

# Miguel González López

Staff Software Engineer & Infrastructure Architect

## About

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I'm a **Staff Software Engineer & Infrastructure Architect** with a passion for building **scalable web applications and distributed systems**. My expertise lies in **backend development, cloud infrastructure, and full-stack engineering**, working with technologies like **Go, React, Docker, and AWS** to create high-performance, cloud-native solutions.

I specialize in **architecting production-grade systems** that handle millions of requests daily, designing resilient infrastructure, and leading technical initiatives that drive business growth.

My experience ranges from **microservices architecture** to **containerized deployments** and **modern DevOps practices**.

### ◆ Core Expertise:

- **Infrastructure & Cloud Architecture:** Designing scalable AWS infrastructure, Docker containerization, and microservices
- **Backend Development:** Go APIs, distributed systems, high-performance databases (PostgreSQL, Redis)
- **Full-Stack Engineering:** React, Next.js, modern frontend architectures with seamless backend integration
- **DevOps & CI/CD:** GitHub Actions, Ansible, observability with New Relic and CloudWatch
- **Technical Leadership:** Architectural decisions, mentoring teams, and driving technical excellence

I'm passionate about scaling engineering organizations and building systems that empower high-performing teams to move fast with confidence.

## Languages

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Spanish (Native)

English (Fluent)

# Professional Experience

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## Staff Software Engineer

### AdaptedMind

May 2019 - Present · 6 yrs 3 mos

Proud to be part of a lean, high-performing team of 5 engineers powering AdaptedMind — an edtech platform with over 25 million requests/day. I lead architectural and infrastructure initiatives that keep the system fast, scalable, and resilient.

#### Key Achievements:

- Architected and maintained a production-grade platform with ~6,000 RPM backend/API load and total ~25M daily requests across frontend, backend, and CDN, handled through AWS ELB, Cloudflare, and EC2
- Designed path-based traffic routing (Next.js vs Go APIs) with Cloudflare → AWS ELB → containerized services
- Deployed services via Docker, GitHub Actions, and Ansible into EC2, reducing manual ops and improving deployment consistency
- Owned integration of Redis (MemoryDB), Aurora PostgreSQL, and Cloudfront/Cloudflare CDN to improve latency and scale
- Built observability pipelines with structured JSON logs, Cloudwatch, and New Relic with real-time alerting
- Scaled the application to support at least 10x the users due to COVID-19 demand
- Led product development and enhancement: New animated subjects "Reading" and "Super skills", New "Math" algorithm and video problem types
- Migrated platform from PHP, Angular and MySQL to Golang, React and PostgreSQL

**Technologies:** Go, React, NextJS, Docker, AWS (EC2, ELB, S3, CloudFront, RDS, Route 53), Cloudflare, Redis (MemoryDB), Aurora PostgreSQL, GitHub Actions, Ansible, New Relic, Cloudwatch

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## Staff Software Engineer

### Rocket Lawyer

May 2014 - May 2019

#### Key Achievements:

- Increased business revenue by 18% through mobile-responsive development and optimization
- Achieved 23% conversion rate increase through strategic mobile implementation
- Built scalable E-Commerce platform and integrated enterprise systems (Salesforce, Marketo)
- Implemented automated testing and CI/CD processes improving deployment reliability

**Technologies:** Java, Spring, JavaScript, AngularJS, MySQL, MSSQL, Jenkins, Git

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# Core Technical Skills

## Infrastructure & DevOps

- Docker (Expert)
- AWS (Advanced)
- Cloudflare
- GitHub Actions
- Ansible
- New Relic
- CloudWatch
- Microservices
- CI/CD

## Backend Development

- Go (Expert)
- PostgreSQL
- Redis (MemoryDB)
- Aurora PostgreSQL
- RESTful APIs
- gRPC
- Distributed Systems

## Frontend & Full-Stack

- React (Expert)
- Next.js
- JavaScript/TypeScript
- HTML5 & CSS3
- Astro
- Modern CSS

## Cloud & AWS Services

- EC2 & ELB
- S3 & CloudFront
- RDS & Aurora
- Route 53
- Lambda
- VPC

# Education

## B.S. Information Technology and Communications Engineer

ITESM Campus Saltillo (Tecnológico de Monterrey)

2007 - 2012

Professional ID: 7520188

Score: 97/100 (GPA 4.0)

# Academic Achievements

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## Academic Excellence

2008 - 2012

- **[August 2012]** CENEVAL Diploma with "Leading" Result in all areas of Computer Science exam
- **[May 2012]** Honorable Mention of Excellence (Score 97)

## Notable Projects

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### High-Scale EdTech Platform

#### AdaptedMind Infrastructure

2019 - Present

##### Architecture & Scale:

- Designed and implemented infrastructure handling 25M+ daily requests with 6,000 RPM backend load
- Built containerized microservices architecture using Docker and AWS ECS
- Implemented advanced traffic routing with Cloudflare → AWS ELB → containerized services
- Created comprehensive observability with structured logging, New Relic, and real-time alerting

**Technologies:** Go, React, Docker, AWS (ELB, EC2, RDS), Cloudflare, Redis, PostgreSQL

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### Personal Website

#### migolo.net

Ongoing

- Built with modern **Astro** framework showcasing full-stack capabilities
- Implemented responsive design with advanced CSS and dark mode support
- Integrated analytics, SEO optimization, and performance monitoring
- Deployed with automated CI/CD pipeline using GitHub Actions

**Technologies:** Astro, React, TypeScript, Modern CSS, GitHub Actions