Joel Antonio Lopez Cota

+52 687 139 9822 | joellopezc12@gmail.com | linkedin.com/in/joel-cota

Education

Instituto Tecnológico de Sonora — Ciudad Obregón, Sonora, Mexico
Bachelor's Degree in Software Engineering — *Aug 2021 – Dec 2025*

Universidade Estadual de Campinas (Unicamp) — Campinas, Brazil
Academic Exchange Program — *Jul 2024 – Jan 2025*

Experience

Pinnacle Aerospace — Mexico
QA Engineer — *Aug 2025 – Dec 2025*

- Performed manual and automated testing for aerospace software systems following strict quality standards.
- Used Robot Framework, Selenium, Appium, and JMeter to build and execute automated test suites.
- Documented test cases, ran regression tests, and supported validation workflows with engineering teams.

Zitheonsoft — Ciudad Obregón, Sonora, Mexico
Full Stack Developer Intern — *Jan 2025 – May 2025*

- Developed a cross-platform messaging app using React Native, Expo, and TypeScript, including authentication, real-time chat, and group/contact management.
- Created reusable UI components and implemented navigation using React Navigation; integrated Firebase Cloud Messaging for push notifications.
- Built secure backend services with Spring Boot, MySQL, and Keycloak; implemented WebSocket-based real-time communication and local caching with SQLite.

Projects

SonoraFix – E-Commerce Platform — *Feb 2026 – Sep 2026*

- Built a full-stack store with React 19, TypeScript, and a Fastify + Prisma REST API on PostgreSQL and Redis.
- Integrated PayPal checkout, CFDI tax invoicing (SAT), Google OAuth, and rotating JWT refresh tokens.
- Containerized with Docker Compose and Caddy; covered by 466 Vitest tests; built a bilingual (ES/EN) admin panel.

Cloud Monitoring and Incident Response – Production Simulation — *Jan 2026 – Present*

- Deployed a containerized web app on Google Cloud (Compute Engine, Docker) to simulate production.
- Built Prometheus and Grafana dashboards and alerts; configured health checks and automatic container restarts.
- Simulated database failures and latency spikes, performed root cause analysis, and wrote SRE runbooks.

Movie Reviews Application – Web App — *Sep 2024 – Nov 2024*

- Built a movie review platform with community features using custom Web Components for a modular UI.
- Developed the backend with Node.js, Express, and MongoDB, secured with JWT authentication.

Technical Skills

Programming Languages: Java, Python, Kotlin, JavaScript, TypeScript, PHP, Go
Backend: Spring Boot, Node.js, Express, Fastify, Prisma, ASP.NET, Django, REST APIs, WebSockets
Frontend and Mobile: React, TanStack Query, React Native, Expo, HTML, CSS
Testing and QA: JUnit, Mockito, Vitest, Selenium, Appium, Robot Framework, JMeter, Postman, SonarQube
Databases: PostgreSQL, MySQL, SQL Server, MongoDB, Redis, SQLite
DevOps and Cloud: Docker, Kubernetes, CI/CD, Prometheus, Grafana, Google Cloud, AWS (EC2, S3), Azure
Tools and Methods: Git, GitHub, GitLab, Nginx, Cloudflare, Agile/Scrum, Kanban
Spoken Languages: Spanish (Native), English (B1), Portuguese (B1)