

Sanyam Ahuja

+91-8306594678 | s.ahuja.alwar@gmail.com | linkedin.com/in/sanyam-ahuja-tiet | github.com/Sanyam-Ahuja

Second-year Computer Science student focused on backend and infrastructure engineering. Experience building and operating CI/CD pipelines, production database migrations, and Linux-based deployments across cloud and self-managed servers, alongside backend development in Node.js, FastAPI, and PostgreSQL/Redis.

EDUCATION

Thapar Institute of Engineering and Technology (TIET)

Bachelor of Technology in Computer Science; CGPA: 9.2/10

Patiala, India

Aug. 2025 – May 2029

EXPERIENCE

Software Engineering Intern (Paid)

Feb. 2026 – Jul. 2026

Thapar Institute of Engineering & Technology

Patiala, India

- Developed a production Outcome-Based Education (OBE) platform supporting academic accreditation workflows, including CO-PO mapping, attainment analytics, and automated Self-Assessment Report (SAR) generation for faculty and administrators.
- Engineered backend services for assessment management, role-based access control, accreditation workflows, and analytics using Node.js, Express.js, Prisma ORM, PostgreSQL, and Redis.
- Strengthened production reliability by implementing CI/CD pipelines, Docker-based deployments, version-controlled Prisma database migrations, and Linux server administration on DigitalOcean infrastructure.
- Collaborated with faculty stakeholders to translate accreditation requirements into scalable software solutions while working under a strict NDA in an Agile development environment.

Freelance Full-Stack Developer

Jan. 2026 – Apr. 2026

Farmer Dairy (Client Project) – farmerdairy.co.in

Remote

- Architected and delivered a full-stack e-commerce platform serving 100+ daily users for a dairy business client, integrating a live payment gateway and SMS notifications
- Implemented PostgreSQL with Redis caching, cutting page load times and keeping API response times under 200ms
- Hardened the deployment with rate limiting, CORS, CSP, and HTTPS, sustaining 99.9% uptime in production on Google Cloud infrastructure

Full-Stack Developer & Automation Intern

Dec. 2025 – Feb. 2026

Svachhata

Remote

- Automated local and remote server operations, streamlining deployment workflows and reducing manual system administration overhead.
- Contributed full-stack updates to the company website, implementing content and feature changes

PROJECTS

CampuGrid | Distributed P2P GPU Compute Marketplace (In Development)

- Architecting a peer-to-peer compute marketplace enabling idle consumer GPUs to be rented out for affordable ML training and rendering workloads
- Building an AI-driven pipeline for automatic framework detection and containerization using Kaniko and MinIO for reproducible, rootless image builds
- Designing a fault-tolerant microservices backend across FastAPI, PostgreSQL, Next.js, and Redis

Snapshoty | AI Screenshot Organization System – GitHub

- Created an intelligent screenshot manager processing 1000+ images with automated, context-aware categorization and tagging
- Streamlined learning-material generation from screenshots for beta users

Veil | Anonymous Mental Health Platform – GitHub

- Engineered a cross-platform social app for 500+ college students, addressing mental health through anonymous, emotion-first design
- Selected as a Top 11 finalist (top 5%) at the international Sabka AI Hackathon among 200+ teams from 3 countries
- Designed a three-layer architecture eliminating popularity metrics, driving 3x higher engagement vs. traditional social platforms

HerVoice | Women's Safety Mapping App – GitHub

- Delivered a crowd-sourced safety-mapping app with a FastAPI/PostGIS backend, using geohash indexing (precision 7) for efficient proximity queries on user-submitted safety ratings
- Trained an XGBoost model to predict safety scores for unreviewed map cells from urban features, filling gaps in crowd-sourced coverage
- Applied an exponential time-decay model (0.0077 decay constant) with circular hour-distance Gaussian weighting to score locations by time of day, with SHA-256-hashed anonymous submissions

context-pilot-mcp | Context Manager for AI Coding Agents (PyPI, v0.2.4) – GitHub

- Published and maintain an open-source MCP server on PyPI that tracks file relevance and compresses stale files via tree-sitter AST to keep AI coding agents' context windows optimized

- Achieved a 64% average token reduction on benchmark files through turn-based staleness scoring and multi-language AST compression (Python, JS, TS, Go)
- Shipped native compatibility with Claude Code, Cursor, VS Code (Cline/Roo), and other MCP-compatible agents

AgenticGithub | *Autonomous AI GitHub Contribution System (In Development)*

- Constructing an autonomous pipeline that discovers open GitHub issues, dispatches AI coding agents to resolve them, and manages the full pull-request lifecycle end-to-end
- Implementing an orchestration layer with SQLite-backed state tracking, stuck-session detection, and automated retry logic across discovery, solving, testing, and review stages
- Engineering a compact LLM data format for API calls, targeting 30-60% token savings versus raw JSON

Snappers | *Hostel E-Commerce Platform*

- Identified an after-hours delivery gap and launched a platform serving 150+ hostel residents with 24/7 availability
- Generated Rs. 50,000 in revenue (Rs. 10,000 profit) within 10 days at a 95% customer retention rate
- Processed 300+ orders at MRP rates, eliminating the 2-3x price markup students previously paid at convenience stores

TECHNICAL SKILLS

Languages: Python, C++, JavaScript/TypeScript, C, SQL

Infrastructure & DevOps: Docker, PM2, CI/CD, Nginx, Proxmox

Systems & Networking: Linux (Fedora Silverblue, rpm-ostree), Tailscale, Pi-hole

Backend & Frameworks: Node.js, Express.js, FastAPI, React, Next.js, REST APIs

Databases: PostgreSQL, Redis, MongoDB, PostGIS

Tools: Git, GitHub, Linux Server Administration, Google Cloud Platform, DigitalOcean