PRAVEEN KUMAR BHARTI

Data Scientist

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PROFESSIONAL SUMMARY

Highly skilled Data Scientist with a Master's in Engineering. Proven ability to develop text preprocessing pipelines, optimize data for chatbot platforms, and ensure data quality. Experienced in Python, SQL, Data Viz., and TensorFlow.

WORK EXPERIENCE

Data Scientist

July 2024 - Present

IXC DIGITAL | Chandigarh

- Developed an automated trading application using Python, integrating Trading View Pine Script strategies for real-time trade execution.
- Trained an AI model with LSTM and vision-based techniques for future trade level prediction.
- Enabled automatic trade execution in users' broker accounts through seamless API integration.

AI/ML Engineer

Apr 2024 – June 2024

DRIFKO | Noida

- Developed and implemented data scraping and preprocessing scripts, ensuring high-quality datasets for training.
- Leveraged **MongoDB** as vector databases to store the vector embeddings ensuring the data integrity and security.
- **Fine-tuned** the Llama 3 model with custom scripts, enhancing chatbot performance.
- Created and deployed chatbot code using the LangChain framework, crafting effective prompts for accurate responses.

Data Science Consultant, Intern

Jul 2023 – Feb 2024

RUBIXE | Bengaluru

- Developed robust text pre-processing pipeline: Cleaned, normalized, and segmented customer chat
 data stored in MySQL database, handling diverse formats and dialects. Achieved 95% accuracy
 in data quality assessment.
- Built high-quality pre-processed tokens: Employed **NLP** techniques like **stemming**, **lemmatization**, and **NER** to enrich tokens and improve model training performance. Reduced training time by 30% and increased **F1-score by 15%**.
- Optimized data for Rubixe platform: Tailored processing pipeline for swift integration with Rubixe's chatbot builder, facilitating faster customization and deployment.

PROJECTS

Automated Machine Learning App: Streamlining Data Science Workflow

- Created an intuitive app leveraging **deep learning** and machine learning techniques for automated data science workflows.
- Utilized modular Python coding to ensure scalability, maintenance, and efficiency in processing datasets, cleaning, preprocessing, and visualizing data, and constructing predictive models with statistical accuracy metrics.
- Implemented user experience enhancements such as sample datasets using **PostgreSQL** to showcase the app's capabilities, resulting in a seamless and engaging environment for users, ultimately advancing the field of data science.

Medical Chatbot

- The medical chatbot uses **the RAG architecture** to dynamically retrieve and incorporate relevant medical information, enhancing the accuracy and specificity of its responses.
- Developed a system to answer user queries efficiently and accurately, utilizing Python, LangChain, Flask, Meta Llama2, and Pinecone.
- Demonstrated expertise in **AI**, **vector search engines**, and integrating various tools for a cohesive solution.

Movie Recommender System

- Implemented Sentiment Analysis on state-of-the-art techniques to gain valuable insights into personalized customer Movie recommendation
- Improved text summarization by 30% using **RegEx and Postags**, resulting in more accurate and concise summaries
- Created a Flask-based web application for user interaction.

ATS Checker and Hand Writing Recognition

- Developed two projects using **Gemini-Pro and Gemini-Pro-Vision LLM** models: one for ATS compatibility checking of resumes and another for recognizing handwritten content from images.
- Implemented advanced AI models for resume analysis and **image text recognition**.

EDUCATION

Masters in Environmental Engineering

Sep 2019 - Aug 2021

National Institute of Foundry and Forge Technology, Ranchi

Bachelor of Technology, Civil Engineering

Jul 2013 - Aug 2017

Gandhi Institute for Technology, Bhubaneshwar

CERTIFICATIONS

Certified Data Scientist: IABAC
Certified Data Scientist: NASSCOM
Certified Data Scientist: Datamites
Data Scientist: JainX

SKILLS

Programming Language: Python, HTML

Python Framework: Pandas, Numpy, Seaborn, Matplotlib, Scikit-Learn, TensorFlow, Flask, Beautiful Soup

Databases: MySQL, PostgreSQL, Oracle, MongoDB

Networking: LAN/WAN, SAN/NAS, TCP/IP

Data Analysis/Statistics: Data Analysis, Statistics, Predictive Modeling, Predictive Statistical Modeling, Data Mining, Data Analytics, Time Series Analysis

LLM: OpenAI, BERT, Facebook's BART, Hugging

Face, Fine Tuning, llama2, Prompt Template

Data Visualization Tools: PowerBI, Tableau

Machine Learning/NLP: ML Algorithms NLP, Deep Learning (ANN, CNNs, Transformers, RNNs), Scikit-

Learn, Transfer Learning, Data Preprocessing

GenAI: RAG Architecture, LangChain, Prompt Templating, Agent, Chaining, Embedding,

Deployment: GitHub CI/CD, Streamlit, PythonAnywhere, AWS

Soft Skills/Other: Adaptability, Creativity Leadership,
Project Management, Teamwork, Communication
Skill, Time Management, Problem Solving,
Collaborative, Innovative