

Daniel Ramirez

Full-stack engineer with nine years of solar operations under the hood

Sacramento, CA · open to remote

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Engineer with the unusual prior of having scaled the company that was the customer. Co-founded a \$30M solar EPC, ran operations for nine years, and taught myself the engineering side along the way — Salesforce Apex/LWC, Google Apps Script automations, REST integrations, MySQL. Now full-time at BriteBuild — multi-tenant SaaS for solar EPCs and contractors. Comfortable owning the schema, owning the front-end, and owning the boring middle that decides whether a \$1M quote is still correct on Friday.

EXPERIENCE

Full-Stack Engineer · BriteBuild (ShimmerWorks Inc.)

Feb 2025 – Present

Multi-tenant SaaS for solar EPCs & contractors · Remote

- Designed the multi-tenant data model — tenants → EPCs → contractors — with polymorphic territory scoping (state + county FIPS) and a 325-permission RBAC across 24 domains and 7 roles.
- Built the bitemporal pricing system: `lock_session*_pricing()` SQL functions + snapshot cloning + downstream `COALESCE(locked_*, current_*)` reads, so a quote sent Tuesday still reads Tuesday's prices on Friday without duplicating data.
- Compiled the geometric solar panel placement engine to **Rust → WebAssembly**: drag-select on Google Maps imagery, magnet-snap, edge-to-edge tiling on sheared grids. Integrated with Google Solar API + PVWatts.
- Centralized OAuth (Google / Microsoft / Apple) on a base-domain hub with signed JWT hand-off to tenant subdomains; fail-closed secrets, hashed reset tokens. Patched real auth CVEs in the process.
- Shipped multi-bucket financing splits with database-canonical scenario state (caught and corrected an early UX that persisted only in localStorage), rebates engine with 3-tier inheritance, contract template engine with merge fields + DocuSign, and the public REST API v1 with key auth and rate limiting.
- Hardened a Slack-like real-time messaging WebSocket dispatcher against multi-client desync — 8 bugs fixed, **82 E2E tests added** in Playwright.
- Drove svelte-check warnings from **1530 → 0**, removed axios for supply-chain CVE remediation, restored Sentry source-map upload, and migrated build to deferred S3 client init.

TypeScript

Svelte 5 (runes)

SvelteKit

Node.js

PostgreSQL

Rust

WebAssembly

Python

FastAPI

Tailwind

Vite

Playwright

Vitest

WebSockets

AWS

Stripe Connect

DocuSign

Sentry

Co-Founder & Chief Operating Officer · Gold Rush Energy Solutions

2015 – 2024

Solar EPC · Sacramento, CA

- Engineered the operational software glue across the company: **Salesforce ↔ Google Workspace ↔ DocuSign ↔ QuickBooks**, MySQL-backed in-house tools, REST/SOAP integrations, automated document generation in Google Apps Script.
- Owned the Salesforce environment as administrator — Apex, Lightning Web Components, Visualforce, SOQL/SOSL, security model, DevOps with Salesforce DX — and made it the system of record for contracts and finance.
- Co-founded and scaled the company to **\$30M+ annual revenue**, 70 outside reps, \$130M+ lifetime sales, and 40 MW installed.

Salesforce (Apex / LWC / SOQL)

Google Apps Script

MySQL

REST / SOAP

Aurora Solar

Energy Toolbase

Vice President & Secretary, Board of Directors · Placerville Food Co-op

2024 – Present

2,506 member-owners · Placerville, CA

— Co-led a **\$1.39M building purchase** in April 2026 backed by a member-driven capital campaign that raised \$155K+ in net proceeds and added 76 new member-owners.

SELECTED SYSTEMS

Bitemporal pricing locks

PostgreSQL

Quote-version-locked equipment and adder prices via session-pricing snapshot functions and snapshot cloning. Reads coalesce locked vs. current so unlocked sessions transparently use live prices. Caught and corrected an early UX that persisted financing scenarios in localStorage — DB became canonical, the diagram a projection.

Solar design engine

Rust + WASM

Drag-select panel placement on Google Maps imagery with magnet-snap and edge-to-edge rectangular tiling on sheared grids; racking auto-takeoff framework. Performance-critical placement compiled to WebAssembly for in-browser execution.

Real-time messaging platform

WebSockets

Slack-like workspaces, channels, threads, reactions, mentions with autocomplete, attachments, slash commands, and entity link cards. Embeddable across sessions and projects; auto-creates channels per session and project.

SKILLS

LANGUAGES	TypeScript, JavaScript, Rust, Python, SQL (PostgreSQL), Apex
FRAMEWORKS	SvelteKit, Svelte 5, React, Tailwind, FastAPI, Vite
BACKEND & DATA	Node.js, PostgreSQL (audit triggers, polymorphic FKs, bitemporal versioning), MySQL, Salesforce data model
INFRA & TOOLING	AWS (S3, SES), Heroku, GitHub Actions, Sentry, WebSockets, Stripe Connect, DocuSign
AUTH & SECURITY	JWT, OAuth 2.0, multi-tenant subdomain auth, RBAC, hashed reset tokens, supply-chain CVE remediation
GEOSPATIAL	Rust → WebAssembly, Google Maps / Solar API, GeoTIFF, proj4, county FIPS, R-Tree
TESTING	Vitest, Playwright, ESLint, Prettier, svelte-check

REPOSITORY FOOTPRINT AT BRITBUILD

630 Svelte components · **1,131 TypeScript modules** · 8 Rust modules in the WASM placement library · Python FastAPI PDF parser backend · 130 API route directories · **377 SQL migrations in history, 291 authored or modified** by me.