Abhinav Abhishek

Senior Machine Learning Engineer

Contact

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Skills

Deep Learning: CNN , RNN, LSTM, GRU, Image Classification.

Deployment Skills: TensorRT IS, TFServing

Machine Learning: SVM, kNN, Logistic Regression.

Programming language: Python, SQL.

Tools/Framework/Packages: Pytorch, Keras, Tensorflow, Scikit Learn, Pandas, Numpy, NLTK ,Gensim

A passionate Data Science enthusiast who wants to be part of the next technology disruption.

Work History

2020-02 - Current

Senior Software Engineer- Machine Learning

Gartner India Research & Advisory Services Private, Benagluru, Karnataka

Clause Comparison(NLP)

- Building system to identify & classify different types of clauses hidden in PDF & other documents. System will be utilized by the analyst to support Gartner in reducing total processing time.

2018-12 - 2020-02

Senior Machine Learning Engineer

Quantiphi Analytics Solution Private Limited, Bengaluru, Karnataka

Real Time Video Analytics to impose Safety Features(Computer Vision & Video Analytics)

- Built highly scalable Deep Learning model to support "Real time" video analysis and safety features and also Involved in building highly available inference architecture for platform side.
- We have used several "state of the art architectures" like(CenterNet, PifPaf, Mobilenet, Resnet) to Detect "Human skeleton points" and classify Poses into different behaviour(Panic, Rest, Attention).
- We have also able to overcome the issues in detecting small objects by adjusting the **"global receptive fields"** of our custom networks.
- **We have maintained throughput of 15 inferences/sec with overall maximum measurable latency of ~2 seconds.**
- **We were able to reduce FPs from 1000/day to 20/day by applying several data augmentation techniques as cut-out etc**.
- We used different quantization techniques supported by instances like p4/T4 to lower the latency without loosing Accuracy of the models.
- Used cloud "PUB SUB" for faster message queuing.

Cloud : GCP, AWS

Data Visualization: pyplot, Tensorboard

- Collaborated with Nvidia & TensorFLow team to optimise DL models for faster inference without increasing latency.

2018-12 - 2020-02

Senior Machine Learning Engineer

Quantiphi Analytics Solution Private Limited, Bengaluru, Karnataka

Classifications of Symptoms into various categories after Medical Device Implantation(Natural language Processing & Computer Vision)

- Helped customer in reducing the manual effort to categorize side-effects after applying several Neural based Object detection(MobileNet Network) and Text classification techniques on Medical records generated post device implantation in patients.
- We were one of the few partners of AWS who utilized their NLP services(Healthcare) like Comprehend and deployed the application in production.

2014-11 - 2018-12

Machine Learning Engineer

Wipro Limited(Wipro Holmes Product Team), Bengaluru, Karnataka

Sentiment Analysis for Screening of clients using "Unsupervised Learning"(NLP)

- Used unsupervised learning(Latent Dirichlet Allocation) to build the model which will provide the best desired paragraph out of hundreds and indicative of any illegal/negative action done by the individual/Institution.
- This whole project was in **"POC"** stage and received lots of appreciation from the leaders and stakeholders.

2014-11 - 2018-12

Machine Learning Engineer

Wipro Limited(Wipro Holmes Product Team), Bengaluru, Karnataka

Information extraction using image and Text Classification(Natural language Processing & Computer Vision)

- Information Extraction: The objective is to build Intelligent service based on Text classification to detect and extract the financial Data (Assets,

Directors,Controllers). My responsibility was to explore the patterns available in the unstructured documents like (PDF) and build a classifier capable enough to
1)detect Valid section of Data. 2)Extract the Data. Generate Evidences.

Extraction of Tabular Data using CNN and Text Classification:

- Part of team having scope to build a generic framework capable of detecting and extracting the data from a image document. We used CNN to detect the tabular structure in the document and extracted texts using OCR. Once text got extracted applying some rule based regular expressions get the desired data.Used CNN to detect/find desired classes in "Annual Report" with an accuracy of 86% followed by OCR for extraction of the Text data.

Education

2014-12 - 2018-08

Master in Technology: Information Technology

Vellore Institute Of Technology - Vellore
G.P.A - 8.6

2011-04 - 2014-07

Bachelor of Science: Instrumentation Sciences

Bhaskaracharya College Of Applied Sciences - Delhi
Percentile : 83 %

Accomplishments

- I am the holder of "UNIVERSITY POSITION" in my undergraduate Bachelor Degree (2011).
- I am a holder of the "POSCOW ASIA FELLOWSHIP" for consecutive two academic years (2011 – 2012).