

Harsh Sahu

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Results-driven Full Stack Developer with a passion for DevOps-oriented, self-hosted FOSS solutions and a track record of building impactful open-source alternatives. Developed a social media platform that garnered 3.5k page views in 30 days, leveraging expertise in Next.js and TypeScript to deliver scalable, modern applications. Committed to empowering communities through free & accessible, ethical technology.

TECH STACK

Next.js, React.js, TypeScript, JavaScript, HTML, CSS, SCSS, Bootstrap, Tailwind CSS, Node.js, C/C++, Python, PyQt, PostgreSQL, SQLite, MongoDB, Prisma, Redis, Lucia, JWT, Zod, Docker, Docker Compose, Oracle OCI, Vercel, Coolify, AWS (S3, SES, SNS), Cloudflare (r2), MinIO, GitHub Actions, Turborepo.

PROJECTS

Zephyr - Social Media Aggregator & Platform (<https://development.zephyrr.in>)

- A unified social media platform aggregating content from major networks into a single, intuitive interface, achieving 3.5K+ page views in 30 days during beta with 100+ daily active visits. Implemented custom algorithms for personalized user recommendations and a point-based engagement reward system to enhance user retention.
- Developed a custom notification system for likes, follows, mentions, and post interactions, and a unified bookmarking system to organize saved content from platforms like Hacker News.
- Optimized performance, achieving 30x-90x improvements by migrating from SaaS to self-hosted services, reducing API response latency from ~300ms to 25ms (16x improvement).
- Enhanced security with email validation/verification, preventing the use of temporary email accounts.
- **Utilized:** Next.js, React.js, TypeScript, Tailwind CSS, Lucia(auth), Docker, Redis, PostgreSQL, MinIO, Turborepo, JWT, Prisma, Oracle OCI, Coolify, JavaScript, Git Hooks, Unsend, Zod, AWS SES.

Velastris - Real-Time Chat & Discussion Platform (<https://dev-chat.zephyrr.in>)

- A sleek and powerful chat platform designed as part of the Zephyr ecosystem, enabling real-time, seamless communication with a modern, intuitive interface.
- Built a rich messaging experience, including message reactions, replies, threads, seamless sending/editing/ deleting of messages, and image sharing in chats.
- Implemented an invite system with 6-digit codes and shareable invite links, allowing controlled access and workspace collaboration.
- Optimized real-time performance using Convex, ensuring low-latency messaging and smooth user interactions.
- **Utilized:** Next.js, Convex, Tailwind CSS, TypeScript, NextAuth(auth), WebSockets.

Nyxforge - Production ready Next.js & Turborepo Template ([NPM module](#))

- A Turborepo-powered (Monorepo) starter template for building scalable, high-performance Next.js applications with minimal configuration.
- Optimized for developer experience, featuring prelinked packages, resolved aliases, and unified tooling to streamline development.
- Seamless setup with “`npx nyxforge@latest init`”, enabling instant project scaffolding & regularly updated to incorporate latest Next.js features and ecosystem tools.
- **Utilized:** Next.js, Turborepo, TypeScript, Biome, Tailwind CSS.

Nyxtext Zenith – Windows Code Editor with Terminal (nyxtext-zenith/releases)

- A modern, keyboard-centric text editor with Qt & QScintilla, supporting 35+ programming languages with syntax highlighting, code folding, and auto-indentation.
- Built-in PowerShell terminal for seamless command execution within the editor & highly customizable with Lua-based theming, keybindings, and shortcuts.
- Optimized workflow with workspace & codespace tabs, dockable file tree, and dynamic status bar with Enabled calltips & autocompletion for Python and Lua.
- **Utilized:** Python, PyQt, QScintilla, Lua.

Yggdrasil - Simple Linux/macOS GUI task management

- A suckless, GUI-based task management utility written in C with liblief, designed for efficient daily task tracking.
- Implemented task serialization & deserialization, ensuring seamless data persistence with a priority-based system, automatically sorting tasks from high to low priority for better organization.
- Built with the leif UI library, providing a lightweight, immediate-mode interface for a distraction-free experience.
- Supports Linux & macOS, offering a fast, resource-efficient alternative to bloated task managers.
- **Utilized:** C, liblief, GTK/X11 (for UI rendering).

PROFESSIONAL EXPERIENCE

Operation Smile Foundation (Non-Profit Organization)

Web Development Intern

Remote

Apr 2024–June 2024

- Developed a responsive website using HTML and CSS, enhancing the user interface and overall user experience.
- Collaborated with the development team to optimize performance and participate in code reviews, contributing to continuous improvement and project success.

AI Club, VIT Bhopal

Web Team Member

Bhopal, India

April 2024–Present

- Developed and maintained the AI Club's website to enhance functionality and improve user experience while effectively promoting club activities and resources.
- Organized events and workshops to engage members and foster collaboration within the artificial intelligence community.

Mozilla Firefox Club, VIT Bhopal

Content Team Member

Bhopal, India

March 2024–Present

- Created and curated content for Mozilla events and workshops, including anchoring scripts, website content, and event reports, ensuring clear communication and engagement.
- Organized and led events & workshops, fostering community collaboration and driving engagement within the Mozilla ecosystem.

EDUCATION

VIT Bhopal UNIVERSITY

Bachelor of Technology in Computer Science
(Specialization in AI & ML)

Bhopal, India

Sept. 2023- May 2027

ADDITIONAL

- Hacktoberfest 2024: Maintained and contributed to Zephyr, submitting 16 high-quality PRs (4x the requirement). Led code reviews, PR management, and documentation, fostering open-source collaboration.
- Project Admin & Contributor at Social Winter of Code, managing project workflows, team coordination, and Zephyr's codebase expansion. Ranked #2 in Week 1.