

Manpreet Singh

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Platform Engineering | DevOps | Backend Development

Technical Skills

Languages	: JavaScript, TypeScript, Python
Backend	: Express.js, Flask, Gin
Databases	: PostgreSQL, MongoDB, Prisma, Drizzle ORM, Mongoose
DevOps & Infrastructure	: Linux, Docker, Docker Compose, GitHub Actions, CI/CD, Nginx, Bash, DigitalOcean
Tools & Technologies	: Git, GitHub, GitLab, Redis, Electron

Projects

ActionScope In Development

- Building an observability platform for GitHub Actions using Go, PostgreSQL, Redis, and GitHub Apps.
- Designed an event-driven architecture for webhook ingestion, workflow tracking, and execution analysis.
- Processes workflow events through worker queues and generates execution traces for CI/CD debugging.

College Kiosk Platform

- Built an Electron-based kiosk platform using Express and Vite for campus information, staff directories, timetables, and 360° campus tours.
- Developed backend APIs and integrated content delivery workflows.
- Implemented an automated release and update system enabling kiosk devices to update without manual intervention.

Alumni Management Platform

- Developing a self-hosted alumni networking platform using Next.js, Express, and PostgreSQL.
- Responsible for backend services, database design, deployment architecture, and CI/CD workflows.

Healthcare Platform (Hackathon)

- Collaborated in a 4-member team during a 36-hour hackathon to build a healthcare platform connecting doctors and patients.
- Designed MongoDB schemas and implemented authentication systems.
- Developed backend services supporting core application workflows.

Open Source Contributions

- Contributed to Forem by diagnosing and fixing failing test cases introduced by upstream code changes.
- Contributed to p5.js by resolving CI workflow configuration issues and improving repository automation reliability.
- Contributed fixes and enhancements to Linux desktop ecosystem projects including Noctalia Shell and related plugins.

Achievements

- First Runner-Up in a college hackathon as part of a 4-member team, receiving a share of the INR 31,000 prize pool.
- Merged open-source contributions to Forem and p5.js, including test fixes and CI workflow improvements.

Certifications

- GitHub Foundations Certification (June 2025 – June 2028)

Education

Baba Farid College of Engineering and Technology

B.Tech in Computer Science Engineering

2024 – 2028