

ADITYA GUPTA

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SUMMARY

CS Student from New Delhi with hands-on experience spanning production infrastructure, Agentic AI/NLP pipelines, and full-stack development. Proficient in Python, Kubernetes, LangChain, and Bash; comfortable across the stack from infrastructure automation and CI/CD to LLM integrations and web engineering.

EDUCATION

Indian Institute of Technology Madras B.Sc Data Science and Artificial Intelligence <i>GPA: 8.83</i>	Remote May 2024 - 2028
Maharaja Agrasen Institute of Technology B.Tech Computer Science <i>GPA: 8.75</i>	New Delhi Aug 2024 - 2028
Birla Vidya Niketan Senior Secondary School PCM+CS	New Delhi Apr 2009 - Apr 2023

EXPERIENCE

Nyahost <i>Founder</i>	New Delhi Nov 2025 - May 2026
- Designed and operated self-hosted Kubernetes and Proxmox clusters, managing the full infrastructure lifecycle from provisioning to incident response for client workloads. - Managed a full networking stack including DNS, Nginx and Traefik reverse proxies, load balancing, and TLS termination across hosted services. - Automated infrastructure provisioning, backup scheduling, and operational tasks using Bash and Python scripting; maintained runbooks and deployment documentation.	
Codetech <i>WebOps Expert</i>	New Delhi Feb 2021 - Jan 2022
- Built and operated a load-balanced hackathon platform capable of supporting over 300 concurrent users. - Managed TrueNAS Scale K8s clusters, web servers, DNS records, and deployment workflows. - Performed troubleshooting and performance optimization across application and infrastructure layers.	

SKILLS

Programming Languages:	Python, Rust, JavaScript, TypeScript, C/C++
AI / ML:	LangChain, Transformers, spaCy, Pandas, Scikit-learn, RAG, Prompt Engineering
Infrastructure:	Linux, Kubernetes, Docker, Helm, Proxmox, Nginx, Traefik
CI/CD & Automation:	GitHub Actions, Gitea Actions, Bash, Shell Scripting, Git
Cloud & Networking:	AWS (EC2, S3), TCP/IP, DNS, Reverse Proxies, Load Balancing, TLS
Frameworks:	FastAPI, Django, React, Vue, Svelte, Actix

PROJECTS

Coggle <i>Python, spaCy, Transformers</i>	https://live.adityagupta.dev/coggle
CLI file-automation engine (FossHack 2026) that maps natural language queries to local tools like FFmpeg, ImageMagick, and Pandoc. Built a lightweight 12MB spaCy NLP pipeline for intent classification and slot mapping, a self-describing adapter registry for semantic-to-command translation, and a token-classifier to resolve ambiguities across tool invocations.	
Omnia <i>Python, TypeScript, LangChain, Vector DB</i>	https://live.adityagupta.dev/omnia
AI-driven, intent-based game engine separating simulation from generation to eliminate LLM state hallucinations. Implements a custom vector-DB RAG pipeline for dynamic context retrieval, a multi-tiered async tick system with Level-of-Detail NPC scaling, and deterministic state validation via patch algorithms before database writes.	
Gippity Pruner <i>JavaScript, Manifest V3</i>	https://live.adityagupta.dev/gpt-pruner
Cross-platform browser extension (Firefox & Chrome) with UI improvements for the ChatGPT interface. Engineered a DOM-pruning system that dynamically hides older messages to eliminate UI lag in long sessions. Gained over 1,000+ concurrent users with a 4.6/5 rating; shipped and maintained via personal CI/CD workflows.	
BrewJournal <i>React, TypeScript, Express.js, PostgreSQL, Gitea Actions</i>	https://brew.adityagupta.dev

End-to-end offline-first coffee logbook running in self-hosted production, with automated CI/CD pipelines for zero-downtime deployment across environments.

gsplash *C, SDL2, FFmpeg, Linux*

<https://live.adityagupta.dev/gsplash>

Fullscreen splash-screen launcher built in C using SDL2 and FFmpeg, packaged for Arch Linux as an AUR package (gsplash-git). Features multimedia rendering, process lifecycle management, focus detection, and automated testing utilities.

GyanSetu *React, TypeScript*

<https://live.adityagupta.dev/gyansetu>

Gamified educational platform for K-12 students and teachers. **Shortlisted for Smart India Hackathon 2025.**

AWARDS

Hack4Health Hackathon

Consolation prize at Hack4Health organized by IIIT-D and Horiba

Horiba
July 2025

Microsoft Office Specialist

National finalist in PowerPoint 2016 Track

Compudon
June 2018