+91-8826638628

Senior Data scientist having 6+ years of industry experience of developing end to end machine learning, deep Learning based solutions.

Skills

Agile, Machine Learning, Deep Learning, NLP, Transformers, BERT, GPT, Elasticsearch, Generative AI, Langchain, OpenAI, Python, pytorch, tensorflow, huggingface, SQL, Image Processing, Flask, FastAPI, Docker, Tesseract, Airflow, Mlflow, AWS, GCP

Experience

Zenon.ai / Tech lead Sep 2021 - Present, Noida, India

AI-powered contract analytics

- Produced potential savings of over \$1.00 MM per year with the developed solutions for Legal teams for extracting information from contract documents using BERT-based NER/TC, co-reference resolution, and Generative AI (for downstream integration)
- Created a proprietary solution for decomposing complex clauses into linear policy components using open-source Generative AI based models.
- Optimized model inference pipeline. e.g., earlier to run inference on 140 Contracts, it took ~ 2hours, after applying multi-processing, it just took ~12 mins, thereby, reducing overall inference time by 90 %.
- Effectively allocated resources, including personnel and equipment, to optimize team efficiency and project outcomes.

Business/Capability Development

- Developed Elasticsearch based search engine to handle free text user queries on Domain specific knowledge-base for a healthcare client.
- Developed POC for QA-bot for question-answering on pdfs using GPT 3.5 and langchain, llama-index as a framework.
- Developed POC for dialogue summarization using historical chat data using open-source LLMs and langchain framework.

Telus International (Innovation Labs) / ML engineer Aug 2019 - Aug 2021, Noida, India

Customer support ticket classification

- Increased CSAT by 92% with auto ticket classification and populating issue specific response to the users for a major gaming portal.
- Multi-class classification using pre-trained BERT model was developed.
- Deployed REST API using FastAPI and Docker for inference.

Topic extraction on inbound emails

- Decreased response time for the user issues by 60% with Topic modelling on the inbound emails.
- Contextual pre-trained model was used to extract topics out of given emails.
- Major topics/issues were captured over a time period based on volume of emails/issues received, which helped support team to prioritize the action items.

SMART Knowledge Base search engine

- Implemented contextual search engine using BERT and elasticsearch which could handle queries in more than 5 languages.
- Collaborated with cross-functional teams from UX/UI, data engineers, Product owners to build client ready solution.

Text classification APIs for Chatbot

- Developed text Classification APIs for Abuse detection, Tone classification, Intent Classification using BERT and Flask API.
- These APIs were integrated downstream the chatbot application to better understand customer's level of dissatisfaction and provide customized solution to them on priority.

Tata Consultancy Services / Data Scientist Jan 2017 - Aug 2019, Pune, India

Propensity model development

- Enhancing the propensity to delay of datacenter deployments using logistic regression.
- Developed classification models using Logistic Regression and Tree-based ensemble models.

Customer Segmentation and Market Basket Analysis

- Developing Clustering based models on RFM analysis to group the customers into different categories using K-means Clustering.
- Validated with past model performances and was able to achieve a lift of ~7%.

Education

- NIT Hamirpur / M.tech (CFD and Heat transfer) June 2014 June 2016, Hamirpur, Himachal Pradesh
- **JSSATE Noida** / B.tech (Mechanical engineeing) June 2009 June 2013, Noida, Uttar Pradesh