

ANSH KUMAR TRIPATHI

Computer Engineering Student

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Summary

Computer engineering student focused on applied computer vision and learning-based image restoration. At SAC-ISRO, worked on SAR denoising and quality evaluation, combining classical and ML methods with RL (PPO) for challenging restoration settings. Also applies ML in real-world industrial safety (PPE / accident prevention) and builds supporting Python tooling and interfaces.

Work Experience & Internships

Research Intern

Jan 2026 – Apr 2026

Space Applications Centre Indian Space Research Organisation (SAC-ISRO)

- Worked on image restoration and quality evaluation of SAR images.
- Researched and used PPO RL to develop one of kind RL agent for SAR image denoise, that had no previous work in this domain.
- Used Classical and machine learning method to denoise the image.

Skill Based Training (Intel AI for Manufacturing)

Feb 2025 – Jul 2025

Intel Corporation

- Developed a dual-approach AI-based accident prevention system for modular manufacturing, featuring real-time helmet detection and a Unity 6 simulation to demonstrate automated safety responses.

Projects

ResumeSpace

Sep 2025 – Oct 2025

- Built a privacy-focused resume builder where user data stays in the browser.

AI Safety Accident for Smart Manufacturing System

Mar 2025 – May 2025

- Designed an AI-driven accident prevention system tailored to an automobile factory workflow, blending deep learning and real-time PPE detection.

GrayMatter – Personal AI Study Assistant

Mar 2025 – May 2025

- Built an offline-capable AI personal study planner using local LLMs (Ollama) for personalized organization.
- Implemented chat-based integration and vector search using FAISS with a Python backend for sub-second document retrieval.

Education

B.E. Computer Engineering

2022 – 2026

L.D. College of Engineering, GTU | Ahmedabad, India

CGPA: 7.28/10

Technical Skills

Programming & Scripting: C++, Python, HTML, CSS, JavaScript

Tools & Libraries: React.js, Node.js, Next.js, Flask, MongoDB, Git/GitHub, REST APIs

Certifications & Achievements

- Google: Foundation of Cybersecurity
- IBM: Generative AI Applications; Python & Flask Development; React Front-end Development; Git & GitHub
- UC Irvine: Internet of Things (IoT) Programming
- Represented GTU and Gujarat in the AI Impact Fest, Delhi (Nov 2025)
- Volunteered in NCC from 2023; attended national camps