

Mariano Roberto Rac Noguera

Junior Full Stack Developer | Software Developer

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PROFESSIONAL SUMMARY

Junior Full Stack Developer and Computer Science and Systems Engineering student at Universidad de San Carlos de Guatemala (USAC, 7th semester completed). Builds web applications end to end with React, Angular, Node.js and Express on top of SQL Server and PostgreSQL, and knows what runs underneath: Docker, Kubernetes on Google Cloud, Linux and networks. Freelance developer with TechnoMaya working directly with business clients. Bilingual (native Spanish, advanced English B2-C1), with experience leading operations for 150+ collaborators.

TECHNICAL SKILLS

- **Programming Languages:** JavaScript, TypeScript, Python, Java, Go, Rust, C++, PHP, SQL, HTML5, CSS3
- **Frontend:** React, Angular, Vite, Tailwind CSS, responsive and accessible interfaces
- **Backend and APIs:** Node.js, Express.js, REST APIs, gRPC and Protobuf, RabbitMQ, object-oriented programming
- **Databases:** Microsoft SQL Server (T-SQL, triggers, views), PostgreSQL, Oracle SQL, MongoDB, Valkey (Redis), data migration (Oracle to SQL Server)
- **Cloud and DevOps:** Docker, Docker Compose, Kubernetes (GKE), Google Cloud, AWS (EC2, S3), GitHub Actions, CI/CD, Linux
- **Tools:** Git, GitHub, Postman, DBeaver, Locust, Grafana, Microsoft Office
- **Soft Skills:** Problem Solving, Teamwork, Client Communication, Consultative Sales, Leadership, Mentoring, Intercultural Communication, Adaptability

PROFESSIONAL EXPERIENCE

Freelance Software Developer and Sales Agent

TechnoMaya | Guatemala | Mar 2026 - Present

- As a freelance developer with TechnoMaya, build custom web and mobile applications for small and medium-sized businesses in Guatemala, such as business websites and inventory, appointment and attendance systems.
- Gather requirements directly with clients and turn business needs into technical scope, data models and estimates.
- Support consultative sales: present tailored proposals and quotes and explain technical options to non-technical clients.

Mentor

The Church of Jesus Christ of Latter-day Saints | Guatemala | May 2026 - Present

- Mentor and train new missionaries in practical teaching skills using the Preach My Gospel framework, in coordination with mission leadership.
- Track key performance indicators (KPIs) and lead feedback sessions focused on each person's professional and personal growth.

Executive Assistant, Team Lead and Volunteer Mentor

The Church of Jesus Christ of Latter-day Saints | Guatemala | Jan 2024 - Feb 2026

- Led operations and logistics for an organization of more than 150 collaborators, reporting directly to senior executive leadership.
- Facilitated weekly professional development workshops and provided personalized coaching that improved team performance.

Mathematics and Physics Teacher

El Castaño Bilingual School | Guatemala | Jan 2023 - Dec 2023

- Taught mathematics and physics from 6th grade through high school, designing curricula focused on logical reasoning and complex problem solving.
- Applied active learning methodologies, adapting teaching styles to different learning levels.

PROJECTS

Super La Estrella - Sales, Payments and Inventory System (team of 2)
Microsoft SQL Server 2022, T-SQL, Node.js, Express, React, Vite, Docker Compose

- Owned the database layer and the sales and payments flow of a full stack app: SQL Server schema migrated from Oracle SQL, data load of 9,084 rows and 5 triggers that enforce stock and payment rules.
- Integrated the flow with a Node.js and Express REST API (the only access layer to the data) and a React and Vite dashboard; containerized the stack with Docker Compose and published a live demo.

M.U.M.N.K8s - Real-time Microservices on Kubernetes (Google Cloud)
GKE, Rust, Go, gRPC, RabbitMQ, Valkey, Grafana, Helm, Operator SDK, Locust

- Designed and ran a distributed system on a 3-node GKE cluster: an autoscaled Rust API (HPA, 1 to 3 replicas) forwards reports to Go microservices over gRPC, through RabbitMQ with publisher confirms, into Valkey and a Grafana dashboard.
- Sustained 1,288 requests per second with zero failures in Locust load tests after diagnosing an OOMKill caused by ~8,800 load balancer keep-alive connections per pod and resizing memory limits from measurements.
- Built a Helm-based Kubernetes Operator for Valkey and Grafana, fixed uneven gRPC load balancing (0 vs. 500/500 requests) with a headless Service and round_robin, and served all images from a private Zot registry over HTTPS.

Centro JAS Naranjo - Registration and Check-in Platform
React, Express, PostgreSQL, Tailwind CSS

- Built an attendee registration platform for a community center with downloadable QR ID cards and hybrid check-in (camera scan or manual search), published as a live demo.

Personal Portfolio - akamariano.github.io
HTML, CSS, JavaScript, GitHub Actions, GitHub API

- Bilingual portfolio with interactive case studies (a network topology simulator and a Kubernetes autoscaling simulator), deployed by a GitHub Actions pipeline that builds the project list from the GitHub API; WCAG AA contrast.

ExtreamFS - File System on AWS
C++, CMake, Makefile, AWS EC2, AWS S3

- Implemented a file system in C++ and deployed it on AWS EC2 instances with Amazon S3 as the storage backend (two project phases).

EDUCATION

Bachelor's Degree in Computer Science and Systems Engineering (Ingeniería en Ciencias y Sistemas)
Universidad de San Carlos de Guatemala (USAC) | In progress - 7th semester completed

- Academic Excellence Award, Universidad de San Carlos de Guatemala (2 times).

High School Diploma in Computer Science (Bachillerato en Computación)
Colegio Jesús Rey de Gloria | 2020

CERTIFICATIONS

- Certificate of Language Ability - English, Level B2-C1 (TrueNorth 8.0) - Rosetta Stone - Feb 2025
- Microsoft Office Specialist: PowerPoint 2019 Associate - Microsoft - Aug 2020
- Microsoft Office Specialist: Word 2016 - Microsoft - Sep 2019
- Missionary Training (MTC) digital badges: Instructional Excellence (Oct 2026), Learner-Focused Development (Sep 2026), Vision and Alignment (Jun 2026)

LANGUAGES

Spanish - Native | English - Advanced (B2-C1) | Miskitu - Intermediate