AKHILESH SINGH

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EDUCATION

MAHARISHI DAYANAND UNIVERSITY

Rohtak, Haryana

Bachelor of Technology-Computer Science and Engineering

Expected Oct 2025

SGPA: 7.5

PROFILE SUMMARY

Aspiring AI/ML Engineer with hands-on projects in Computer Vision and NLP. Proficient in Python, OpenCV, and Streamlit with a strong foundation in ML and UX design. Led technical clubs and events; actively seeking an AI/ML internship to apply practical skills and solve real-world problems.

SKILLS SUMMARY

PROGRAMMING: Python, Pandas, NumPy, Jupiter, Streamlit, uv

VISUALIZATION: Figma, Canva. VERSION CONTROL: Git and GitHub

PERSONAL: Good Communication Skills, Positive Attitude, Teamwork, Punctual, Problem Solving, Adaptability.

PROJECTS

AI Resume Critiquer link

AI-powered Resume Feedback Web App using Streamlit & OpenAI GPT

- Developed a user-friendly web application using Streamlit that analyzes resumes and provides personalized feedback tailored to a specified job role.
- Integrated OpenAI's GPT model to evaluate resume content for clarity, skill representation, and professional impact using dynamic prompt engineering.
- Implemented PDF and TXT file parsing with PyPDF2 and file type handling, allowing real-time extraction and processing of resume text.
- Utilized .env and os for secure API key management and ensured structured feedback output for improved user readability.

AI Virtual Mouse link

Gesture-Based System Control using Hand Tracking and Computer Vision

- Built a real-time AI-powered virtual mouse using Python, OpenCV, MediaPipe, and PyAutoGUI to enable hands-free control of the system cursor.
- Integrated fingertip tracking to map hand gestures to screen coordinates, allowing smooth cursor movement across varying resolutions.
- Achieved accurate real-time performance (~30 FPS) with a single webcam, using MediaPipe's optimized hand landmark detection.
- Designed and implemented fingertip visualization using OpenCV to enhance user interaction and debugging experience.

Image Enhancer – Python-Based Desktop App link

 $\textit{Python} \cdot \textit{OpenCV} \cdot \textit{NumPy} \cdot \textit{Image Processing}$

- Developed a real-time image enhancement tool that applies contrast stretching, sharpening, grayscale conversion, rotation, and 2x–4x upscaling.
- Utilized OpenCV and NumPy to create a clean enhancement pipeline capable of boosting image clarity and resolution up to 80%.
- Enabled side-by-side comparison of input vs enhanced output with Matplotlib, improving user understanding of visual upgrades.

TECHNICAL ACHIEVEMENTS

- Coordinated **Technical Club** at Vaish College of Engineering, organizing **5+ events** and workshops for **800+ participants**, significantly boosting technical skills and student engagement.
- Orchestrated the Tech Fusion event, featuring inter-college technical, cultural, and sports events with over 800 participants.
- Secured 2nd place out of 25+ teams in a Hackathon at Vaish College of Engineering.

ADDITIONAL

- Languages: Full Professional Proficiency in English; Native Proficiency in Hindi.
- Participated in an IoT workshop by SmarDen Automations Pvt. Ltd., contributing to live projects and developing practical IoT skills.