Himanish Puri

+91-9891866020 ˜ himanishpuri2235@gmail.com ˜ LinkedIn ˜ GitHub ˜

Education

Thapar Institute of Engineering & Technology, Patiala **Aug 2023 – July 2027**
Bachelor of Engineering, Computer Science & Business Systems *8.67/10 CGPA*

Experience

Salesforce — *Software Engineering Intern, Network Security & Infrastructure* *Bangalore* · **May 2026 – July 2026**

- Built a **network-policy visualization tool** replacing manual CIDR tracing across **1,000+ deployment/SG configs** with an **AI-assistant** query layer that instantly surfaces governing policies and rules.
- Replaced a fragmented **3–4-dashboard + Slack-bot** workflow with one **web frontend** for ˜150–200 engineers, unifying connectivity, pipeline, and PR-check visibility in one view.
- Eliminated scattered Game Day reports with an **ingestion pipeline** auto-generating standardized pages from raw JSON, feeding a searchable **AI-assisted** knowledge base for **15+ teams'** trend analysis.

Centre of Excellence, University of Queensland — *Software Developer TIET, Patiala* · **Jan 2026 – Mar 2026**

- Shipped full-stack features for a **research review portal** used by **300+ professors**, including **dynamic forms**, **submission-review workflows**, and **AI-assisted summarization** across a **Next.js + Go** stack.

DRDO, Defense R&D Organisation — *AI/ML Research Intern* *New Delhi* · **June 2025 – July 2025**

- Fine-tuned a multimodal **image-captioning** pipeline at DRDO (ISSA), fusing **MobileNetV3** vision embeddings into a **LLaMA-3 8B** decoder via prompt-embedding injection, over **10 epochs** to a **2.71** validation loss.

Ergane Foundation (Vajra) — *Open Source Contributor* *Remote* · **Oct 2026 – Present**

- Merged **14 PRs** into **Vajra**, an open-source **Python/Suricata** inline intrusion-prevention system, fixing install, restart, and detection-rule bugs surfaced by **end-to-end runs on fresh Ubuntu VMs**.
- Built a dual-stack **nftables** blocking backend (IPv4/IPv6) that restores saved blocks and protects host, gateway, and DNS traffic, raising passing tests from **81 to 96**; rewrote brute-force rules to **SYN-only** matching, cutting false drops from **26 to 0**.

Projects

AcousticDNA: Shazam-like audio fingerprinting system built from scratch in Go. **Link**
Go · JavaScript · WASM · DSP · STFT · HTML

- Engineered a full **DSP pipeline** in Go, STFT with Hamming windowing, spectral peak extraction, and **32-bit combinatorial hashing**, identifying songs from noisy **5–15 second clips**.
- Deployed **WebAssembly** processing sending only fingerprint hashes (**∼98% bandwidth reduction**), with a **single batched indexed lookup** and CLI, REST, and WASM interfaces.

Helix: Fully self-hosted RAG chatbot, no external LLM API. **Link**
Python · FastAPI · Redis · ChromaDB · llama.cpp · Docker

- Engineered a fully self-hosted RAG pipeline via **llama.cpp**, **zero external API calls**, eliminating per-token inference cost and external data exposure entirely.
- Cut repeat-query latency from **2.5s** to **0.3s** via a semantic response cache and made follow-ups reliable with **history-aware query rewriting**; two-process design (**SSE** gateway + Redis-backed async workers) streams tokens live with cancel-on-disconnect.

Skills

Languages & Databases: C++, Python, JavaScript/TypeScript, Golang, MongoDB, MySQL, Redis
Frameworks: React, Next.js, Node.js, Express, FastAPI, Mongoose
Cloud & DevOps: AWS, Docker, Nginx, GitHub

Awards and Recognition

- **Hackathon Wins (3×)**: ACM Hacklipse (Winner, 300+ participants), ISTE Hackathon (Winner, 100+ participants), DTU brAInwave ML Track (Runner-up, 75+ teams).
- **Salesforce Futureforce AI Challenge 2025:** Selected as one of **60 finalists** from **4,500+ applicants** nationwide for an invite-only AI hackathon organized by Salesforce in Hyderabad.
- **Leadership & Speaking**: Mentored 20+ teams at HackTU 6.0 (MLH-certified, 5,000+ registrations); **2nd Place** at PitchPerfect, Toastmasters Club.