

Prakhar Gupta

Full-Stack Developer | Open Source Contributor

+91 81758 46122 | prakhar06.work@gmail.com | github.com/prx-my | x.com/_prxmy | linkedin.com/in/Prakharrdev | prxmy.in

OPEN SOURCE

Sugar Labs (musicblocks-v4) – Open Source Contributor | [\[PR #646\]](#)

Jul 2026 – Present

TypeScript, SVG Geometry

- Fixed SVG renderer geometry bugs by correcting stroke calculations and path-generation logic, resolving visual distortions across the MusicBlocks UI toolkit, merged by maintainer within 3 hours.

FaceGate-Mac – macOS Face-Auth App Locker | [\[Code\]](#) | [\[Web\]](#) | [\[Release\]](#)

Jun 2026 – Present

Swift, AVFoundation, AppKit

- Contributed 3 merged PRs to a 300+ star macOS face-auth locker delivering security hardening (emergency kill toggle), concurrency fixes (camera race condition), and persistent overlay architecture with app-window mode — featured in v1.2.0 release.

EXPERIENCE

QMax QCom Optimizer – Freelance AI Engineer (*US Based Client*)

May 2026

Architected an 8-agent ad-optimization platform replacing manual analysis across 4 Q-commerce apps.

Next.js, FastAPI, Prophet, Supabase, DuckDB, Claude, GPT-4o, DeepSeek

- Designed and delivered a full-stack multi-agent platform from scratch, reducing manual analysis workflows from days to seconds.
- Built a 3-tier LLM fallback chain with governed chatbot workflows, improving reliability during API/model failures while keeping raw data secure.
- Delivered a 14-page dashboard with sub-second queries on a 3-tier storage stack (Postgres + DuckDB), consolidating 4 siloed platforms into a single analytical view.

Home Tutor Platform – Freelance Full-Stack Developer (*Contract*) | [\[Live\]](#)

May 2026 – Jun 2026

Delivered an SEO-optimized web platform with admin controls and a 3-channel lead capture system.

Next.js, NextAuth, Supabase, Resend, Tailwind CSS

- Full-Stack Build:** Developed a 9-page public site and 12-section admin dashboard, enabling a non-technical client to manage SEO and content independently.
- Backend Abstraction:** Engineered CRUD API powering 12 admin sections with role-based auth, eliminating massive code duplication.
- Growth Architecture:** Deployed database-driven SEO metadata and dynamic sitemaps, generating direct leads through a unified WhatsApp + Email pipeline.

Bits & Bytes – Back-End Developer Intern | [\[Code\]](#)

Apr 2026 – May 2026

Developed a full-stack Discord utility bot for a 1,000-member tech community, automating onboarding workflows, meeting scheduling with voice orchestration, audio transcription, and role-based access control.

Node.js, discord.js, SQLite, Notion API, Docker, FFmpeg

- Platform Migration:** Redesigned the architecture with Docker and self-registering slash commands, eliminating deployment failures.
- Centralized Auth & Storage:** Implemented role-based authorization gateways and hybrid SQLite+Notion storage, significantly reducing API latency.
- Meeting System:** Built an end-to-end meeting scheduler with FFmpeg audio merging for live, timestamped transcripts.

PROJECTS

RailMind – Train Conflict Resolution Engine | [\[Code\]](#) | [\[Live\]](#)

Jun 2026

Beam-search planning engine that reduces train priority conflicts across a 437km simulated corridor.

Python, FastAPI, NetworkX, React, WebSockets, SQLite

- Planning Algorithm:** Implemented a beam-search engine that cuts passenger-delay costs by **10.07%** over FCFS dispatch with only **23ms** planner latency.
- Robust Testing:** Built a disruption-injection system for 3 real-world failure types, rigorously validating the engine across 50 simulated corridor scenarios.
- Explainability:** Developed a real-time WebSocket React dashboard with an interactive decision-tree visualizer, transforming black-box AI into transparent recommendations.
- Real-World Validation:** Presented prototype to Khajuraho Railway Station Master and received positive feedback. [\[Post\]](#)

JanSamadhan – Civic Grievance Platform | [\[Live\]](#) | [\[Code\]](#) | [\[Demo\]](#)

Mar 2026

Grievance routing platform piloted with a Delhi ward and winner at India Innovates '26.

FastAPI, Next.js, PostgreSQL/PostGIS, Redis, Gemini AI, WhatsApp Cloud API, GCP

- AI Intake Pipeline:** Built a multilingual Gemini chatbot classifying complaints across 43 categories with auto-severity and authority routing at 3 paise per inference, paired with a full WhatsApp conversational flow supporting 10 Indian languages, image-first intake, and 20m spatial deduplication before ticket creation.
- Database Architecture:** Designed an 8-table PostgreSQL schema with ENUM-enforced state machines, 28 Row-Level Security policies for department-isolated access, and PostGIS spatial indexes keeping ward-level queries under 100ms.
- Computer Vision:** Deployed an ONNX-optimized YOLOv8 model at 20ms inference on GCP Cloud Run for automatic civic issue detection from CCTV feeds.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Swift, SQL, HTML/CSS, C++

Frontend / Backend: React, Next.js, Node.js, FastAPI, Tailwind CSS, REST APIs, WebSockets, NextAuth, discord.js

AI / ML: Multi-Agent Systems, LLM Orchestration, Gemini AI, Prophet, NetworkX.

Data / DevOps: PostgreSQL/PostGIS, SQLite, Redis, DuckDB, Docker, CI/CD, GCP, Railway/Render

Tools / Platforms: Git, FFmpeg, WhatsApp Cloud API, Supabase

ACHIEVEMENTS

India Innovates '26 – National Grand Finale Winner: JanSamadhan civic grievance platform

[\[Post\]](#)

InnovateNSUT '26 – 1st Place: Leafline, a civic issue reporter

[\[Post\]](#)

EDUCATION

Manipal University Jaipur – *Bachelor of Technology in Computer Science & Engineering*

Expected Graduation: May 2029