KUNAL SINGH

pykunalsingh@gmail.com | +91 9039 88 0309 | 84, Shahpura, Bhopal, M.P., India

github.com/KunalSin9h | www.kunalsin9h.com | linkedin.com/in/kunalsin9h

EDUCATION

Technocrats Group of Institution
B.Tech., Computer Science & Engineering   November 2021 - August 2025
CGPA: 8.10

EXPERIENCE

Blupp Co. | Backend Developer Intern   *June - July 2024*
- Worked on Serverless application involving Cloudflare Workers and Other technologies like JavaScript, Go, NodeJS, TypeScript. PlanetScale.
- Worked on Go Backend application, designed for High Throughput.

SKILLS

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

PROJECTS / OPEN-SOURCE

Melt-CD | github.com/kunalsin9h/meltcd *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) | github.com/kunalsin9h/secops *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 | github.com/KunalSin9h/tiddi *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.
- It can be self hosted using **Docker**
- Deployed on **Azure VM** via **Nginx**

Netgres | netgres.pages.dev *GoLang, Tailscale, Wireguard VPN*

- Netgres is a work in progress application for creating personal network password manager secret directory on top of Wireguard VPN.
- It creates a private network using an individual's own devices, aiming to provide the accessibility of cloud-based password managers while maintaining personal control over data storage.

HONORS & AWARDS

Led the Team which Won 2nd Place in Hackathon Organized by NRI Group of Institutions, Bhopal

3-Year Consecutive 1st Rank Winner of CodeCrunch (Annual Programming Contest at TIT Group)