ANOOP SHARMA

Staff ML Engineer, 11 years

✓ asanoop24@gmail.com

+91-9620642424

in @asanoop24

@asanoop24

@asanoop24

Always Eager to learn about new tools, frameworks and best practices in the rapidly evolving world of machine learning. Currently focused towards building production grade solutions in the fields of Natural Language Processing and Computer Vision. Also exploring the LLM realm, specifically the Open source LLMs and their applicability and feasibility in an enterprise environment.

Experience

Kenvue Staff Engineer – ML and Al

Feb 2024 - Present / Bangalore

- Leading the development of the planogram optimization solution aimed at maximizing the sales and retail stores by selecting the best assortment and arrangement for their products. The solution currently uses Genetic Algorithm to find the optimal mix of products and their positioning on the planogram with revenue as the key objective.
- Developed Knowledge Graph based RAG pipeline to enhance the accuracy of the existing chatbot enabling internal users to query the company documents and policies conversationally.

Firstsource Solutions Lead ML Engineer

Jan 2018 - Jan 2024 / Bangalore

- Developed an automated multi-page claim classification solution for a leading Insurance provider by using the scanned images and OCR text obtained from the images. Implemented both vision and language based deep learning models to achieve a page level accuracy of over 95% and the multi-page claim level accuracy of over 99% after applying certain probability thresholds.
- Developed a Generative AI based solution to automate the QA process of the customers' chat interactions with the agents. Leveraged OpenAI's GPT-3.5 an GPT-4 models to extract the required information from chat transcript which is later used to classify the chat into one of the pre-defined categories. The solution also incorporates a redaction component to mask any PII and ensure data privacy.
- Architected and managed the development of an online news monitoring solution to predict and highlight the potential impact of external factors on the different operational metrics. The solution uses different components such as custom Python based web scraper to source news data, Seq2Seq based language models for news article summarization and a Workflow Orchestration tool to deploy the solution as an automated pipeline.
- Managed the development of the in-house Analytics platform to enable business users and data scientists to analyze their data and run models with a few clicks.
- Developed a proof-of-concept for an API hub to democratize all the solutions as APIs and feed-in to the in-house Analytics platform as well as external users
- Designed and developed a proof-of-concept to extract information in structured format from the tables in scanned images.
- Managed the business intelligence and reporting for different projects and guided the team through the dashboard development and automated refresh pipelines.

Antuit Al

Mar 2015 - Jan 2018 / Bangalore

Sr. Business Analyst

- Developed a scraper tool to extract the products and catalogs of different websites and store them in a structured format.
- Developed an automated solution to extract data from PDF files with varying templates with a coverage of nearly 80%.
- Developed a topic model to identify key themes in an unstructured text and cluster the documents based on those topics
- Designed and developed an Excel and VBA based dashboard application providing an end-to-end view of the customer responses for a CRM firm helping them understand the areas of improvement in products and services offered.
- Worked with the E-Commerce team of a recently launched beauty products company to help them assess their performance in the market individually as well as with their competitors and optimize their inventory by forecasting the sales of their SKUs for the coming month.

Mu Sigma Business Analyst

Aug 2013 - Feb 2015 / Bangalore

Worked with the Search Advertising team of a leading Technology company for

- Evaluating the current performance of its recently launched product
- Suggesting the optimal targeting settings for its customers enabling them to maximize their revenue
- Developed multiple dashboards using Excel/VBA to provide business intelligence around the product ads in the search engine results.

Extras

- Written a python library, Dagmate, to act as a wrapper for Dagster (a workflow orchestration framework) and automate the workflow generation using a simple yaml configuration file. Published the library to PyPi.
- Published 2 articles on Medium around web development and ML workflow automation respectively.

Skills

Programming Languages Python, SQL, ReactJS

Computer VisionVision and Vision-Language Transformers (Donut, LayoutLM, DiT), CNNs, OpenCVNatural Language ProcessingLanguage Transformers – BERT, RoBERTa, BART etc., Semantic Search, LLMs (GPT-3.5/4)

Structured Data Modelling Random Forest, Xgboost, SHAP, Linear/Logistic Regression

ML Tools / Frameworks Hugging Face Transformers, PyTorch, SkLearn, Langchain, OpenAI, Haystack

ML Ops / Dev Ops / Cloud Dagster, MLFlow, FastAPI, Streamlit, Kubernetes, Docker, GitHub Actions, Terraform, Azure, GCP

SQL / Vector Databases PostgreSQL, MySQL, SQL Server, Qdrant, Chroma, Weaviate

Other Software / Tools Power BI, Tableau, Qlik Sense, Excel

Highest Education

Bachelor of Technology - Civil Engineering CGPA – 6.9

2009 - 2013 / Indian Institute of Technology, Roorkee