KUNAL SINGH

Full Stack Developer • Backend Engineer

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GitHub | Portfolio | Linkedin

EDUCATION

Technocrats Group of Institution

Computer Science & Engineering B.Tech.   November 2021 - August 2025

CGPA: 8.01 (Till 4th sem)

SKILLS

Programming Languages:	C++, Go, JavaScript, TypeScript, Rust
Libraries/Frameworks:	HTML, CSS, React.js, Next.js, Express, Node.js, Tailwind CSS, Prisma
Tools / Platforms:	Git, GitHub, Linux, Bash, Docker, Docker Swarm, Containers, Nginx, Fiber(GoLang), REST Api, WebSockets, GraphQL, RabbitMQ, RPC and gRPC, Testing, Azure VM
Databases:	SQL, PostgreSQL, MongoDB, Redis

PROJECTS / OPEN-SOURCE

Melt-CD | Link   *Go, React.js, TypeScript (JavaScript), HTML / CSS, JSON, GitHub Actions (CI), Docker*
- Continuous Development (**CD**) platform for docker swarm.
- Build a reliable CD application with golang to work with **docker swarm**, an alternative to **Kubernetes**.
- It is based on *GitDevOps* technique, just like **Argo-CD** for *Kubernetes*.
- The **API** Server is build with **golang**, the **CLI** is also build with **golang** and the *admin UI* is build with **React.js**.

Secops (Secure Operations) | Link   *Rust, Tauri, Typescript, Ubuntu, React.js*
- A Desktop application for Ubuntu Operating System to manage OS Security.
- Build with Rust, Tauri (a rust framework) and Typescript.
- Using secure technique to authenticate like **pkexec**, and its completely offline to make it more secure.
- Manages hardware security like *Blocking of camera, Bloking of USB Port* etc. And other system security technique such as **Firewalls**, **SSH** can be enhanced.

Image Server | Link   *Go, SQLite, Docker, HTML/CSS, JavaScript, Azure*
- Designed and developed a self hosted Image Server, which can be used in online forums, like blogs, articles. It can be used as a microservice to add image serving capability, alternative to AWS S3.
- An image server is web server software which specializes in delivering (and often modifying) images
- It can be self hosted using **Docker**
- Deployed on **Azure VM** via **Nginx**

Portfolio Website | Link   *Next.js, React, TypeScript, Shadcn UI, Tailwind CSS, Meilisearch*
- My portfolio website serves as a comprehensive showcase of my skills and achievements.
- Through a collection of projects, I demonstrate proficiency in full stack development.

LiveJQ | Link   *Rust, JSON*
- A CLI tool for JSON Data Parsing on Realtime data stream
- An alternative jq implementation in rust for continuous parsing without crashing on invalid JSON
- Helpful for data streams, which may have other formats in between like text along with JSON, and you want to parse JSON for better readability.

HONORS & AWARDS

Lead the Team which won 2nd price in Hackathon organized by NRI Group of Institutions, Bhopal

2 Year Consecutive Winner of CodeCrunch (Annual Programming contest at my College)