

Nandishwar Singh

AI Engineer | Full-Stack Developer | Vellore, India

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SUMMARY

AI engineer who builds full-stack LLM products and the backend systems under them. Nine months as an AI Engineer Intern at HireCreatives (now Dusky AI), shipping production features for an AI workspace for creators. Works in TypeScript, Go and Python with Next.js, PostgreSQL, RAG and LLM agents; merged PRs in Corsair (13.6k stars) and OpenUI (10.7k).

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Go, Python, SQL, C

AI and LLMs: LLM agents, tool calling, MCP, RAG, embeddings, hybrid search, reranking, Vercel AI SDK, OpenAI

Backend: Node.js, tRPC, REST APIs, WebSockets, Server-Sent Events, OAuth 2.0, WebAuthn, webhooks, Zod, Drizzle ORM

Frontend: React, Next.js, SvelteKit, TanStack Query, Progressive Web Apps

Data: PostgreSQL, pgvector, full-text search, Redis, SQLite, S3 object storage

DevOps: Linux, Docker, Podman, Caddy, Nginx, systemd, Tailscale, Git, GitHub, Vitest

EXPERIENCE

AI Engineer Intern

2025 – 2026

HireCreatives (now Dusky AI)

Remote

- Built production features for Dusky AI, an AI canvas for researching top channels and rescripting viral outliers.
- Worked across the front end, backend APIs and LLM workflows: content imports, structured context and templates.
- Helped take the product from early build to production use, handling production debugging and reliability fixes.

PROJECTS

MochiTutor | TypeScript, React, three.js, Gemini Live API, Bun, Web Workers

Oct 2026

3D voice tutor with a maths board and AR mochitutor.nandishwarsingh.com | github.com/NandishwarSingh/MochiTutor

- Built a realtime voice tutor on the Gemini Live API in Hindi, Hinglish and English, with server-minted tokens.
- Let the model drive a chalkboard through tools: KaTeX steps, coin and Monty Hall simulations, an exact calculator.
- Rendered a VRoid avatar in three.js with audio lip sync; phone AR from ArUco markers and a homography pose solve.
- Added a webcam notebook check that boxes the wrong step; cut median reply time from 2.95 s to 2.09 s; 77 tests.

Chitra | TypeScript, React, WebGPU, FFmpeg.wasm, Rust, axum, whisper.cpp

May 2026

Browser-based AI video editor

github.com/NandishwarSingh/chitra-video-editor

- Browser editor with a WebGPU preview, an FFmpeg.wasm export that matches it, and chat edits in a small edit language.
- Local Rust (axum) services for whisper.cpp transcripts with word timings, subtitles, beat detection and rotoscoping.

badal | Go, PostgreSQL, pgvector, SvelteKit, S3, Podman, Caddy

Jul – Aug 2026

Self-hosted personal cloud

badal.nandishwarsingh.com | github.com/NandishwarSingh/badal

- Go backend (12.8k lines) and offline-first SvelteKit PWA for notes, files, mail and calendar, in production on my VPS.
- Sync built on a change log, offline outbox and conflict diffs; files deduplicated with FastCDC chunking and BLAKE3.
- RAG chat with citations: PostgreSQL full-text plus pgvector fused with RRF reranking, evaluated by recall@k and MRR.
- Email-to-calendar extraction over IMAP; OCR and Whisper speech-to-text jobs on a leased worker queue; passkey login.

OPEN SOURCE CONTRIBUTIONS

corsairdev/corsair | TypeScript integrations SDK

13.6k stars

- Merged #450, fixing Gmail webhook pushes that skipped new mail (9 regression tests), and #457, a Datadog plugin.

thesysdev/openui | Open standard for generative UI

10.7k stars

- Merged #644, a LangGraph multi-agent chat example.

linebender/parley | Rust rich text layout library

753 stars

- Merged #615, implementing the Debug trait for PlainEditor and its dependent types.

EDUCATION

Vellore Institute of Technology (VIT) | Master of Computer Applications (MCA)

2026 – 2028

Shoolini University | Bachelor of Computer Applications (BCA) in AI and Machine Learning | CGPA 8.9/10

2023 – 2026