Aditya Singh

Full-Stack & Backend Developer Intern
B.Tech CSE (2029) | TypeScript, React & Node.js | Seeking Summer 2027 Internships
Bhubaneswar, Odisha | +91 9932819397 | heyitsmeadi4127@gmail.com | LinkedIn | GitHub | Portfolio

EDUCATION

B.Tech, Computer Science and Engineering
Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar | Expected Graduation: 2029

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Go, C, SQL, Rust (Basic)
Frontend: React, Next.js, Astro, HTML, CSS, Tailwind CSS, shadcn/ui
Backend: Node.js, Bun, Express, REST APIs, GraphQL, JWT, OAuth, Webhooks, WebRTC
Databases & ORM: PostgreSQL, MongoDB, SQLite, Prisma, Drizzle
Tools & Platforms: Git, GitHub, Docker, Linux, Vercel, Inngest, Judge0

PROJECTS

Hush — Real-Time Social Audio Platform (Ongoing)
TypeScript, Bun, Express, MongoDB, React, Redux Toolkit, JWT

- Engineered passwordless login with expiring OTPs, HMAC-SHA256 verification and JWT refresh tokens, enabling session restoration without storing plaintext OTPs.
- Implemented profile activation, avatar processing and protected routes to restrict application access to authenticated, activated users.
- Building WebRTC and Socket.IO audio rooms with participant roles and microphone controls to support live group discussions.

FoxAI — AI-Powered Pull Request Review Platform
Next.js, TypeScript, Prisma, PostgreSQL, Better Auth, Octokit, Inngest

- Integrated GitHub OAuth and Octokit to connect repositories and authorize access to pull requests.
- Automated review initiation through GitHub webhooks, removing the need to manually trigger reviews for incoming pull request events.
- Implemented Inngest background jobs and structured AI feedback to process reviews outside HTTP requests and surface actionable findings.

Edgecase — Coding Practice Platform
Next.js, TypeScript, Prisma, PostgreSQL, Clerk, Monaco Editor, Judge0

- Integrated self-hosted Judge0 with Monaco Editor to execute and evaluate submissions in 3 languages: JavaScript, Python and Java.
- Modelled problems, test cases, playlists, tags and user progress with PostgreSQL and Prisma to centralize assessment data.
- Built a role-based admin dashboard with Zod validation, enabling challenge creation and updates without source-code changes.

ANVIL — AI Agent Orchestrator
TypeScript, Bun, Vercel AI SDK, OpenRouter, OpenTUI, SQLite, Telegraf

- Engineered 4 agent modes with tool calling and up to 40 execution steps, enabling autonomous coding, read-only Q&A and structured planning.
- Implemented staged file mutations, unified diff previews, shell approvals and path sandboxing to keep codebase changes under user control.
- Built terminal, Telegram and web interfaces with persistent sessions, remote approvals, token and cost tracking, and a 14-day usage dashboard.

BiharLang — Custom Programming Language
Go, Lexer, Pratt Parser, AST, Tree-Walking Interpreter, REPL

- Built a dynamically typed Bhojpuri-based language from scratch in Go, using a 3-stage lexer, Pratt parser and tree-walking evaluator.
- Implemented lexical scoping and runtime objects to support first-class functions, recursion, closures, conditionals and loops.
- Developed a CLI for .bh scripts and an interactive REPL; added unit tests for the lexer, parser and evaluator to validate language behavior.