

Arpit Tiwari

Python & AI Developer

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SUMMARY

Experienced Python & AI Developer with a strong background in building scalable applications using Python, Flask, and REST APIs. Possess expertise in Generative AI, LangChain, and RAG for intelligent assistants and document automation. Proficient in developing secure web applications, implementing robust web scraping pipelines, and integrating third-party APIs. Demonstrated ability to quickly learn and implement new technologies through documentation-driven development, with a portfolio showcasing AI chatbots, Flask web dashboards, and automation suites.

WORK EXPERIENCE

Python & AI Developer at Self-Learning & Projects

2024-08-01 - Present | Uttar Pradesh, India

Developed scalable applications using Python, Flask, and REST APIs. Designed secure, session-based dashboards with authentication, user management, and API-driven workflows. Implemented advanced AI solutions with LangChain, RAG (Retrieval-Augmented Generation), and LLMs for intelligent assistants and document automation. Built end-to-end automation scripts for data fetching, report generation, and third-party API integrations, significantly reducing manual effort. Developed robust scraping pipelines using Python libraries (BeautifulSoup, Requests) to collect and analyze structured data from multiple websites. Integrated multiple third-party APIs (payment, communication, and data services) into applications with proper error handling and logging. Demonstrated strong ability to quickly learn and implement new technologies directly from official documentation and API references.

- ✓ Built scalable applications using Python, Flask, and REST APIs.
- ✓ Designed secure, session-based dashboards with authentication and user management.
- ✓ Implemented advanced AI solutions with LangChain, RAG, and LLMs for intelligent assistants and document automation.

- ✓ Reduced manual effort by building end-to-end automation scripts for data fetching, report generation, and API integrations.
- ✓ Developed robust web scraping pipelines to collect and analyze structured data.
- ✓ Integrated multiple third-party APIs with proper error handling and logging.

Technologies: Python, Flask, REST APIs, LangChain, RAG, LLMs, BeautifulSoup, Requests

PROJECTS

Advanced Telegram AI Bot

Built a fully functional Telegram bot with modular architecture using Python. Integrated multiple APIs for automation, information retrieval, and custom commands. Designed conversation flow with Generative AI (LLMs) to handle natural user queries. Implemented session management and error handling for a smooth user experience.

- ✓ Built a fully functional Telegram bot with modular architecture.
- ✓ Integrated multiple APIs for automation and information retrieval.
- ✓ Designed conversation flow with Generative AI to handle natural user queries.
- ✓ Implemented session management and error handling for smooth user experience.

Technologies: Python, Telegram Bot API, Generative AI, LLMs, APIs

RAG-based AI Chat System

Developed an advanced Retrieval-Augmented Generation (RAG) system using LangChain and vector databases. Enabled document ingestion, semantic search, and context-based intelligent responses. Integrated external APIs for real-time data fetching within the chatbot. Applied Generative AI models for creating human-like conversational responses.

- ✓ Developed an advanced RAG system using LangChain and vector databases.
- ✓ Enabled document ingestion, semantic search, and context-based intelligent responses.
- ✓ Integrated external APIs for real-time data fetching.

- ✓ Applied Generative AI models for human-like conversational responses.

Technologies: LangChain, Vector Databases, Generative AI, RAG, APIs

Flask Blog Website

Designed and deployed a full-stack blog website using Flask. Implemented user authentication, sessions, and CRUD operations for blog posts. Added API-based integrations for dynamic content. Focused on secure and scalable backend architecture.

- ✓ Designed and deployed a full-stack blog website using Flask.
- ✓ Implemented user authentication, sessions, and CRUD operations.
- ✓ Integrated APIs for dynamic content.
- ✓ Ensured secure and scalable backend architecture.

Technologies: Flask, Python, HTML, CSS, JavaScript, APIs, SQLite

Generative AI Projects

Built multiple projects leveraging OpenAI/GenAI models for content generation & summarization, document Q&A assistants, and automation workflows using APIs + LLMs. Focused on applying AI for real-world problem-solving and productivity enhancement.

- ✓ Leveraged OpenAI/GenAI models for content generation and summarization.
- ✓ Developed document Q&A assistants.
- ✓ Created automation workflows using APIs and LLMs.
- ✓ Applied AI for real-world problem-solving and productivity enhancement.

Technologies: OpenAI API, GenAI models, LLMs, APIs

EDUCATION

High School Diploma

SSV Inter College, Ayodhya, Ayodhya, Uttar Pradesh, India (2024)

- Class 12th and Class 10th Passed

SKILLS

DATA HANDLING

Web Scraping
BeautifulSoup
Data Processing
JSON
CSV
API-based Data Fetching

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Generative AI
LLMs
LangChain
Retrieval-Augmented Generation (RAG)
Prompt Engineering

PROGRAMMING & SCRIPTING

Python
Requests
OOP
Automation

BACKEND DEVELOPMENT

Flask
Authentication
Sessions
REST APIs

TOOLS & PLATFORMS

Git/GitHub
VS Code
Postman
Jupyter Notebook

AUTOMATION

Workflow Automation
Script Scheduling
API-driven Reporting Tools

OTHER SKILLS

Documentation-driven Learning
Problem Solving
Self-Learning Adaptability

API INTEGRATION

Third-party API Integration
Error Handling & Logging

DATABASES

SQLite

Vector Databases