Nosakhare Omokaro

Regina, SK | nosa@nosa.dev ↗ | GitHub ↗

Education

University of Regina Regina, SK

Bachelor of Applied Science, Systems Engineering (General), First Year *Sep. 2026 – Present*

Intended Major: Electronic Systems Engineering | IEEE Student Member | Available: May – Aug. 2027

Projects

Vibe Hub (CLIProxyAPI Gateway) | *TypeScript, Node.js, SQLite, HTTP/SSE* 2026

GitHub ↗

- Engineered a self-hosted TypeScript/Node.js access and routing gateway around the third-party CLIProxyAPI binary, delivering isolated admin/member dashboards and HTTP/SSE streaming inference.
- Implemented deterministic personal-first routing and shared-backup reserve guards using quota-freshness validation, configurable switchover thresholds, per-account model prefixing, bounded queues, and stream cancellation.
- Integrated the OpenAI Decisions API to screen shared-backup traffic against configurable policy rules, adding owner review holds, time- and request-count-scoped approvals, decision caching, and spending budgets.
- Built SQLite activity logging with full-history filtering before snapshot pagination, salted `scrypt` auth with timing-safe verification, and automated tests covering quota boundaries, isolation, and failure paths.

ESP32 Logic Analyzer *(In Progress)* | *C++ (Arduino), ESP32-WROVER, PlatformIO* 2026 – Present

GitHub ↗

- Designed single-channel ESP32-WROVER logic-analyzer firmware in C++ (Arduino/PlatformIO) that captures GPIO state transitions with microsecond-unit (`micros()`) timestamps into a bounded in-memory buffer.
- Decoupled signal acquisition from serial reporting by halting at buffer capacity and flushing recorded levels and computed inter-edge pulse intervals once over USB serial, eliminating blocking serial I/O during capture.
- Built an on-board GPIO square-wave test generator for closed-loop capture verification; actively extending buffer depth, capture/rearm controls, independent-source characterization, and host-side UART decoding.

RCCG Cornerstone Church Platform | *Astro, TypeScript, Sanity CMS, pnpm* 2026

GitHub ↗

- Architected a multi-site pnpm monorepo with shared Astro UI packages and a Sanity CMS studio, statically generating site-scoped newsletter routes from typed GROQ queries and schema validation.
- Built and tested an event-driven publishing router that dispatches CMS updates to the owning site's Vercel deploy hook with event deduplication, retries, and deployment-status tracking.

Technical Skills

Programming: C++ (Arduino), TypeScript, JavaScript, HTML/CSS
Embedded & Hardware: ESP32-WROVER, GPIO, serial debugging, PlatformIO, Solid Edge (3D CAD)
Software & Tools: Node.js, SQLite, HTTP/SSE, Git/GitHub, pnpm, GitHub Actions, Astro, Sanity CMS

Experience

Retail Sales Associate Mar. 2026 – Aug. 2026

Marshalls *Saskatoon, SK*

- Processed high-volume cash, card, and gift-card POS transactions accurately while resolving customer inquiries in a fast-paced retail environment.
- Coordinated stock replenishment and merchandise floor organization with team members to maintain safe, orderly sales-floor and stockroom operations.