

Jacob Spradlin

Full-Stack Software Engineer

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SUMMARY

Full-stack engineer who owns features from schema to production. Fifteen-plus shipped applications across marketplaces with escrowed payments, AI-assisted matching, and consumer tools, built primarily on Next.js, TypeScript, Supabase, and Stripe. Equally comfortable writing the feature and writing the gate that keeps it correct: security remediation at audit scale, CI checks that fail the build on factual and authorization regressions, and end-to-end verification against live systems rather than assumptions. Veteran. Async-first and documentation-heavy by default.

EXPERIENCE

Founder & Principal Engineer · Formation Labs LLC

2025 — Present

Remote

Designed, built, and deployed fifteen-plus production applications end to end — schema and RLS policy design, authentication, payments, background jobs, AI features, CI, and deployment — as a solo engineer accountable for uptime and correctness.

Ship on Next.js (App Router) and TypeScript against Supabase/PostgreSQL, Stripe, and Vercel, with Playwright and Vitest coverage and CI gates that block releases on regressions.

Run security audits and architecture reviews for client codebases, delivering prioritized findings with severity ratings, reproduction steps, remediation runbooks, and operational recovery playbooks.

Build AI features on the Claude API in production: streaming assistants, retrieval and ranking pipelines, document extraction, and cost/latency budgeting with retry-on-transient handling.

Author reusable internal tooling — a portable end-to-end testing agent and a runnable security-audit harness — applied across projects rather than rebuilt per engagement.

AI hiring platform for security-cleared professionals

Own technical direction and implementation for a two-sided hiring platform serving cleared candidates and defense-sector employers, spanning the web application and a React Native mobile client.

Built the candidate/role matching system as a two-stage retrieval plus narrative ranking pipeline rather than an opaque score, so employers see the reasoning behind a match.

Led remediation of a pre-launch architect-class security review covering 100-plus findings: established a finding-by-finding ledger, wrote per-finding runbooks for risky multi-step fixes, and closed 30 P1/P2 findings in four calendar days — the reviewer described the resulting drop in open severity as a dramatic collapse.

Hardened the platform across Row Level Security, edge-function authorization, AI guardrails, CSP, webhook verification, and account-enumeration surfaces, then wired the resulting checks into CI so the same classes cannot regress.

SELECTED ENGAGEMENTS

LastCall Pro — two-sided marketplace with escrowed payments

Next.js · Supabase · Stripe Connect · Vercel Cron

Built the full booking and payment lifecycle for an on-demand marketplace connecting funeral homes with verified workers and suppliers: post, apply, accept, book, capture, hold in escrow, complete, release. Implemented credential and photo-ID verification gated per role, offline ZIP-centroid location matching with no paid geo API, and a server-recorded acknowledgment trail at apply time. Diagnosed and fixed a dormant 24-hour auto-release job that had been deployed but silently 307-redirected by middleware for 96 days, so escrowed payouts never actually transferred; rebuilt it as an hourly cron with a shared-secret guard and per-booking Stripe idempotency keys, then verified the whole path with real test-mode transfers.

Security architecture audit — lending CRM (client confidential)

Node.js · MySQL · Prisma · Redis/BullMQ · React

Fixed-price audit of an active production CRM holding roughly 23,000 lead records. Combined static review with authenticated and unauthenticated live probing to confirm findings behaviorally rather than theoretically. Delivered a prioritized findings report with severity ratings, plus a system control and recovery playbook, an access and ownership audit, and a cost-efficiency review identifying where custom complexity was not paying for itself.

GitHub organization access control — consulting firm

GitHub API · organization policy

Locked down a client organization before she handed repository keys to an outside development vendor: role and seat configuration, branch protection, and permission boundaries, every setting verified against the live GitHub API rather than the settings UI. Handed over a thirteen-slide plain-English guide written for a non-technical owner. Delivered inside a three-day window.

Military Transition Toolkit — content platform with a correctness gate

Next.js · Supabase · Flutter · CI

Consumer platform for service members leaving the military: 900-plus articles, 35 interactive calculators and tools, and a companion iOS app. State-by-state benefits and tax guidance is high-stakes for the reader, so I wrote a verification gate that parses comparison tables, bold-label bullets, and dollar caps against a source-of-truth data file. It surfaced 73 factual contradictions across 28 files, all corrected against primary sources; the gate now runs in prebuild and fails the production build on a regression.

PRODUCTS & PROJECTS

AdaptHome · adapthome.vet — Platform matching disabled veterans with certified contractors for VA home-adaptation grants.

Kindling — Adaptive tiered LLM inference runtime published as a TypeScript library — routes requests across model tiers by cost and capability.

KalBot — Python prediction-market trading bot running against live markets with local model inference.

PhoenixScope · phoenixscope.com — SaaS scoring the health of Klaviyo email marketing accounts.

Voicematch · voicematch.dev — AI writing-voice cloning with a browser extension.

Client sites — Monarch Haven Real Estate, Low Cost Hauling, and Mr. Franco Junk Removal — small-business sites built for search visibility and conversion.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL, Dart

Frontend: Next.js (App Router), React, Tailwind CSS, React Native / Expo, Flutter

Backend & data: Node.js, PostgreSQL, Supabase (RLS, Auth, Storage, Edge Functions), Prisma, Redis / BullMQ

Payments: Stripe — Connect, escrow flows, webhooks, idempotency

AI: Claude API (streaming, tool use, agents), retrieval and ranking pipelines, Ollama

Infrastructure: Vercel, Docker, GitHub Actions, cron and background jobs

Quality & security: Playwright, Vitest, CI correctness gates, RLS and authorization review, threat modeling, remediation ledgers

EDUCATION

B.S. Applied Technology · University of Maryland Global Campus

Expected 2027