**Vasudeva Reddy B +91-9632522052 | developervasudeva@gmail.com**

Experienced full stack data scientist/machine learning engineer with 4 years of professional experience - building, deploying and monitoring machine learning, deep learning models/pipelines primarily focusing on unstructured data (Text) using Python, Natural Language Processing (NLP), GCP. Experienced in working across various domains - banking, ESG/Sustainability, energy utilities and HR-analytics.

**EXPERIENCE**

**Associate consultant KPMG | Bangalore Oct 2021 – Present**

**ESG-IQ product-development:**

* Objective was to generate ESG score for an organization, or a country by fetching the news article(s) based on different ESG frameworks. This score is going to help a bank, which will be used as a metric to evaluate while lending money to an organization/country.
* Part of unstructured data science team working as a full stack machine learning engineer, wherein I built and tested automated pipelines to fine-tune aspect-based sentiment model (SPC-BERT), topic classification model (ROBERTA-LARGE) using GCP (BigQuery, GCS, Vertex AI, Docker).
* Followed end to end MLOPS (CI/CD) process for model deployment/re-training. Deployed the entire ESG-IQ unstructured scoring pipeline to do batch inference for the backfill and daily run jobs on 4 years of data (40 million+ news articles) using Apache airflow, GCP Dataflow, Kubernetes.

**Systems Engineer Infosys | Hyderabad Jan 2019 – Oct 2021**

**Multi-lingual sentiment/intent classification chatbot:**

* Worked with an Indian bank to detect the sentiment behind the customer feedback after completing a transaction, where the given sentences were in Hinglish (Hindi + English).
* Developed a multiclass classifier to identify the sentiments – Positive, Negative and Neutral. Involved in conversion of data into Latin script (Devanagari), generating the embedding vectors using a pre trained model (IndicBERT), finetuning for our specific task and building an API using Flask.
* Module was developed to get an understanding of what all issues users faced when they made a transaction, so that they can improvise the user experience in future, if possible.

**Email Classifier to recognize an appreciation mail:**

* Developed an email-classification model using 10k+ emails to detect whether the email is appreciation email or not, for the internal consumption of the HR department.
* This involved data extraction, preprocessing of staff emails - conversion of email body into embedding vectors using USE (Universal Sentence Encoder), fine tuning the model.
* With the help of this model, HR team were able to get an insight about who is getting appreciated on what and used it as a metric for performance evaluation within the organization.

**SKILLS**

* **Areas of Expertise:** Deep learning, machine learning, NLP, MLOPS (CI/CD), ML System design (Low level, high level), OOPS, Computer vision.
* **Tools**: Python, Shell scripting, SQL, Docker, GCP (Bigquery, Vertex AI, DataFlow, Kubernetes), Git, Github Actions (CI/CD), Apache Airflow, DVC (Data Version Control), MLFlow, FastAPI, Flask, streamlit, BentoML, pytest.
* **ML libraries**: NumPy, Pandas, Seaborn, Plotly, Scikit-learn, Pytorch, Pytorch-lightning, Tensorflow, Keras, Transformers, NLTK, Spacy.

**EDUCATION & CERTIFICATION**

* **Amrita Vishwa Vidyapeetham**, Bengaluru **Karnataka, 2015 - 2019**

Bachelor of Technology in Computer science specialization (**CGPA - 7.36)**