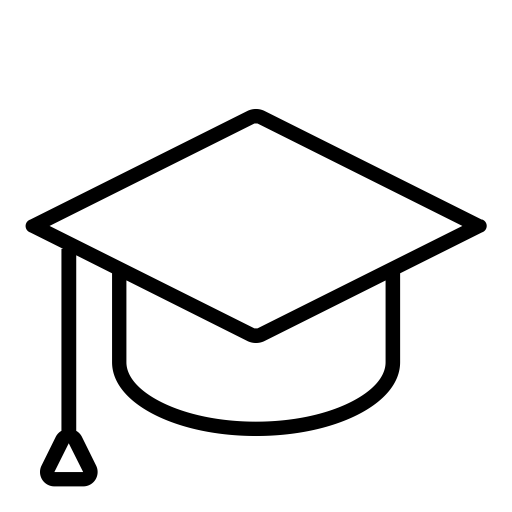
RAAJESH LAGUDUVA RAMESHBABU  raajeshlr2@gmail.com

Machine Learning Development and MLOps Engineer  +91 - 9600745502

Trying to make the world a better place, one line of code at a time.  Shivani Apartments, Bangalore.

<https://www.linkedin.com/in/raajeshlr> Image result for work experience icon png Accenture - 7 Years



 ML Development - <https://github.com/raajeshlr?tab=repositories>  B.E ECE: 86.3 %

 ML Operations: MLOps - <https://github.com/emlopsinfy?tab=repositories>

**SKILLS**

**Machine Learning Development:** Machine Learning, Deep Learning, NLP, Python, RNN, LSTM, TensorFlow, Keras, PyTorch, Image Processing, OpenCV, MongoDB, SQL.

**Machine Learning Operations MLOps:** DVC, GitHub Actions for CI/CD, Continuous Machine Learning, Heroku, Docker, Kubernetes, GCP Cloud Services, Microsoft Azure Services, Azure ML Studio, MLflow, Kubeflow, Model Monitoring.

Leadership Skills.

# INTERESTS: Machine Learning Operations

**MLOPS INTERNSHIP EXPERIENCE** **@**  <https://theschoolof.ai/> **Sep 2021 – Present**

* Version Control using DVC and automated Python testing using GitHub Actions.
* Developed Flask App which accepts image and returns prediction, then deployed it to Heroku – <https://emlopsinfy.herokuapp.com/>
* Developed Flask/PyTorch/Docker App and deployed it to Heroku using Docker – <https://pytorchinfy.herokuapp.com/>
* Learnt fully about Docker components, also created two services and communicated using docker-compose.
* Learnt all the internals of Kubernetes, used online environment and worked on topics like create K8s cluster, deploy app, explore app, scale up the app, and much more.
* Worked Kubernetes on local, created MongoDB and MongoDB-express services and interconnected with secrets and config maps.

GitHub Repo for ML Operations MLOps - <https://github.com/emlopsinfy?tab=repositories>

**MLOPS WORK EXPERIENCE Accenture, August 2021 – Present**

**Model Monitoring**

* Developed Model Monitoring System using Evidently for the data drift, target drift, performance drift.
* Created the pipeline on MLflow and integrated with Model Monitoring System.

**Model Deployment to GCP**

* Created Pipelines using Kubeflow components and deployed it to GCP Vertex AI.
* Used Cloud services such as Cloud Function, Cloud Build, Cloud Source Repo, Cloud Scheduler, Cloud Pub/Sub, Cloud Storage.

# ML DEVELOPMENT WORK EXPERIENCE Infosys Ltd, Dec 2018 – July 2021

# INFOSYS FRAUD DETECTOR

# Developed web application - Angular: UI Layer, Python: Application Layer, MongoDB: Data Layer.

# Worked on Python and MongoDB and have understandable knowledge on Angular.

# Have used LSTM + CNN based ensemble network for identifying fraudulent info in text and numerical data.

# Deep Learning model + NLP techniques Spacy, tesseract, bounding box for identifying tampered image.

# Used Docker for Python, implemented Azure AD Single Sign On (SSO), 3-tier architecture.

# The product is live, and taken care of end to end - Requirement, technically leading, deployment.

# COMPREHENSIVE CROSS CHECK FOR NEW JOINERS

# Developed Python bots for extracting fields from documents and pdfs, comparing it with SAP DB data.

# Created deployment pipelines of this project in the Virtual machines.

# It is for the HR Team and the product is live, it automated the manual cross check work and reduced FTE’s.

# INFOSYS INTELLIGENT CHATBOT – Understands user screen and provides solution.

# Developed Microsoft Azure Chatbot using node.js and used Python for backend Machine Learning.

# Used One-Shot Learning, NLP techniques, and built with QnA and RPA Services.

# Deployed Python code to Azure as a Docker image.

# INFOSYS INTELLIGENT ASSISTANT – To Automate Support Projects.

# Used Logistic Regression, Random Forest, Decision trees algorithm for the text classification.

# Implemented LDA for clustering for tickets, spacy for NER, text rank for related tickets.

# SIGNATURE CLASSIFICATION USING CNN

# Started this project from scratch, collected the images, labelled it, trained using CNN model.

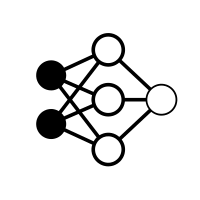
# Written the python code for cropping, finding the coordinates and completed this small project.

# ML DEVELOPMENT INTERNSHIP EXPERIENCE <https://theschoolof.ai/>

# Image result for work experience icon png Experience on CNNs and NLP using Keras and PyTorch, GAN.

# CNN - Image classification and object detection, Landmark’s detection, Transfer Learning, super convergence.

# NLP - RNN’s and LSTM for text classification, Sequence to Sequence models.

CNN Projects in Keras: https://github.com/raajeshlr/EVARepository

 NLP Projects in PyTorch: <https://github.com/raajeshlr/NLP-END>

# JUNIOR ML ENGINEER WORK EXPERIENCE TCS, Dec 2014 – Nov 2018

**HOME CREDIT DEFAULT RISK**

* Our goal is to predict loan defaulters using Logistic Regression, Random Forest, and LightGBM model.
* Performed EDA, preprocessing done, tried feature engineering, and evaluated with ROC AUC.

**FINDING DONORS FOR CHARITY**

* Our goal is to predict individuals makes money > $50,000 to appeal donor for a non-profit organization.
* Performed EDA, pre-processing including skewed continuous feature transformation, normalization, encoding.
* Performed Grid Search CV and fine-tuned essential parameters for GBM, which achieved a prediction accuracy of 87%.

**DENSELY CONNECTED CONVOLUTIONAL NETWORKS – DENSENET**

**CIFAR10 DATASET: DENSE-NET PAPER** <https://arxiv.org/pdf/1608.06993.pdf>

* Created Dense-Net architecture with three convolution blocks and two Transition blocks.
* Achieved the max validation accuracy of 88% after fine-tuning and implementing OneCycleLR.

**CREATING CUSTOMER SEGMENTS**

* Developed Unsupervised Learning, clustering technique, demonstrated feature scaling, dimensionality reduction and feature transformation using PCA and identity customer segments hidden in the data.
* Developed K-Means clustering algorithm and GMM and measured performance with Silhouette score.

**CONVOLUTIONAL NEURAL NETWORKS USING FASHION MNIST DATA- NO OBSELTE METHOD**

* Goal is to achieve 99.2% Val Accuracy with less than 20,000 Hyper-parameters (No Hidden layers should be used).
* Developed the model with a high-level framework Keras, with selection of TensorFlow for backend.
* The model achieved 99.2% Validation accuracy in 11 Epochs.

**RESTAURANT REVIEW MANAGEMENT SYSTEM**

* Goal is to classify reviews, performed cleaning, stemming, created corpus and bag of words with 2000 features.
* Implemented Gaussian Naïve Bayes Classifier, and trained and tested the model, evaluated using f1\_score.

**CERTIFICATES**

ML Nanodegree - Udacity, Sequence Models - Coursera, Machine Learning - Coursera, Machine Learning A-Z - Udemy.

**HONOR AWARDS**

*Impact creator award from Infosys.*

*Best Performer of the year award from TCS.*

*Service and commitment award from TCS.*

# LANGUAGES: Sourashtra, English, Tamil, RW Hindi, Learning Kannada.

# ACHIEVEMENTS

# Secured ‘Certificate A’ Exam under authority of, Ministry of Defense, Government of India.

# Completed Hindi Exams until Praveshika.

# Presented Parallel Parking robots and image processing surveillance system papers during college.

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