Miguel Colmenares

Senior Software Engineer

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SUMMARY

Senior Software Engineer focused on the front end, with 17+ years of experience. Working in React and Next.js since 2023, I ship production Next.js platforms for U.S. clients and own them end to end: App Router and Server Components, ISR and caching strategy, headless WordPress integration, and third-party API layers. I treat performance as part of the build, not a last step, and I turn repeated work into shared packages, standards and base images that the team reuses, documented for the next engineer.

SKILLS

Languages: TypeScript, JavaScript (ES2023+), PHP 8.2, HTML5, CSS3, SQL
Platforms: Next.js, WordPress (traditional & headless), SAP Commerce Cloud, Astro
Frontend: React 19, Next.js (App Router, Server Components, Server Actions), ES modules, Lit web components, Tailwind CSS 4, Radix UI, shadcn/ui, responsive design, accessibility (WCAG)
Performance: Core Web Vitals, Lighthouse, LCP optimization, lazy loading, service workers, PWA, Workbox, ISR, caching strategy (Redis, CDN)
Backend & APIs: REST, GraphQL (WPGraphQL), Node.js, Salesforce API (OAuth 2.0), Stripe, Brevo, headless WordPress, Zod
Testing & Quality: Jest, React Testing Library, Playwright, Cypress (E2E), PHPUnit, PHPStan, ESLint, TypeScript strict mode
Cloud & DevOps: AWS (CloudFront, ECS, Secrets Manager, CodePipeline, Amplify), Docker, Redis, Git
CI/CD & Automation: GitHub Actions (matrix testing, release automation, SHA-pinned actions), CodeQL, Dependabot with auto-merge, automated code review, quality gates, npm packages, Composer, Vite, Docker base images
AI Engineering: Claude Code, GitHub Copilot, Codex, MCP (Model Context Protocol) server development, agent workflow design, AI-generated code review
Design Handoff & Methods: Figma (spec-to-component workflow), design systems, component libraries, Agile/Scrum, Domain-Driven Design, test-driven development, code review, technical documentation

EXPERIENCE

U.S. senior-care client | Senior Frontend Developer Jan 2024 – Present
Colombia — Remote

- Led the migration of the client's websites from traditional WordPress to headless WordPress + Next.js, defining the architecture, routing, and data-fetching strategy for each.
- Kept image-heavy templates fast by measuring first: found the true LCP element and applied preload hints, fetch priority, and an image-loading strategy.
- Designed the ISR and Redis caching layer plus on-demand revalidation between WordPress and Next.js, so editorial changes publish without a rebuild.
- Built integrations with Salesforce (OAuth 2.0), Stripe Checkout and webhooks, Brevo, WPGraphQL, and REST APIs.
- Developed production WordPress plugins in PHP 8.2 — CRM integrations, HIPAA-compliant email, security hardening, and headless cache revalidation — with PHPStan level 8, WordPress Coding Standards, and PHPUnit.
- Established the quality pipeline and the GitHub Actions automation the team's repositories share: Jest, React Testing Library and Cypress E2E in AWS CodePipeline; matrix testing, CodeQL, Dependabot with auto-merge, SHA-pinned actions, and release pipelines triggered on tag.
- Standardized how the team builds and ships. WordPress plugins share packages and coding standards, Next.js integrations share one script-loader package, and WordPress Dockerfiles became pinned, checksum-verified base images for WordPress and Next.js sites.

Keyrus | Frontend Tech Lead Apr 2020 – Jan 2024
Bogotá, Colombia — Remote
Promoted from Senior Frontend Developer (Jul 2019 – Mar 2020)

- Led a multinational frontend team building SAP Commerce Cloud storefronts for Grupo Corbeta and Comfama, and owned frontend performance on the Alkosto storefront.
- Designed and built, on my own, the modernization of the storefront frontend. It started with updating WRO, the JavaScript and CSS build, whose old version could not read current JavaScript, then the legacy codebase moved to ES modules loaded on demand.
- Proposed and built the PWA and service worker to improve performance, first in vanilla JavaScript and later in Google's Workbox: assets load in the background while the user browses. Published on Google Play as an Android app.
- Built a library of reusable web components (Lit), published as open source, so the marketing team could assemble pages with custom HTML tags, with no ad hoc JavaScript or CSS in each page.
- Taught the new architecture to the frontend developers of the team, in several countries. Introduced single responsibility, domain-driven design and test-driven development.

Earlier experience
Independent Frontend Developer (2016–2019) | Ardilla Amarilla, Web Developer (2013–2017) | Enigmind, Senior Frontend Developer (2014) | I Believe Group, Frontend Developer (2009–2011)

SELECTED LIVE PROJECTS

- **Oasis Senior Advisors** — oasisseniorадvisors.com: WordPress-to-Next.js migration. Elementor content is read through a custom WPGraphQL integration, and a Next.js proxy keeps the WordPress origin hidden.
- **FamilyAssets** — familyassets.com: the client's largest platform, a nationwide senior care directory. I was the main front-end developer, working with other developers. Each page merges headless WordPress (GraphQL) and a REST API.
- **AssistedLiving.org** — assistedliving.org: geo-search and provider directory on Next.js 16 and React 19, organized by domain. I was the main developer. Lead forms run on a pluggable provider architecture with Zod-validated Server Actions.
- **CareChanges** — carechanges.com: senior living search by city, state or zip code on Next.js 16. I wrote most of the front end, with other developers. Each cacheable route has its own revalidate time and tags, and one endpoint clears the Next.js cache and the CDN.

OPEN SOURCE & PUBLISHED PACKAGES

npmjs.com/~miguel.colmenares | packagist.org/users/miguelcolmenares | marketplace.visualstudio.com/publishers/miguel-colmenares

- **microsoft/vscode-test** (contribution) — Fixed a macOS `spawn ENOENT` that broke the test run of VS Code extensions after VS Code 1.110 dropped the legacy `Electron` symlink. Pull request #350, merged 2026-07-23.
- **recaptcha-next** (npm) — reCAPTCHA v3 for Next.js Server Actions. A client field keeps a fresh token in a hidden input, and a server function checks it with Google and returns a typed result. It loads lazily and fails closed. Tested with Jest and Playwright against a real Next.js app. MIT licensed.
- **docs-sitekit** (npm) — CLI, Astro template and reusable GitHub Action that give a repository its own documentation site. `npx docs-sitekit init` writes the site and its GitHub Pages workflow, with themes, search, and a check for credentials. MIT licensed.
- **jsdoc-to-tsdoc** (npm, GitHub Action) and **social-card-action** (GitHub Action) — JSDoc-to-TSDoc migration with a CI check gate, and a repository social preview image, with no image service.
- **CSS & JS Minifier** (VS Code Marketplace) — Offline minification, with LightningCSS and oxc-minify.
- **whatsapp-widget** (archived) — Floating WhatsApp chat button for any website, loaded from a CDN with one script tag. Published in 2020. At its peak, in 2026, it carried high traffic from a CDN.
- **agents-toolkit** (documentation site) — Reusable AI agent prompts for Copilot, Claude Code and Codex.
- **Writing** — Articles on my mistakes and what they taught: miguelcolmenares.com/blog

EDUCATION & LANGUAGES

Politécnico Grancolombiano | Software Engineering 2023 – Present
SENA | Multimedia Production 2010 – 2013

Spanish (native) | English (B2 — professional working proficiency)