DIVYANSH GUPTA

+91 8178392040 ◇ Bengaluru, IN
divyanshg809@gmail.com ◇ linkedin.com/in/divyanssh ◇ github.com/divyanshg ◇ divyansh21.vercel.app

SUMMARY

Full-stack engineer with 4+ years building production systems across industrial IoT, fintech, and developer tooling. Shipped Zero Trust infrastructure, live consumer apps with 500+ active users and 101 Cr+ in recorded transactions, and cloud-edge architectures for industrial HMI and washpad environments.

SKILLS

Languages	TypeScript, JavaScript, Python, C/C++, SQL, Bash
Backend	Node.js, NestJS, Express, REST APIs, WebSockets, MQTT, gRPC, Microservices, BullMQ
Frontend	React, React Native, Next.js, Expo, Tailwind CSS, Vite, shadcn/ui
Databases	PostgreSQL, MongoDB, Redis, SQLite, Supabase, Prisma ORM, Time-Series DBs
DevOps / Infra	Docker, GitHub Actions, Terraform, CI/CD, NGINX, Caddy, AWS, Azure, Ansible, Turborepo
Real-time	Socket.io, Mediasoup (WebRTC SFU), NATS, Firebase Cloud Messaging
AI / CV / ML	OpenAI API, Microsoft Foundry, Anthropic API, OpenCV, FAISS, MediaPipe, NumPy
Tools	Git, Jira, Postman, Figma, Playwright, Jest, Cypress, Vitest, pnpm, Maestro

EDUCATION

Bachelor of Technology, Computer Science, 2020 - 2024
Manav Rachna International Institute of Research and Studies

EXPERIENCE

Lead Software Developer Nov 2024 - Present
Techsonic Services Ltd. *Alberta, Canada*

- Led architecture and end-to-end delivery of 2–3 industrial **HMI and Washpad Management Systems** for cloud-edge environments, managing a team of 2–3 engineers across design, development, and deployment
- Reduced **MQTT communication latency from** $>$ 1**s to** $<$ 100**ms** by redesigning broker topology and message batching strategy, enabling sub-100ms real-time data refresh on HMI dashboards monitoring 200+ industrial devices
- Built and owned the full **CI/CD pipeline** (GitHub Actions + Docker + Terraform), cutting deployment time by ∼45% and enabling zero-downtime releases across cloud and edge targets
- Designed scalable **NestJS/Node.js services** with PostgreSQL and time-series data pipelines, integrating MQTT for low-latency device telemetry in production industrial environments

PROJECTS

myssh — Zero-Trust SSH Access CLI github.com/divyanshg/myssh-cli
Built and published a production-grade CLI tool (`npm: @avtl/myssh`) implementing a Zero Trust SSH access model with ephemeral ed25519 keypair generation, 5-minute CA-signed SSH certificates, and principal-scoped authorization preventing cross-node certificate reuse.

- Implemented org-based **RBAC** (Owner → Viewer), per-node ACLs, and optional TOTP enforcement with QR-code terminal setup and 10 backup codes
- Built an **AES-256-GCM encrypted secrets vault** (Doppler-style injection via `myssh vault run`) with versioning, TTL-based expiry, key rotation, and CI/CD service token support — secrets never touch disk

RightKhata — Digital Ledger App for Indian SMBs Play Store | iOS
Sole developer of a full-stack digital khata product: React Native mobile app, React web app, NestJS backend, and PostgreSQL/Supabase — shipped solo from zero to production.

- Reached **503 active users** (511 total) across Play Store and App Store, recording **101 Cr+ in total transactions**
- Designed the transaction data model, ledger reconciliation logic, and real-time sync between mobile and web clients

Mini Ansible — Lightweight Configuration Management Tool github.com/divyanshg/mini-ansible
Built an Ansible-inspired provisioning engine in Python with YAML playbook execution over SSH, parallel host execution via `ThreadPoolExecutor`, and idempotent modules (`apt`, `copy`, `service`, `wait_for`, `user`).

- Implemented full loop constructs (`with_items`, `with_sequence`, `loop`), variable hierarchy, run-once tasks, fail-fast host tracking, and real-time color-coded streaming output

JustWave — Palm Biometric Payment System justwave.in
Built a working demo of a palm-based UPI payment system targeting the Indian market — a dual-modality biometric pipeline running on Raspberry Pi that identifies users by their palm vein and palmprint patterns, then routes a UPI transaction without any physical contact or device.

- Engineered a **dual-camera capture pipeline** (RGB + NIR) with MediaPipe hand detection, palm ROI extraction, and feature extraction using HoughLinesP, spatial histograms, and line-structure descriptors
- Implemented **FAISS-based 1:N identity matching** for fast vector search across enrolled users, backed by a NestJS API connecting the edge hardware to the cloud payment layer

AI-Powered Internships Platform internspace.in
Designed and built a platform using AI to conduct automated video assessments, dynamically generate technical questions, and evaluate candidates on accuracy and communication via serverless async scoring pipelines.