

Pratik Rathod

AI/ML Engineer (Data Scientist)

+91 8140577692 | pratikr1521998@gmail.com

www.linkedin.com/in/pratik-nareshkumar-rathod | github.com/Pratikrathod08

Results-driven AI/ML Engineer (Data Scientist) with ability to designing, developing, and maintaining Machine learning, Deep learning and AI Applications. Expertise in Preprocess data, conducting exploratory data analysis and visualizing data insights. Proven track record of collaborating with cross-functional teams to meet project goals and deadlines.

SKILLS

- **Programming & Scripting Languages:** Python, SQL
- **Data Preprocessing and Analysis:** Pandas, NumPy, Matplotlib, Tableau, Seaborn
- **Statistics and Maths:** Linear Algebra, Probability, Matrices, Descriptive statistics (Central tendency, Variability, Distributions), Inferential Statistics (Hypothesis testing, Chi-square, Anova)
- **Machine Learning:** Supervise & Unsupervised ML (Linear Regression, Logistic Regression, Decision Tree, Naive Bayes, SVM, KNN, Bagging & Boosting Techniques, k means, etc ...)
- **Deep Learning:** ANN, CNN, NLP, RNN, LSTM, Transformer, TensorFlow, Keras, Pytorch, NLTK
- **Generative AI:** OpenAI, Langchain, Hugging Face, Vector DB, Llama-Index, Chains, Agents, Memory, LLM's
- **Databases:** MySQL, Postgres SQL, MongoDB, Chroma DB, Pinecone
- **Frameworks:** Flask, Fast-API
- **Version Control:** Git, Github

PROFESSIONAL EXPERIENCE

AI/ML Engineer | MobileFirst Applications | Jan 2024 – Present

- Collaborated with a cross-functional team to Integrate Machine Learning and AI in Web Applications.
- Designed and implemented AI and machine learning models.
- Worked on Various frameworks, AI/ML Tools and technologies.
- Manage team and client interaction related to projects and prototypes.

Senior Relationship Manager | India Shelter Finance Corporation | Sept 2022 – Oct 2022

- Guided customers through the home and mortgage loan process, ensuring ease and clarity.
- Built and maintained strong relationships with clients for better customer retention.
- Developed a robust business network through partnerships with channel partners.
- Increased sales by offering tailored financial solutions to meet client needs.

Senior Sales Executive | ICICI Bank | Dec 2020 – Sept 2022

- Assisted customers with home and mortgage loan applications to ensure smooth processing.
- Strengthened client relationships to foster trust and long-term association.
- Expanded the business by collaborating with channel partners and generating referrals.
- Consistently achieved sales targets by delivering customer-centric financial solutions.

Sales Co-ordinator | Real Value Finloan Services | Dec 2018 – Sept 2019

- Coordinated sales activities between banks, NBFCs, and channel partners to ensure efficiency.
- Maintained clear communication among stakeholders to streamline operations.
- Supported channel partners in meeting customer needs for financial products.
- Helped improve business outcomes by managing sales processes effectively.

EDUCATION

Master of Science in IT (Business Intelligence and Analytics) | Gujarat University | May 2024

- **Key Skills:** Data Analysis, Data Preprocessing, Statistics, Mathematics, Databases, Machine Learning, Deep Learning, Data Engineering

Bachelor of Commerce (Accounting, Statistics, Business Administration) | Gujarat University | Sept 2020

- **Key Skills:** Accounting, Business Statistics, Business Administration, Management, Economics

CERTIFICATIONS

- Data Science Master – PhysicsWallah (PW-Skills)
- Data Analytics and Visualization Job Simulation – Forage (Accenture)
- Python For Data Science - Cognitive Class (IBM)
- Scientific Computing with Python – FreeCodeCamp
- SQL and Relational Databases 101 - Cognitive Class

PROJECTS

MobileFirst Applications:

- **RE Analyser (Langchain, Brave-search, Fast-API, Perplexity.ai, Postgres-SQL)**
 - Created Chatbot with live user property search and document based on real estate and investment.
 - Added deep city analysis for provide city detail with respect to user city input using live search and previously city analysis data.
 - Created API's using Fast-API Framework for integrate in project and utilize chatbot and city analysis.
 - Integrated chatbot and city analysis system with Postgres-sql database for store data and utilize in future inquiries and to provide Efficient user query solutions with respect to historical search, city analysis data.
- **XFA Tax Analyser (Langchain, OpenAI, Flask, Nanonets, Stripe, Supa base)**
 - Created W2 form analyser for analyse w2 form data and also provided chat facility for solve queries for investment and any other purpose.
 - Used Nanonet Api key for parse w2 form data and get proper detail into key value pair.
 - Used Flask framework for integrate with UI using API's.

- Used Open AI Api key for get analysis and chat Langchain chains for chat with data.
- Integrate Stripe Api's for paid subscription plan and managed subscriptions.
- **FrankSpend-spend analysis (Django, Plaid, Postgres-SQL)**
 - Added multiple institutions and accounts management in project backend of Android and iOS mobile app.
 - Restructure Database with respect to multiple Institutions and accounts data storage.
 - Created subscription flow with respect to monthly and annually plan and cancellation flow also created webhooks for transaction sync and update as well as update in-app cancellation in our system.
 - Manage multiple user transactions and provide spend analysis for users with respect to various institutions and accounts transactions.
 - Utilize plaid Api's for extract and manage transaction data.
- **Llama-Index Multi-document Agent Version-update (0.9 to 0.10)**
 - Update llama-index library version from llama-index version 0.9 to 0.10
 - Change libraries and updated syntax in full library.
 - Solved error related to system and versions mismatching.
- **Playground (Langchain, OpenAI, Flask, Chroma DB)**
 - Created Product for company to demonstrate various ai use cases and tools and technology.
 - Added OCR system for Data extraction.
 - Added medical, legal and policy analyser tools for various industry related use cases.
 - Added Chatbot functionality to interact with user document.
 - Utilize Chroma DB for store user document and raw data for query solution and Q&A.

Academic:

- **Vegetable Detection (Yolov5, Flask, Roboflow)**
 - Created vegetable detection model for classify and detect vegetables like onion, potato and Lemon.
 - Used Roboflow framework for data annotation purpose.
 - Trained Yolo-v5 model for object detection and classification purpose.
 - Used Flask framework for integrate with UI using API's.
- **Object Image Classification (CNN, VGG19, Flask)**
 - Created Object Classification project on multiple categories of sport and retail like cricket bat, water bottle and etc.
 - Finetuned VGG19 Model for prepare classification purpose.
 - Used Flask framework for integrate with UI using API's.
- **Customer Purchase Capacity Prediction (K-Means Clustering, Flask, Pandas, NumPy, matplotlib, MongoDB Atlas, Docker, GitHub Action, AWS, CI/CD)**
 - Created clustering model for segment customer into rank for predict future product purchase capacity.
 - Used k-means algorithm for segment customer into various rank and also PCA for dimensionality reduction purpose.
 - Used Pandas and NumPy libraries for data preprocessing and analysis also matplotlib and seaborn to visualize data.
 - Used Pipeline for automate preprocessing and model training and prediction.
 - Used MongoDB Atlas for data storage purpose.
 - Used Docker and GitHub Action for CI/CD pipeline and AWS For Deployment purpose.
 - Used Flask framework for integrate with UI using API's.

- **Diamond Price Prediction (Linear Regression, NumPy, Pandas, Matplotlib, Seaborn, Flask)**
 - Created Regression model using linear regressor for predict Dimond price based on past data.
 - Used NumPy and Pandas for data preprocessing and analysis purpose also used matplotlib and seaborn for data visualization purpose.
 - Created pipeline for automated data preprocessing purpose and Model training purpose also for chose best model out of Linear, Lasso, Ridge, Elastic net and Decision tree Regression models.
 - Used Flask framework for integrate with UI using API's.
- **Diabetes Prediction (Decision Tree Classifier, NumPy, Pandas, Matplotlib, Seaborn, Flask)**
 - Created Classification model using Decision Tree Classifier for predict Probability of diabetes of customer based on their data of blood.
 - Used NumPy and Pandas for data preprocessing and analysis purpose also used matplotlib and seaborn for data visualization purpose.
 - Used Flask framework for integrate with UI using API's.
- **Flipkart Review scrapper (Web Scrapping, Flask, Beautiful Soup, Requests, MongoDB Atlas)**
 - Created scrapping project to automatically scrape review and model related data from Flipkart using Request and beautiful soup libraries.
 - Used MongoDB Atlas for store scrapped data.
 - Used Flask framework for integrate with UI using API's.