

# SHAHNAWAZ HUSAIN

## AI ENGINEER – AI / ML

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## SUMMARY

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AI Engineer with experience in a wide range of Machine Learning, Deep Learning, NLP, Generative AI, and MLOps techniques. Skilled in Linux system administration and GPU-accelerated computing for high-performance model training and deployment. Previously worked on data-driven AI solutions for service-based companies and government projects. Currently focused on engineering AI-powered products using GenAI technologies, driving innovation and scalability.

## SKILLS

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### Data Science Skills

<b>Competencies</b>	Machine Learning (ML), Regression, Classification, Clustering, Exploratory Data Analysis (EDA), Artificial Intelligence (AI), Deep Learning (DL), Natural Language Processing (NLP), Generative AI (Gen AI), Agentic AI, Databases (RDBMS), Docker, GitHub Actions, CI/CD, Agentic Rag
<b>Programming Languages</b>	Python, SQL
<b>Tools/Frameworks</b>	Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, TensorFlow, Keras, NLTK, LangChain, HuggingFace, Langgraph, Langsmith, Ollama, HuggingFace, Optuna
<b>Cloud / MLOps / Others</b>	Streamlit, Fast Api, Flask, Git/GitHub, Deployment, PowerBI, MS Office, Docker, Oracle Cloud

### Personal Skills

<b>Domain-Specific</b>	Machine Learning Development, Deep Learning & Neural Networks, Data-Driven AI Solutions, Generative AI & LLMs, Computer Vision & NLP, Model Optimization & Deployment
<b>Leadership</b>	Leadership, Team Management, Client Management
<b>Others</b>	Data Storytelling, Client Presentations, Continuous Learning, Excellent Communication

## SAMPLE PROJECTS

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### MLOps Project: [Online Food Feedback Prediction](#)

- Built a machine learning pipeline using **Random Forest** to predict customer satisfaction from online food delivery feedback.
- Performed data preprocessing, feature engineering, and model evaluation using precision, recall, and F1-score metrics.
- Managed data versioning with DVC and automated testing and deployment with GitHub Actions for full CI/CD integration.

### MLOps Project: [US Company Bankruptcy Prediction](#)

- Developed an end-to-end MLOps pipeline for predicting US company bankruptcy, including data ingestion, validation, and model training with Random Forest.
- Integrated **MongoDB Atlas for data storage**, and automated deployment using **Docker** and **GitHub Actions**. Built a REST API for real-time predictions and implemented full CI/CD for seamless model updates.

### Deep Learning: [Artificial Neural Networks \(ANN\) – Customer Churn Modelling](#)

- Developed an ANN classification model using Keras and TensorFlow to predict a bank's customer churn with 86% accuracy, enabling them to predict and reduce customer churn significantly. Provided business strategies to help reduce the customer churn.
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## Deep Learning: [Long Short Term Memory\(LSTM\) – Ham-Spam Classifier](#)

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- Developed an LSTM-based Ham-Spam classifier using TensorFlow, Keras, and NLP libraries (NLTK) to achieve high accuracy in detecting unsolicited messages. Leveraged sequential text data processing, word embedding(Word2Vec),and deep learning techniques for email filtering, enhancing spam detection efficiency

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## Deep Learning: [Web Scraping and Sentiment Analysis](#)

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- Developed a web scraper using BeautifulSoup and Re to extract user reviews, enabling automated data collection for sentiment analysis.
- Implemented sentiment analysis using NLTK and TextBlob, classifying feedback as positive, neutral, or negative to enhance customer insights and decision-making.

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## Generative AI Projects: [Agentic Rag](#)

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- Built a hybrid RAG pipeline that routes user queries to either a vectorstore or Wikipedia based on context relevance.
- Implemented dynamic source handling, structured document parsing, and adaptive fallback for open-domain questions..

[See All Projects Here](#)

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## WORK EXPERIENCE

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**Allatone Solutions**

**Noida, IN**

**AI Engineer**

**Jul 2024 – Present**

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### **Data Engineering (Client: Ministry Of Rural Development (MORD))**

- Developed Python scripts in Oracle Data Science Notebook for data extraction and transformation from KLM\_BPT schema. Created automated workflows processing transaction data, generating insights for business reporting and analytics dashboards.

### **AI Engineer (Client: Indian Army DGIS MISO)**

- Developing an intelligent text-to-SQL system enabling natural language querying of databases ,reducing query writing time and improving data accessibility for non-technical user.

### **Machine Learning & Forecasting(Client: Vedanta)**

- Developed cost prediction and sales forecasting models using scikit-learn, XGBoost, and Time Series Analysis, optimizing procurement strategies and increasing forecasting accuracy by 25%, reducing stock-outs significantly.

### **Computer Vision & Automation**

- Engineered YOLO-based object detection systems for warehouse inventory management, automating logistics tracking and reducing manual effort by 40%, improving operational efficiency and accuracy across warehouse operations.

### **AI Chatbot Development(Client: Mjunction)**

- Designed and deployed AI-powered chatbots using OCI Generative AI Service with Langchain, automating customer interactions, reducing response time by 50%, and enhancing customer engagement and satisfaction metrics.

### **Document Processing & OCR**

- Implemented OCR solutions using EasyOCR and PyTesseract for automated text extraction, reducing manual verification time by 60%. Automated PDF workflows using PyPDF2, streamlining document processing operations.

### **Dashboard & Visualization(Client: Mjunction)**

- Built Streamlit dashboards for real-time AI model monitoring, improving accessibility to machine learning insights and enhancing data-driven decision-making across teams with interactive visualizations and performance metrics.

### **ML Pipeline Development**

- Designed scalable machine learning pipelines using Flask for efficient production deployment, enabling continuous model integration and updates. Conducted hyperparameter tuning with GridSearchCV and RandomizedSearchCV, improving accuracy and reducing error rates by 15%.

**Freelancer.com**

**Remote**

***Freelance Python Developer & Data Engineer  
2024***

***Jun 2023– Jun***

- Delivered custom Python solutions for clients across data engineering and automation projects.
- Designed and implemented ETL pipelines, data cleansing processes, and automation scripts for diverse datasets.
- Utilized tools such as Pandas, NumPy, SQL, Airflow, and APIs to process and transform structured and unstructured data.
- Developed dashboards and reporting tools using Matplotlib, Plotly, and Streamlit to visualize data insights for clients.

**LetUsCode Systems**

**Remote**

***Junior PowerBi Developer(Data Analyst)  
2023***

***Jun 2022– May***

- Designed and developed interactive Power BI dashboards to visualize business KPIs, improving data-driven decisionmaking and enabling stakeholders to track performance metrics efficiently.
- Utilized DAX functions for complex data analysis, enabling trend forecasting, KPIs, and variance analysis, enhancing business insights and reporting accuracy.
- Optimized Power BI data models and implemented efficient DAX measures, resulting in improved report performance and reduced query processing time by 30%.
- Integrated multiple data sources including SQL databases, Excel, and cloud services into Power BI, centralizing data for streamlined analysis and reporting

**EDUCATION**

**Teerthankar Mahaveer University**

**Moradabad, IN**

**BTech (Mechanical Engineering)**

**Apr 2018 – May 2022**

***Final Grade: CGPA: 7.0***

**DATA SCIENCE CERTIFICATIONS**

Complete Generative AI Course	Krish Naik, Udemy
MS PowerBI Desktop for Business Intelligence	Maven Analytics, Udemy
OCI Generative AI professional	Damien Carey, Oracle University
OCI AI Foundation Associate	Damien Carey, Oracle University
Python for MachineLearning and DeepLearning	Ducat