Harsh Shivhare – Portfolio Knowledge Base

Personal Overview

I'm Harsh Shivhare, a highly motivated and curious B.Tech student specializing in Artificial Intelligence, Machine Learning, and Data Science, currently in my third year at IIIT Bhopal. My journey is driven by a passion for building impactful, real-world Al solutions, and I have had hands-on experience working with startups, developing full-stack Al systems, and solving industry-grade problems. I'm the winner of Smart India Hackathon 2024 and have earned a prestigious Executive Post Graduate Certification in Data Science and Al from IIT Roorkee.

Education

Indian Institute of Information Technology, Bhopal

Degree: B.Tech – Information Technology

Duration: Oct 2022 – Present

CGPA: 8.29

Relevant Coursework:

- Data Structures & Algorithms
- Object Oriented Programming
- Machine Learning

Professional Experience

- SafeGuard Reality SDE Intern (Oct 2024 Present)
 - Developed a LLaMA-based computer vision system to extract structured key-value data from legal documents, improving processing speed by 3x and reducing errors by 30%.
 - Built an ETL pipeline using Python, SQL, and REST APIs to integrate and manage global sanctions list datasets, ensuring robust KYC compliance.

• Enhanced data integrity and query efficiency using **relational database design** for financial risk assessment and compliance.

Al Zira – Machine Learning Intern (Aug 2024 – Jan 2024)

- Delivered 10+ Al production tools, including fine-tuned LLMs for domain-specific outputs, like Academic Writing Assistant and Language Tutors.
- Built an Al-powered avatar-based chatbot with TTS/STT systems supporting 95%+ accuracy and real-time interaction, enhancing accessibility.
- Automated the entire ML deployment pipeline using Docker and GitHub Actions, improving release cycles for staging and production environments.

Academic & Personal Projects

Amazon Alexa Review – Sentiment Analysis – https://github.com/250519/-Amazon-Alexa-Review---Sentiment-Analysis

- Skills Used: EDA, NLP, Neural Networks, Kaggle, Tokenizer
- Preprocessed thousands of unstructured reviews and built a neural model that achieved
 94% accuracy in sentiment classification.
- Performed in-depth exploratory data analysis to identify customer sentiments and trends for product feedback.
- W GitHub

Conversational Al Chatbot (Enterprise-Ready RAG Bot)-https://github.com/250519/ChatBot

- Tech Stack: RAG, LangChain, Pinecone, Mistral, Flask, HTML/CSS
- Built a memory-aware intelligent chatbot with retrieval capabilities, handling 1000+ weekly customer queries to automate support.
- Leveraged **vector databases**, **custom prompt chaining**, and **session management** to ensure continuity and relevance in chats.

• SitHub

Email Tracking System – Al Mail Assistant – https://github.com/250519/Email-Tracking-Agent----Langgraph

- Stack: LangGraph, LangChain, Ollama, IMAP, Streamlit
- Designed a personal assistant that **auto-categorizes incoming emails**, extracts job-related info, and tracks **100+ job applications**.
- Enabled parallel email parsing, real-time alerts, and smart job categorization using LangChain agents and a custom dashboard UI.
- GitHub

Customer Churn Prediction Model – https://github.com/250519/Customer-Churn

- Tech Stack: Pandas, NumPy, Keras, Scikit-learn, TensorFlow, Plotly
- Analyzed behavior patterns of 15,000+ customers and built **predictive neural models** that led to a **40% churn rate reduction**.
- Visualized insights using Plotly dashboards and incorporated advanced hyperparameter tuning for optimal performance.
- GitHub

Achievements & Awards

Smart India Hackathon 2024 – Winner – https://www.linkedin.com/feed/update/urn:li:activity:7273671161182367744/

- Organized by: Ministry of Communication, Department of Posts
- Developed an AI web platform called **Yojana Sahayak**, helping **1,00,000+ post offices** enhance scheme awareness and delivery.
- Applied clustering for audience targeting, DNNs and LSTMs for predictions, and FastAPI for seamless backend integration.

- Designed an end-to-end solution from data ingestion to personalized communication using LLMs.
- V LinkedIn

Certifications

Executive Post Graduate Certification in Data Science & Al – https://tih.iitr.ac.in/Certificate/intellipaat/IPTIH230586.jpg

- Issued by: IIT Roorkee in collaboration with Intellipaat
- Duration: 2023
- Projects included:
 - Advanced ML modeling
 - Real-time analytics
 - Dashboarding with Power BI
 - Business intelligence projects with predictive analytics
- <u>Quantificate</u>

Technical Proficiencies

- Languages: Python, C, C++, SQL
- **Libraries & Frameworks:** TensorFlow, Keras, PyTorch, Scikit-learn, Transformers, LangChain, LangGraph
- APIs & Backend: FastAPI, Flask, REST APIs
- Databases: MongoDB, PostgreSQL
- Tools & Platforms: Docker, Kubernetes, Git, VSCode, Jira, Power BI, Streamlit

- Other Skills: AWS, Speech-to-Text, Text-to-Speech, DevOps (CI/CD)
- Soft Skills: Leadership, Communication, Team Management, Innovation

Contact Information

Warm regards, Harsh Shivhare

Email: harshshivhare280@gmail.com

Phone: +91 7869154328

LinkedIN: https://www.linkedin.com/in/harsh-shivhare-107032252/

Github: https://github.com/250519

Kaggle: https://www.kaggle.com/harshshivhare2505

LeetCode: https://leetcode.com/u/h2505/