

Vikas Pathak

✉ vikaspathak0911@gmail.com 📞 +91 9170135960 🌐 pathakx 📄 pathakx 📁 Portfolio

Education

VIT Bhopal University

Bachelor of Technology in Computer Science, 8.62 CGPA

09/2022 – Ongoing

Bhopal Madhya Pradesh

Experience

Tsuroni Ltd. — Israel

Apr 2025 – Jun 2025

AI Workflow Automation Intern — Remote

- Architected and deployed complex AI agent workflows on **n8n** to automate critical business functions, including content creation, financial analysis, and data processing.
- Developed an end-to-end **SEO content pipeline** that performs automated keyword research, scrapes and analyzes top-ranking competitor articles, and generates complete, human-like blog drafts using a chain of LLM agents.
- Automated PDF invoice data extraction from emails to a relational Airtable using a Gemini agent.
- Engineered an automated **stock analysis** workflow that aggregates data from multiple financial APIs, performs technical analysis (RSI, MACD), analyzes news sentiment, and generates a comprehensive report for investment insights.

Projects

Emotion Detector

Nov 2023

- Built a Flask-based web application for facial emotion detection, enabling users to upload images and receive real-time classification across seven emotional categories: happy, sad, angry, surprised, neutral, fear, and disgust.
- Trained ML model and integrated it to analyze uploaded images and dynamically display emotion confidence scores through an intuitive and responsive user interface.
- Ensured robust UX by implementing secure image upload with file type and size validation, can process 50MB size.

Medical ChatBot

Feb 2025

- Developed an AI-powered medical chatbot using Flask, LangChain, Pinecone, and LLMs for query understanding and response generation.
- Implemented Docker-based containerization for consistent development and production environments.
- Deployed the application on AWS EC2 with ECR integration ensuring scalable and reliable cloud hosting.
- Automated build and deployment using GitHub Actions CI/CD workflows, reducing manual intervention and improving release efficiency.

Conversational AI Agent

Aug 2025

- Developed a conversational AI agent using LangGraph, Flask, and Python to handle product recommendations and order management queries.
- Implemented a state machine architecture with LangGraph to create a robust and scalable conversational workflow.
- Built a RESTful API with Flask to expose the AI agent's functionality to web applications and utilized JSON for efficient data exchange between the user interface and the AI agent.

Technical Skills

Languages: Python, Java, JavaScript, HTML/CSS **Tools:** GitHub, AWS, n8n

Libraries: pandas, NumPy, Matplotlib, PyTorch, Tensorflow, LangChain, LangGraph

Skills: Agentic AI, RAG, Prompt Engineering, Problem Solving, SQL, NLP, LLM Fine Tuning, DSA

Certification: Cloud Computing NPTEL(2024), IBM Cyber Security Analyst(2025), Marketing Analytics NPTEL(2025), JLPT N5(2025)

Achievements

- Solved 300+ questions on Leetcode
- Member of Student Internship Program under Bhopal Police 2024-2025
- Selected for SIH internal round(2024)