

Santiago Orozco Holguín

Software Engineer

Medellín, Colombia + Remote

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SUMMARY

Software Engineer with an Electronics Engineering background and experience designing, building, deploying, and maintaining web applications from concept to production. Passionate about turning ideas into products through hands-on engineering, with work spanning Progressive Web Applications (PWAs), distributed systems, cloud services, authentication, cryptography, and AI-assisted development workflows. Seeking to contribute to a collaborative engineering team while continuing to grow through real-world product development.

EXPERIENCE

Independent Software Engineer — Self-employed

Jun 2023 – Present · Remote · Self-employed

- Designed, built, and deployed production-ready web applications from concept to deployment.
- Developed cloud-native applications using React, TypeScript, Progressive Web App technologies, and Cloudflare's edge platform.
- Built software products exploring authentication, cryptography, AI-assisted development, and blockchain technologies.
- Built cloud-connected tooling for interactive experiences, including licensing and telemetry systems for TouchDesigner deployments.
- Designed user-focused Progressive Web Applications with mobile-first and local-first principles.

Software Engineering Intern — TSO Mobile Colombia

Oct 2022 – May 2023 · Remote · Internship

- Migrated a JavaScript UI component library to TypeScript, improving maintainability and type safety.
- Packaged reusable UI components into an internal npm library for use across multiple projects.
- Documented reusable components using Storybook, improving discoverability and developer experience.
- Collaborated with the engineering team to modernize frontend development workflows and reusable component architecture.

PROJECTS

Anthology

Local-first knowledge management platform

A Progressive Web Application for capturing, organizing, and sharing personal knowledge. Built around local-first principles, with optional blockchain publication and QR-based sharing, allowing users to retain ownership of their data while selectively making content public.

- Local-first knowledge platform with optional blockchain publishing and QR sharing.

Technologies: React, TypeScript, Cloudflare Workers

Live

TD Status

Cloud licensing and telemetry platform for TouchDesigner

Cloud platform for managing software licenses and monitoring TouchDesigner deployments. Provides customer management, heartbeat telemetry, license validation, and operational visibility through Cloudflare Workers and KV.

- Built a cloud-based licensing system with heartbeat telemetry for monitoring TouchDesigner deployments.

Technologies: React, TypeScript, Cloudflare Workers

Live

Prompter

AI image generation with crypto micropayments

AI image generation platform that transforms user images using curated prompts while accepting USDC payments through the x402 protocol. Designed without user accounts or traditional payment processing, prioritizing simplicity and privacy.

- Integrated x402 micropayments while protecting proprietary prompts using Cloudflare Workers and KV.

Technologies: React, TypeScript, Cloudflare Workers

Live · Source

SKILLS

Programming Languages: TypeScript, JavaScript, Python

Frontend Development: React, Progressive Web Apps (PWA), HTML5, CSS3, Tailwind CSS

Cloud & Backend: Cloudflare Workers, Cloudflare KV, REST APIs, Edge Computing, Node.js

Software Engineering: Software Architecture, Distributed Systems, Authentication, Cryptography, API Design

AI & Emerging Technologies: AI-assisted Development, Prompt Engineering, Generative AI APIs, Blockchain, Passkeys (WebAuthn)

Creative Technology: TouchDesigner, Interactive Installations, Licensing Systems, Telemetry Systems

EDUCATION

Bachelor's Degree Electronics Engineering — Universidad de Antioquia

Aug 2014 – Jun 2023 · Medellín, Colombia

- Developed a strong foundation in software engineering, embedded systems, electronics, mathematics, and computer architecture.
- Completed an engineering internship focused on modern web development, TypeScript migration, and reusable component libraries.
- Transitioned academic interests toward software engineering through independent product development and modern web technologies.

LANGUAGES

- Spanish — Native
- English — Fluent - B2