

Alex Herrera Manzanares

Software Developer · Cybersecurity Focus

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Available for a university internship · Jan – Apr 2027

PROFESSIONAL SUMMARY

Software Developer focused on secure architectures (AppSec) and AI integration. Experienced in designing scalable corporate platforms, automating processes with LLMs and managing relational and NoSQL databases. Applies Security by Design end to end: vulnerability mitigation, RBAC, injection prevention and automated deployments (CI/CD).

TECHNICAL SKILLS

Security:	Vulnerability assessment, attack testing, RBAC, session and secrets management, injection prevention, CSP, rate limiting.
Networking and Systems:	VLAN, firewall, VPN, ACLs, DNS, Linux server administration.
Programming Languages:	TypeScript, Python, SQL, Java, Kotlin.
Frontend:	Next.js, Astro, Tailwind CSS.
Backend and Mobile:	Node.js, NestJS, REST APIs, WebSockets, React Native (Expo), Android Studio.
Databases:	PostgreSQL, MySQL, SQL Server, MongoDB, SQLite, Supabase, Firebase, Redis.
Cloud and Deployment:	Google Cloud Platform, Azure, AWS, Vercel, Render, Docker.
Version Control and CI/CD:	Git, GitHub Actions.
Testing:	Vitest, Playwright, Jest.
Generative AI:	LLM, RAG, MCP.

PROFESSIONAL EXPERIENCE

Software Developer Jul 2026 – Present

Intercargo Panamá (via Kaizen Apps CR) · project-based

- Segmented the corporate platform architecture, isolating public instances from authenticated environments to limit how far an incident can reach.
 - Hardened the production security posture (AppSec) through strict CSP policies, rate limiting, upload quotas and defense against AI prompt injection.
 - Covered the system with 2,243 unit tests and 27 end-to-end (E2E) suites, adding a dedicated attack suite for each corporate module.
 - Automated the Due Diligence process by integrating generative AI models for document reading, leaving validation and critical decisions entirely to code logic.
 - Streamlined accounts receivable through a virtual assistant on WhatsApp Cloud API, enabling identity verification and client-driven payment management in real time.
 - Migrated the corporate web infrastructure from WordPress to Next.js (14 pages), cutting technical debt by removing 81% of unused assets and implementing modern accessibility standards.
 - Deployed the infrastructure in containers on Google Cloud Run, with continuous builds on Cloud Build and credentials held in Secret Manager.
- Technologies:** Next.js 16, React 19, TypeScript, Node.js, MySQL / Cloud SQL, Cloud Run, Cloud Build, Secret Manager, Docker, Vitest, Playwright, WhatsApp Cloud API, Gemini.

Web Developer Jan 2026 – Present

Star Cargo Service · project-based

- Designed and deployed a custom CRM system to centralize logistics and operational management, replacing manual spreadsheet-based workflows.
 - Automated the sales process and real-time data synchronization, eliminating manual file reconciliation and speeding up the commercial team's operations.
 - Monitored the Supabase Security Advisories and scoped role-level permissions over the PostgreSQL tables.
- Technologies:** Next.js, React, TypeScript, Tailwind CSS, NestJS, Node.js, Supabase, PostgreSQL, Vercel, AppSheet, Apps Script.

Tier 1 Technical Support Jan 2025 – Jan 2026

Star Cargo Service

- Resolved connectivity issues and equipment setup, and handled remote assistance for users across the organization.

Software Developer and Tier 2 Technical Support

Jan 2024 – Present

Kaizen Apps CR · full-time

- Built four custom internal systems and the corporate portal, from requirements gathering to deployment and production maintenance.
- Added features and fixed defects in the HR ERP the company sells under license.
- Redesigned the corporate web architecture, implementing internationalization (English/Spanish) and the SEO the previous site lacked.
- Administered the continuous integration (CI/CD) pipelines on GitHub Actions, automating the AI tooling across the team's repositories.
- Provided Tier 2 technical support, running root cause analysis at code level and resolving complex incidents involving access control, user permissions and data flows.

Technologies: Astro, React, Next.js, Angular, TypeScript, NestJS, AppSheet, Apps Script.

SELECTED PROJECTS

Seiri, offline-capable attendance mobile app

May – Aug 2026

Kaizen Apps CR

- Shipped a mobile attendance app that works offline, storing entries on the device and syncing them in the background once the connection returns.
- Implemented identity verification for each entry through photo capture and geolocation.
- Stood up the Next.js backend on Render: 14 API routes against MySQL over TLS, token authentication and rate limiting.

Technologies: React Native (Expo), TypeScript, SQLite, background sync, Next.js (API), MySQL.

Threshold-based blocking antivirus

Jul – Aug 2026

Academic project

- Built an automated detection system that monitors system activity, checks it against predefined thresholds and triggers blocking actions on anomalies.
- Encrypted the critical content with open-source libraries and deployed the supporting infrastructure on Amazon Web Services (AWS).

Areas: AWS, threshold detection, automatic response, encryption.

EDUCATION

Bachelor's Degree in Information Technology Engineering. Universidad Técnica Nacional.

Jan 2024 – Present.

COURSES AND CERTIFICATIONS

Introduction to Cybersecurity. Cisco Networking Academy.

Jul 2026.

Google Cloud Computing Foundations. Google Cloud, in progress.

Aug – Dec 2026.

LANGUAGES

Spanish: Native.

English: Advanced, PIT-UTN certified.