Bilal Nasr
Senior Full Stack Engineer
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PROFESSIONAL SUMMARY

Backend-focused Senior Full Stack Engineer specializing in system design, PostgreSQL schema and query design, and APIs, carried through to web apps, admin tools, and deployment. Top contributor on two multi-repo products, with personal projects that reach into networking: RADIUS, PPPoE, and OS-level routing. Works fast with an AI-augmented workflow (Claude Code, Cursor, GitHub Copilot). Experienced in leading projects and mentoring engineers, with a background in teaching coding.

WORK EXPERIENCE

Lelabo Digital | Senior Full Stack Engineer *(Feb 2024 – Present)*

- Designed and developed full-stack applications using MERN stack.
- Built and optimized backend systems in Node.js ensuring scalability and security.
- Structured and optimized relational databases using PostgreSQL.
- Implemented caching mechanisms to enhance performance.
- Conducted SEO optimizations for search engine rankings.
- Developed automation scripts for workflow efficiency.
- Collaborated with cross-functional teams for high-quality web solutions.
- Promoted to Senior Full Stack Engineer; took ownership of architecture decisions and technical direction for key features, and mentored engineers on the team.
- Guided interns through their internship tasks.

MISCK, Lebanon | Web Developer Intern *(Oct 2023 – Jan 2024)*

- Developed full-stack applications with Next.js, Tailwind CSS, and Firebase.
- Optimized backend performance and resolved issues.
- Contributed innovative solutions for improved user experience.

Bright Champs | Coding Instructor *(Mar 2022 – Oct 2023)*

- Delivered coding lessons to UK students (Grades 1-12).
- Provided individualized student support and mentoring.
- Conducted training sessions for fellow teachers on curriculum implementation.

FREELANCE PROJECTS

PassPo | Full-Stack Engineer, Freelance Team Project *(2025 – 2026)*

- Led full-stack development of a pet health passport and vet booking platform (passpo.ai): one Node.js/Express + PostgreSQL API behind a Next.js web app, admin CMS, and provider CMS, plus two Flutter apps built mainly by a teammate.
- Built an API of about 565 routes, 84 tables, and 7 auth realms, and moved authentication from Supabase to an in-house system with OTP, refresh tokens, per-account 2FA, session revocation, and audit logs.
- Added shared account erasure across 6 realms and Arabic/English (RTL) localization in the web app.
- Top contributor on a 3–4 person team (about 63% of commits), owning backend architecture and cross-app code review.

Emarmo | Full-Stack Engineer, Freelance Team Project *(2025 – 2026)*

- Led backend and frontend development for a B2B marble/stone marketplace, opening soon, handling escrow-style payments, credit terms, letters of credit, disputes, and container logistics.
- Built a ledger-based escrow with idempotent payments, in a backend of about 160 tables and 540 routes across 4 role realms with 145 test files.
- Integrated AI summaries and listing tools, a custom MCP server for AI coding tools, and Sentry

monitoring; built buyer-facing and multi-realm admin apps in Next.js with automated testing (Playwright, Vitest).
- Primary contributor across backend and frontend repositories on a 3–4 person team (about 69% of commits).

PERSONAL PROJECTS

LAN Wi-Fi Manager | Creator, Solo Project *(2026)*

- Released desktop app (v2.5.0, 30 public releases) that fails over between wired and Wi-Fi and can use both lines at once: C# on Windows, Rust and Tauri on Ubuntu and macOS.
- Built a local proxy that binds each connection to one network adapter, with crash-safe restore, plus 1,160 Rust tests and an automated release pipeline.

QuotaLeft | Creator, Solo Project, Pre-release *(2026)*

- Multi-tenant billing and subscriber platform for small ISPs (NestJS, PostgreSQL, Next.js), with an on-site RADIUS box that works offline and a FreeRADIUS cloud fallback over WireGuard.
- Lab load test: 2,000 subscribers redialling in 60 seconds with none lost, p99 20.6 ms. Validated on physical MikroTik hardware, with over 4,000 automated tests.

Internet Monitor | Creator, Solo Project *(2026)*

- Live Next.js and PostgreSQL app that tracks home internet usage from a MikroTik router behind carrier-grade NAT, handling PPPoE counter resets, clock skew, quota alerts, and outage classification.

Fernlock | Creator, Solo Project, In Progress *(2026)*

- Self-hosted secrets manager (Fastify, PostgreSQL, Drizzle) with envelope encryption, key rotation, custom auth with TOTP, and a CLI with device-code sign-in.

Fernway | Creator, Solo Project, In Progress *(2026)*

- Self-hosted deploy panel (Next.js, Docker) with live logs, rollbacks and a least-privilege host agent.

EDUCATION

Lebanese University, Lebanon

- Bachelor's Degree in Computer Science

TRAININGS & CERTIFICATIONS

- Full Stack Development Certification (Park Innovation, 2023) – 400-hour training in front-end and back-end.
- IT Essentials (Cisco Network Academy, 2022) – Specialized in networking and troubleshooting.

TECHNICAL SKILLS

- Programming Languages: C, C++, Python, Java, JavaScript (ES6+), TypeScript, Rust, C#, PHP, Shell Script, MIPS (Assembly)
- Web Development: Node.js, Express.js, NestJS, Fastify, React.js, Next.js, Tailwind CSS, Tauri, Laravel, Blade
- Databases: PostgreSQL, MongoDB, schema design, query optimization
- Tools & Platforms: Git, GitHub, GitHub Actions, Docker, Google Cloud, Firebase, Supabase, Vercel, Cloudflare, Playwright, Vitest, Sentry, Claude Code, Cursor, GitHub Copilot

ADDITIONAL SKILLS

- System Design | Performance Optimization | RADIUS and PPPoE | WireGuard | MikroTik RouterOS | Network Cabling | Computer Troubleshooting

REFERENCES

Available upon request