Kirtan Lakhotia

+91 9926902062 | kirtanlakhotia@gmail.com | Linkedin | Github | Indore, MP, India

Professional Experience

Python Backend Intern

Dec 2024 - Jan 2025

Softinator Techlabs

- Evaluated and debugged 100+ Python scripts and SQL queries generated by under-development LLMs.
- Debugged and corrected faulty code, enhancing code execution success rate from 65% to 95%.
- Provided feedback on faulty outputs, contributing to a 15% improvement in LLM-generated code quality.

Summer Research Intern

May 2024 – July 2024

SIRL Lab, IISER Bhopal

- Experimented with 4+ LLMs to develop emotionally interactive models for healthcare.
- Automated empathy dataset translation, creating a 3,000+ interaction set and reducing manual work by 60%.
- Built a similarity search to filter accurate translations, boosting accurate translation identification by 40%.

ML Research Internship

Mar 2023 – Oct 2023

 $IIIT\ Nagpur$

- 95% accuracy Built an **ensemble model** (BERT, BiLSTM, CNN, GloVe, SVM), surpassing the benchmark.
- Researched sentiment analysis in textual data. Improved classification accuracy by 12% using hybrid architecture.
- Published a research paper that gained 250+ accesses in 3 months and received 1 citation. (Link)

EDUCATION

Institute of Engineering and Technology, DAVV	Indore, MP
Bachelor of Technology in Information Technology CGPA:- 8.47	2022 - 2026
Genius Planet Senior Secondary School	Itarsi, MP
$XII\;(CBSE)$ – 90.8%	2021 - 2022
St Joseph's Convent Hr. Sec. School	Itarsi, MP
$X\ (CBSE)\ -\ 84.4\%$	2019 - 2020

Projects

ML/AI-based Sentiment Analysis of Social Media | Python, BERT, GloVe, CNN, BiLSTM, SVM

- Developed a **Python backend** for a team project implementing a hybrid model (BERT, GloVe, CNN, BiLSTM, SVM) trained for **multilingual sentiment analysis** achieving 93.6% accuracy.
- Integrated **APIs** and **web scraping** (Selenium, BeautifulSoup) for real-time analysis with 10-minute autorefresh.
- Generated 15+ statistical graphs and insights for social media reputation management.

Skin Burn Image Classification and First Aid Suggestion | CNN, FastAPI, Web Integration | (Github Repo)

- Implemented a CNN-based deep learning model to classify different degrees of burns with 87% accuracy.
- Integrated the model with a website using FastAPI for seamless access.
- Used Gemini for report generation and 30% better first-aid suggestions compared to static methods.

Saltify Website | Node.js, MongoDB, AI Chatbot, Web Development | (Live link)

- Developed in 7 phases using the **waterfall methodology**. Integrated an AI bot with the website to answer the general query about the product and know its benefits.
- Website for startup, backend **nodeJS** with **MongoDB** database.

TECHNICAL SKILLS

Competitive Coding: (C++, DSA) <u>LeetCode</u> (Top 8%) | <u>CodeChef</u> (3*)

Machine Learning: (Python, TensorFlow, PyTorch, Deep Learning, Hugging Face, LLMs)

Web Development: (JavaScript, Node.js, SQL, MongoDB, Streamlit, FastAPI)

Achievements & Awards

Research Paper: Twitter Sentiment Analysis using an Ensemble of Multi-Channel Models Based on Machine Learning and Deep Learning Techniques (Link)

Research Paper: COVID-19 Twitter Sentiment Classification Using a Hybrid Deep Learning Model Based on Grid Search Methodology (Link)

Hackathon Winner: Capture the Flag category at Innothon Hackathon hosted by SKITM Colleges.