Shaswat Raj

Full-Stack / Product Engineer · ships and runs products end to end · Tech Lead, Bitotsav '26

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EDUCATION

Birla Institute of Technology, Mesra — B.Tech, Computer Science & Engineering — Expected May 2028

SKILLS

Frontend: React, Next.js, TypeScript, Tailwind CSS, WebAssembly, accessibility
Backend: Node.js, Hono, Express, FastAPI, PostgreSQL, Drizzle, Redis, REST, WebSockets
Product: Payments (Razorpay), auth, SEO, analytics, Playwright end-to-end tests
Deploy: Cloudflare Workers, Docker, GitHub Actions, Linux

EXPERIENCE

Bitotsav — BIT Mesra annual festival — Tech Lead '26 · Web team '25 — 2025 – 2026

- Led and built the tech platform for ~5,000 participants: website, registration, team workflows, points system, admin panel and internal tools.
- Built signed-QR entry verification with a scanner that keeps working in no-network zones; Redis in front of PostgreSQL for hot paths.
- Ran live operations through the festival: on call for organisers and gate volunteers, fixing data and flow problems as they came up.
- 2025 (web team): built the festival site's frontend, improved its SEO, and created the first QR-based entry system used at the gates.

Independent products — Founder & sole engineer — 2025 – Present

- IndexFast: agent-native search indexing. MCP server, REST API and npm CLI over one core; a Workers cron drains a throttle-aware queue to IndexNow and Bing.
- RUXs: tiffin and water-can subscriptions that replace vendors' WhatsApp and paper ledgers. Also ScriptlyStore, a code marketplace.

ACM BIT Mesra (student chapter) — Joint Secretary — 2026 – 2027

- Built the chapter's student developer platform with verified identities and rankings (acm-bitmesra.github.io #3, merged).

Open source — Contributor — 2022 – Present

- Merged: google-gemini/gemini-cli #20778, turn cancellation now reaches in-flight chat-compression requests (AbortSignal threaded through the execution layers).
- Merged: mofa-org/mofa #1577, #1587, #1594 (Rust, cron-parsing panic fix), pingdotgg/t3code #23775, preactjs/preact #5331 and codex-team/editor.js #3040.
- In review: Go fixes in kmesh-net/kmesh (CNI nil-pointer panic, duplicate DNS refresh loops) and jaegertracing/jaeger #10024 (reject out-of-range sampling config); 14 open upstream PRs in all, each from a reproduced, filed issue.

PROJECTS

CampusLoop — *Next.js, PostgreSQL, Cloudflare Workers, WebSockets* — campusloop.space

- Student network gated by college email; sign-up accepts the domains of 1,350+ Indian colleges. Feeds, marketplace, polls and time capsules.

SopKit — *Next.js, TypeScript, WebAssembly* — sopkit.github.io

- 605+ privacy-first browser tools that process files client-side, with no uploads and no server compute.
- 4.3M+ requests and 213K+ visits in 30 days, built and operated solo.

Dhwani, BIT Mesra music society — *Next.js, TypeScript* — dhwanibitmesra.in

- Delivered the society's site for a non-technical team against a fixed event date: requirements, design and build end to end.

HONORS

- AICTE Productization Fellowship 2025 — shortlisted in the national Top 500 (Kishan AI).
- Adobe University Hackathon 2026 — reached Round 3 with OmniAudit-GEO, an AI-search visibility auditor (team of two; live demo).
- Apify hackathon prize ($100) for a production web-scraping actor · technical writing on Dev.to, 45K+ followers.