SNEHALKUMAR SOLAWALA

Bengaluru, Karnataka 560037 | 8153097353 | snehalsolawala@gmail.com

Summary

Computer Science enthusiast with a zeal for innovative ideas and a passion for creating a positive impact. Offers strong technical skills in software development and applications. Adaptable to challenging situations, with a team-oriented and proactive mindset. Passionate about staying up-to-date with advancements in AI and machine learning, aiming to drive innovation and deliver practical, impactful solutions.

Education

Master of Technology, Computer Science Engineering – AI & ML Specialization
Vellore Institute of Technology, Tamil Nadu | 2022–2024
- Thesis: Multiple Disease Detection using ResNet50 Model
- CGPA: 8.74

Bachelor of Engineering, Computer Science and Engineering
Bhagwan Mahavir College of Engineering and Technology, Gujarat | 2017–2021
- CGPA: 8.72

Experience

Associate Software Engineer | OPmobility, Bengaluru, India | Feb 2024 – Feb 2025
- Performed data collection, preprocessing, and formatting to prepare datasets for fine-tuning pre-trained LLMs on NLP tasks.
- Developed projects in Computer Vision, Machine Learning, NLP, and Image Processing.
- Executed data preprocessing, feature engineering, and hyperparameter tuning.
- Optimized C code to improve responsiveness of lighting systems.
- Led Proof of Concept (PoC) developments and evaluations.

Computer Engineer Trainee | Surat District Co-operative Milk Producers' Union Ltd, Surat | Nov 2023 – Jan 2024
- Designed SQL queries for efficient data retrieval and manipulation.
- Created stored procedures, triggers, and views in SQL Server.
- Supported the web team in maintaining and updating the employee portal.

Projects

• Virtual Mouse with Hand Gesture Control
- Developed an AI-powered virtual mouse system that detects hand gestures in real-time to control the cursor. Leveraged OpenCV for computer vision, Autopy for automation, and NumPy for image processing. Enabled touchless control, enhancing accessibility and human-computer interaction.

• AI-Powered Resume Matcher & Virtual Interview Assistant
- Built an AI-based tool that analyzes uploaded resumes against specific job descriptions to generate a Skill Match Score based on relevance. Integrated Falcon-7B Instruct LLM for AI assistant and conduct role-specific mock interviews, auto generate questions, and evaluate user responses with scores (1–10) and feedback.

• Collaborative Filtering-Based Movie Recommendation System
- Built a web application that recommends movies based on user behavior using collaborative filtering algorithms. Developed the backend in Python, ensuring personalized recommendations, and deployed a clean, user-friendly interface for seamless interaction.

• Multi-Disease Detection from Chest X-rays using Deep Learning
- Trained and fine-tuned a ResNet50 convolutional neural network on a large dataset of chest X-rays to detect multiple diseases with high accuracy. Achieved robust model performance and deployed the solution for real-time diagnostics support.

Skills

- Programming: Python (NumPy, Pandas, Scikit-Learn), C, Java
- Machine Learning: Classification, Regression, Clustering, CNN, RNN, NLP
- Generative AI : OpenAI API, LangChain, Hugging Face, RAG pipelines
- Data Visualization: Matplotlib, Seaborn, Power BI
- Tools: Git, GitHub, AWS EC2
- Databases: SQL (SQL Server)
- Soft Skills: Analytical Thinking, Teamwork, Work Ethic, Time Management

Technical Training and Certifications

- Website Development & Python Developer – TOPS Technologies
- Machine Learning with Python – IBM (Coursera)
- Placement DSA with Java – APNA College