Lokesh K

AI/ML ENGINEER

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Objective

As an experienced AI/ML Engineer with five year of hands-on experience in building efficient applications and solving complex problems, I aim to leverage my skills in Python frameworks, data analysis, and automation to contribute to a dynamic development team and drive impactful projects

Experience

- DLK Technology
- VEI Technologies
- Shine Craft Technologies
- GainHub Technologies

Education

Gojan School of Business and Technology | B.E
Major: Computer Science | Cpa:8.38

Alpha Matric Higher Secondary School
Major: HSC | Percentage-62

Skills & abilities

- Management
- Problem solving
- Communication
- Leadership
- Computer Skills
- Ability to work in a team
- Communication Skill
- Project Management

Projects

College Projects

1. Phishing URL Detection Using ML

- **Description:** Developed a machine learning model to classify URLs as phishing or legitimate based on extracted features like domain age, HTTPS usage, URL length, and other security indicators. The model was trained using datasets of known phishing and non-phishing URLs.
- **Technologies Used:** Python, Scikit-learn, Pandas, Flask, Selenium (for web scraping), and HTML/CSS for the web interface.
- **AI/ML Implementation:** Used supervised learning algorithms like Random Forest, SVM, and Gradient Boosting for classification.
- **Outcome:** Successfully deployed as a web application where users can enter a URL to check for phishing threats.

2. Spam SMS and Email Detection

- **Description:** Built an AI-powered spam detection system to classify SMS and emails as spam or legitimate. The model analyzed text patterns, word frequency, and sender behavior to filter out unwanted messages.
- **Technologies Used:** Python, NLTK (Natural Language Toolkit), Scikit-learn, TensorFlow, Google Sheets API.

- **AI/ML Implementation:** Used Naïve Bayes, LSTM, and Transformer models to classify messages.
- **Outcome:** Verified messages were stored in Google Sheets for future analysis and reporting.

3. Chronic Kidney Disease (CKD) Detection (IEEE)

- **Description:** Developed a machine learning-based medical diagnosis system using J48 (C4.5 Decision Tree) to detect CKD based on patient data (e.g., blood pressure, sugar levels, creatinine levels).
- **Technologies Used:** Python, WEKA, Scikit-learn, Flask, Pandas, Matplotlib.
- **AI/ML Implementation:** J48 decision tree classifier with feature selection techniques.
- **Outcome:** Achieved high accuracy in predicting CKD, contributing to medical research.

VEI Technologies Projects

1. Chatbot for Internal System (Odoo)

- **Description:** Developed a chatbot integrated with Odoo ERP to streamline employee interactions, such as attendance tracking and leave requests.
- **Technologies Used:** Odoo, Python, Dialogflow, Rasa NLP.
- **AI/ML Implementation:** Used NLP-based intent recognition to understand user queries and respond accurately.
- **Outcome:** Automated HR-related tasks, reducing manual intervention.

2. Gmail Integration

- **Description:** Integrated the Gmail API to automate email notifications for important system events such as approvals, reminders, and status updates.
- **Technologies Used:** Python, Google Gmail API, OAuth2.0, Flask.
- **Outcome:** Improved communication efficiency and reduced manual email handling.

3. Outlook Integration

- **Description:** Developed an automated email management system using the Microsoft Outlook API for handling scheduling, notifications, and workflow automation.
- **Technologies Used:** Python, FastAPI, Microsoft Graph API.
- **Outcome:** Enhanced email and calendar scheduling for internal teams.

4. AI in Customer Support

- **Description:** Built an AI-driven customer support system that automates query resolution using NLP and sentiment analysis.
- **Technologies Used:** OpenAI GPT, LangChain, Python, Flask, Rasa, FastAPI.
- **AI/ML Implementation:** Used deep learning for chatbot response generation, sentiment analysis for prioritization, and voice recognition for speech-to-text interactions.
- **Outcome:** Reduced response times and improved customer satisfaction.

GainHub Technologies Projects

1. LMS Dashboard Using Google APIs

- **Description:** Developed a Learning Management System (LMS) that integrates Google Meet, Drive, and Sheets to facilitate online education and track student progress.
- **Technologies Used:** React, Google APIs, Python, Firebase.
- **Outcome:** Enabled seamless virtual learning with automated tracking.

2. Teams API Integration Using FastAPI

- **Description:** Integrated Microsoft Teams API to automate attendance tracking and store recorded class sessions in OneDrive.
- **Technologies Used:** FastAPI, Microsoft Graph API, PostgreSQL.
- **Outcome:** Improved remote class management and student engagement tracking.

3. GSTIN Verification Using Odoo

- **Description:** Developed an API that verifies GSTIN (Goods and Services Tax Identification Number) for businesses to ensure compliance.
- **Technologies Used:** Python, Odoo, REST API, PostgreSQL.
- **Outcome:** Streamlined financial compliance checks.

4. Social Media Integrated CRM with Google Forms and API Automation

- **Description:** Built a CRM that integrates social media platforms with Google Forms to capture leads

automatically.

- **Technologies Used:** Python, Google Forms API, Facebook API, LinkedIn API.
- **Outcome:** Increased efficiency in lead management.

5. Travel Management System Using API

- **Description:** Developed an API for booking hotels, flights, and cars, making travel management seamless for businesses.
- **Technologies Used:** Python, FastAPI, MongoDB, Expedia API.
- **Outcome:** Automated business travel arrangements.

6. Looking Glass (Network Monitoring Tool)

- **Description:** Developed a tool that helps users check network routes, latency, and connectivity.
- **Technologies Used:** Python, Flask, Nmap, React.
- **Outcome:** Provided real-time network monitoring.

7. Speedometer (Network Speed Testing Tool)

- **Description:** Built a web-based tool to measure upload/download speeds, ping, and latency.
- **Technologies Used:** Python, React, Speedtest API.
- **Outcome:** Allowed users to assess internet performance.

8. FTP Server

- **Description:** Developed a secure FTP server for file storage and transfer over a network.
- **Technologies Used:** Python, Flask, FileZilla, PostgreSQL.
- **Outcome:** Provided secure and efficient file sharing.

Additional AI/ML Projects

1. LangChain-Powered AI Chatbot for Document Summarization

- **Description:** Built an AI chatbot using LangChain that extracts and summarizes key insights from documents and PDFs.
- **Technologies Used:** LangChain, OpenAI GPT-4, FastAPI, React.
- **Outcome:** Enabled quick summarization of lengthy documents for users.

2. NLP-Based Resume Screening System

- **Description:** Developed an AI system to automatically parse and analyze resumes, filtering the best candidates based on job requirements.
- **Technologies Used:** Python, Spacy, Transformers, OpenAI API.
- **Outcome:** Reduced HR workload in the hiring process.

3. AI-Powered Code Review Assistant

- **Description:** Built an AI-powered assistant that analyzes and reviews code for errors, security vulnerabilities, and best practices.
- **Technologies Used:** OpenAI Codex, FastAPI, React.
- **Outcome:** Enhanced software quality and reduced debugging time.

4. Question Answering System Using OpenAI API

- **Description:** Created an AI-driven system that provides precise answers from large datasets or knowledge bases.
- **Technologies Used:** OpenAI GPT-4, LangChain, Pinecone, FastAPI.
- **Outcome:** Improved knowledge management and accessibility.

5. Sentiment Analysis and Opinion Mining for Customer Reviews

- **Description:** Developed an AI model that analyzes customer reviews and classifies sentiments (positive, negative, neutral) to improve business insights.
- **Technologies Used:** Python, NLTK, Hugging Face Transformers, BERT.
- **Outcome:** Helped businesses understand customer feedback better.

6. AI-Powered Speech-to-Text and Voice Assistant

- **Description:** Built a voice assistant using NLP and speech recognition to handle customer queries.
- **Technologies Used:** OpenAI Whisper, Google Speech API, Flask.
- **Outcome:** Enabled hands-free customer interaction.

DECLARATION

I affirm that the information provided is accurate and authentic to the best of my knowledge and belief.