lens (Emage Vision India, *December 2017- May 2018)*
- Performed data-preprocessing using conventional CV techniques.
- Analysis of available data and Data Augmentation for classes with less data to balance the train images.
- Used CNN for Image Classification using Inception Architecture. The Model was trained to classify image to one of 15 classes. Trained the model from scratch.
- Model evaluation using Confusion Matrix and AUC.
- Used TensorBoard for Data Visualization.

Unsupervised Model for Q&A system. (Emage Vision India, *May 2018- August 2018)*
- Training a Unsupervised Learning model for returning the sentence from a paragraph which has the minimum distance from the given question.
- Used Dependency parse tree as a feature using Spacy tree parsing for navigating through the tree.
- Also performed comparison for the performance of the model using Multinomial logistic regression, Random forest and XGBoost on the Validation set.
- Got an onsite opportunity to visit client site in Singapore to give demonstration of the project.

Document Classifier for Financial Documents. (Artivatic Data Labs, *December 2018-March 2019)*
- Task is to Develop a classification model to Classify Financial Image Documents.
- Text Document images related to Finance were used to build the classifier. Financial Image Documents like Bank statement, pay slip, ITR, COI and Other related documents were labelled to different category.
- Sequential model was trained to categorize the image documents to available classes.
- The classified image was passed to different RESTFUL API's to extract insights from the document.

Extraction of Information from Unstructured Document. (Artivatic Data Labs, *November 2018-March 2020)*
- Performing OCR on image documents and to extract the text from the image documents.
- Once the Text is extracted from Images, algorithms were built to map the fields to respective keys.
- Used Tesseract OCR after Image processing and converting a Image document to a searchable document.
- Once the Image document is converted to PDF, python Libraries were used to extract text from the documents.
- Performed data-preprocessing using conventional CV techniques.
- RESTFUL API's were built for each of Financial Document for extracting meaningful insights from the Documents.

Recommendation Systems (Reliance Jio Infocomm Ltd, *February 2021-Present)*
- To build Personalized and Non-Personalized recommendations to the user based on the past history.
- Various data sources from the client were consumed to bring recommendations on Language, Channel and Genres.
- Content based and Collaborative models were built for user recommendations based on the data attributes.

Cricket Scene Clustering and Classification (Reliance Jio Infocomm Ltd, *September 2020-December-2020)*
- From the cricket match video frames were extracted and a model was fit to cluster the image samples to different clusters.

- K-Means clustering adopted to cluster the image frames to different clusters. The number of clusters were chosen to be 19.
- From the clustered data a supervised model was trained to classify the frames from the input cricket match during inference.
- Transfer learning was used to train the model leaving behind last 15 Layers for weight updating. The model was trained for 19 classes.

Data Engineering. (Reliance Jio Infocomm Ltd, *September 2020-Present)*
- This included development of ETL scripts, maintaining the existing ones.
- Data ingestion for data visualization in the Dashboard.
- ETL changes based on the client requirements and communication on various aspects of the project.

Education Details
M.tech : R V College of Engineering , **Digital Communication Engineering 2017**
B.E   : Sai Vidya Institute of Technology, **Electronics and Communication Engineering 2014**