



Istiaq Hassan Emon

Engineering Lead · Full-Stack Product & Platform · TypeScript, Python, Go, Rust

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📍 Dhaka, Bangladesh (UTC+6) · Remote (overlap EU/US-East) · Open to relocation with visa sponsorship

🌐 ihemon.me

Profiles

GitHub

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Summary

Engineering lead who builds the whole product: web, mobile, desktop, backend, and the platform it runs on. I lead four product lines and shipped a radiology reporting web app, a mobile app that serves a whole on-prem fleet from one build, Tauri desktop tools live at 8 labs, a Rust imaging pipeline (70k studies a month) and a control plane for 86 servers.

Client names and references available on request (under NDA). Metrics come from production telemetry.

Experience

TRODAD International Ltd

Dhaka, Bangladesh

Development & Technology Team Lead

February 2025 – Present

Health-technology group: engineering lead across a national radiology platform, a multi-site ERP, a lab-integration product and a consumer health platform.

- Lead engineering for 4 product lines: built and run the hiring loop, mentor engineers into owners of production services, and set the architecture and code-review standards every team ships on.
- Built the product surfaces as well as the backends: a Next.js radiology reporting app, Tauri desktop apps for routing, viewing and lab integration, and an Expo app that serves every ERP site from one build.
- Defined the release process (trunk + release PRs, release-please, goreleaser, Tauri auto-update) that shipped ~1,500 tagged releases in 18 months across 18 core repos.
- Built a medical-imaging (DICOM) server in Rust from scratch for a national radiology platform: volume grew 7× in 6 months to 70,651 studies/month from 375 active sites at p95 latency 234 ms, 6.3M images (4.5 TB), 95 releases; plus a Rust/Tauri site router (35 releases) with a persistent queue and 5 codecs incl. JPEG-XL.
- Resolved a 2-hour radiology worklist outage (workflows/hour 827 to 54) by tracing a four-link failure chain (unindexed cleanup scan, lock convoy, misleading healthcheck, restart loop) and shipping an index, a bounded resumable task, a restart breaker and new lag and lock alerts.
- Designed and led a Go fleet control plane for an on-prem ERP live at 88 sites on 86 servers: automatic pull updates keep 83 of 88 sites on the current release, with an audited remote terminal instead of shared SSH.
- Cut manual lab-result entry with a Rust/Tauri bridge whose instrument parsers compile to WASM (ASTM/HL7, 17 order modules; 326 commits, 59 releases): live at 8 labs, ~23 analyzer families, 25,000+ results captured since June 2026.
- Made rollout repeatable with a one-binary Go deployer and a production k3s + ArgoCD GitOps cluster for one product line. Designed a 5-zone PHI de-identification pipeline so imaging data can feed AI training safely.

Nexis Ltd

Dhaka, Bangladesh

Founder

September 2021 – Present

- Founded a software company (full-time until Feb 2025, part-time since then alongside TRODAD) delivering multi-tenant SaaS (HRM, school management, digital menus, e-commerce, SSO), owning architecture, delivery and client relationships.
- Built the infrastructure-as-code foundation reused by every product (889 commits): Terraform across Oracle Cloud, Proxmox and AWS EKS, with Packer and Ansible.
- Launched Lepti (2026), a VPN/proxy service, from zero: Go API (billing, seats, passkeys/TOTP), Go node agent (xray/hysteria, nftables) and a Rust desktop client.

myBurgerLab

Malaysia

ZE Enterprise

Shah Alam, Malaysia

Web Developer Intern

May 2019 – August 2019

Selected Work**Radiology worklist and reporting web app**

Next.js 15 worklist, reconciliation, collaborative reporting and in-browser viewing; 846 of my commits, 444 releases.

ihemon.me/work/radiology-reporting-web**One mobile app for every on-prem site**

Expo / React Native app that finds the user's site and server and delivers push alerts: one build for the fleet.

ihemon.me/work/universal-mobile-app**Desktop apps at the edge: router, viewer and lab bridge**

Three Tauri 2 apps with Rust cores (router, viewer, lab bridge): 105 releases; lab bridge live at 8 labs.

ihemon.me/work/desktop-edge-apps**Rust imaging pipeline at national scale**

Rust PACS, site router and de-identification hub: 70k studies/month, 375 active sites, p95 234 ms.

ihemon.me/work/rust-imaging-pipeline**Fleet control plane for 86 on-prem servers**

Go hub, agents, WireGuard mesh and React dashboard for 88 sites on 86 servers; audited remote access.

ihemon.me/work/fleet-control-plane**Lepti: a VPN product from zero**

Go control API, node agents and Rust desktop client; billing, seats, passkeys/TOTP.

Skills**Web**

TypeScript, React, Next.js, TanStack Router/Query/Table/Start, Tailwind, shadcn/Radix, Zustand, Zod, tRPC, Vitest, Playwright

Mobile

React Native, Expo, Expo Router, NativeWind, Offline-first (SQLite), Push notifications, WebRTC (LiveKit), Jest + RNTL

Desktop

Tauri 2 (Rust + React), Electron, Auto-update, Deep links, WebAssembly plug-ins

Backend

Python: Django/DRF, FastAPI, Celery, Node.js: Express, Go: Gin, Rust: Axum, PHP: Laravel, DICOM, HL7, ASTM servers, RabbitMQ

Platform & infrastructure

Kubernetes (k3s), ArgoCD/GitOps, Terraform, Packer, Ansible, Docker, Traefik, WireGuard, Prometheus/Grafana/Loki, OpenTelemetry, GitHub Actions, release-please, goreleaser, AWS EKS, Oracle Cloud, Proxmox

Data

PostgreSQL, Redis, S3/MinIO, SQLite, Prisma, Drizzle, Message queues, Schema migrations

Security

Passkeys/WebAuthn, TOTP, next-auth/better-auth, De-identification, Audited remote access, nftables, Secure auto-update

Education**SEGi University**

Computer Networking

BIT

2022

SEGi College

Diploma in IT

2019

Languages**Bengali**

Native

English

Fluent

Hindi

Proficient

Bahasa Melayu

Conversational