Roushan Kumar

Data Scientist and AI/ML Engineer

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🔗 https://github.com/webcoder123   📍 India   🗛 B2B contract is possible

SUMMARY

Data Science & AI/ML enthusiast with 1.3 years of hands-on and internship experience. Proficient in **Machine learning**, **Deep learning** and **GenAI**, **predictive modeling**, and **data visualization**. Skilled in turning complex data into actionable insights to drive innovation and support strategic decisions. Passionate about applying **AI technologies** to real-world business challenges.

Professional Experience & Internships

AISPRY

Junior Data Scientist Intern   Jan 2025 – Jun 2025

Designed and deployed four real-world **AI/ML solutions**, including two computer vision projects. Developed a workplace safety monitoring system using **YOLOv11** for real-time object detection, and built a liver damage detection system using **Deep learning models such as DenseNet121, ResNet50, ResNet101, ResNet152, and VGG16.** Additionally, implemented an energy optimization system for steel plants, following a complete end-to-**end ML pipeline encompassing data collection and cleaning, EDA and preprocessing, feature engineering, model building and evaluation, deployment using Streamlit**, and monitoring with post-deployment analysis. Utilized technologies such as **Python, Streamlit, NLP, and the Google Gemini API** to develop scalable, production-ready AI solutions aligned with real-world business needs. Gained hands-on expertise in computer vision, classification, deployment, and machine learning workflows.

Contechub , Jaipur

Data Analyst (Remote)   Feb 2024 – Jul 2024

Analyzed datasets using **Python, SQL, and Power BI**; built KPI dashboards and automated data pipelines., **Performed EDA and wrote SQL queries** for data extraction and analysis. Conducted data cleaning and visualization and automated reports using **Power BI.**

Krati Tech.AI, Kanpur

AI/ML Intern   Jun 2025 – Present

To generate a **Computer Vision Segmentation** Model which can automatically detect defects like cracks and potholes from images of roads, buildings or pipelines. Contributed to the UPSIDA AI Assistant (UP Government project) by **integrating LLMs, RAG, Lang Chain, and Agentic AI, with backend APIs via Fast API and deployed the solution using Streamlit.**

Projects

AI-Driven Liver damage Detection (GitHub)

Business Problem: Current liver damage detection is manual and error-prone; AI-driven models will analyze histopathology images and healthcare data for early detection.

Objective: Maximize early detection accuracy.

Solution: AI-driven analysis of histopathology images and patient data to reduce human errors and improve diagnostic efficiency Using These models (DenseNet121, ResNet50, ResNet101, ResNet152, VGG16).

Optimization of Energy Consumption in Steel Manufacturing Plants using ML (GitHub)

Business Problem: Inefficient steel grade selection leading to high energy consumption.

Objective: Optimize steel grade selection using ML models. • Solution: Implemented ML models (Logistic Regression, Random Forest, SVM, XG BOOST), Improved accuracy, decision-making, and production quality .

Tech Stack: Python (Pandas, NumPy, Scikit-Learn), SQL, Power BI, Streamlit.

Ai-Based workplace compliance & safety optimization (GitHub)

Business Problem: Manual safety monitoring leading to inefficiencies and compliance risks.

Objective: Automate safety monitoring with AI-based solutions. Solution: Implemented Roboflow (Object Detection), YOLOv11 (Pose Estimation) for real time safety monitoring.

Tech Stack use -: Python, CNN(Object detection), Roboflow , YOLOv11, Streamlit.

LANGUAGES

Hindi   Native

English   Proficient

CERTIFICATIONS

Professional Program in Data Science & AI

Aispry , 360DigiTMG , Hyderabad (Aug 2024 to Jul 2025)

Certificate of Data Science

NASSCOM (LINK)

Codebasic , (Data Analyst Bootcamp 3.0)

United States

SKILLS

Programming & Libraries:

Python, MySQL, NumPy, Pandas, Scikit-learn ,OpenCV, Matplotlib, TensorFlow , Seaborn

ML & DL Models:

Supervised & Unsupervised learning, Model Evaluation, Data Preprocessing, Hyperparameter Tunning, NLP, Gen AI and prompt Enginnering, LLM, RAG, LangChain, Vector DB, Agentic AI , CNN, Computer Vision

EDA & Visualization: Sweetviz, YData Profiling, Power BI, Tableau, Excel, PowerPoint

Tools & Platforms: VS Code, Spyder, Google Colab, Git/GitHub Deployment: Flask, Streamlit

EDUCATION

BCA (Bachelor of computer Applications)

May 2024 VKSU, Arrah, Bihar

I.Sc.(PCM), BSEB June 2020

SS High School Jagdishpur, Bihar

Bihar High School   June 2018

SS High School Jagdishpur, Bihar