TAHA KHAN

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Summary

Python Developer | AI/ML Enthusiast

Python developer with solid OOP skills, experienced in building scalable applications and contributing to AI-driven projects. Skilled at leveraging AI-assisted IDEs to enhance productivity and code quality. Knowledgeable in ML concepts, model training, and Python libraries. Adept at collaborating in remote, distributed teams, using async communication to deliver polished, scalable features.

Education

NED University of Engineering and Technology

B.E. in Computer and Information Systems | GPA: 3.84 / 4

08/2022 - Present

Government Delhi College

Intermediate 10/2020 - 2022

Skills

- Programming Languages: Python, Javascript, C
- **LLM & Data Tools:** Pandas, NumPy, Matplotlib, Scikit-learn, CVAT, Excel, PyTorch, Keras, TensorFlow, LangChain, HuggingFace Transformers
- **Visualization & Reporting:** matplotlib, seaborn, Streamlit AI Agent Design: Multi-step pipelines, ChatBot logic, prompt engineering, RAG
- Database Management: SQL, MySQL, SQLite, PostgreSQL, MongoDB
- Frontend: HTML, CSS, JavaScript, React, Bootstrap, Tailwind, Redux
- **Backend**: Django, Flask, Node.js, FastAPI
- API Handling: REST APIs, JSON parsing, data retrieval from external sources, form handling
- Soft Skills: Communication, collaboration, adaptability, fast learner, debugging, logic building
- Tools: Git & GitHub & Copilot, Firebase, Thingspeak, JWT, Postman, Jupyter Notebook, OOP

Professional Experience

1. Data Annotation Intern – VIDIZMO.AI (Hybrid)

€ Feb 2025 − June 2025

- Worked with real-world video and image datasets using CVAT for object detection and classification tasks.
- Contributed to AI-powered solutions by ensuring high-quality data annotations.
- Collaborated with the annotation and development teams to align dataset requirements with model goals.
- Gained insight into machine learning pipelines and the importance of clean, labelled data.

2. Frontend Developer Intern - NCAI, NED University

≘ Dec 2024 – Jan 2025

- Developed the frontend of NetZero, a carbon emissions monitoring web platform using Django
- Built responsive interfaces using React.js and collaborated with backend teams for integration.
- Gained exposure to sustainable tech and user-centered UI/UX practices.

3. Python & React Developer – Unarchived (Remote)

- Developed scalable backend systems using Django REST Framework integrated with React.js frontends.
- Built AI-driven automation workflows leveraging OpenAI, LangChain, and probabilistic reasoning for procurement tasks.
- Deployed services in Docker containers on AWS EC2, optimizing for low latency and high availability.

Technical Projects

CineVault – Movie Recommendation & Management System Developed a full-stack movie platform using Django (backend) and React (frontend). Implemented features such as user authentication, movie reviews, watchlists, and advanced search. Designed responsive UI using HTML, CSS, and JavaScript. Normalized PostgreSQL database schema and integrated Firebase for additional services.

MediBot - AI-Powered Healthcare Assistant

Built an intelligent healthcare chatbot in Python to answer medical queries. Leveraged Natural Language Processing (NLP) to understand user input and provide relevant responses. Designed for ease of use across command-line and web environments.

Customer Churn Prediction System

Built an end-to-end ML pipeline to identify potential customer churn using real-world datasets. Compared classifiers like Random Forest and Logistic Regression; applied SMOTE for balancing. Used PCA for dimensionality reduction and visualized results using ROC and F1 metrics. Serialized the best-performing model using joblib for deployment using Streamlit. Visualized feature importance and model performance using matplotlib and seaborn.

AirSense - Air Quality Monitoring System (IoT + Web Full Stack)

Designed a real-time environmental monitoring system using ESP32 microcontroller, DHT11 (temperature/humidity), and MQ-135 (air quality) sensors. Sent live data with timestamps to Firebase Realtime Database using NTP. Built a Django backend to sync Firebase data into PostgreSQL and developed a React dashboard for historical charting and AQI visualization. Implemented user-adjustable sampling delays and OTA update support.

SkyCast - Weather Classification Multiclass ML Model

Built a machine learning model to classify weather conditions (Clear, Cloudy, Rainy) using features like temperature, humidity, wind speed, and visibility. Applied Random Forest, Logistic Regression, and Neural Networks. Addressed class imbalance with SMOTE and presented comparative metrics (accuracy, precision, recall, FPR, ROC) through visual plots.

Certifications

Python Developer Internship – *CodSoft*, May 29, 2024

Google AI Essentials Course – *Google Certification Courses*, September 29, 2024

Data Scientist in Python Certification – *DataCamp*, April 11, 2024

Google Data Analytics Professional Certificate – *Coursera*, December 15, 2024