

CRYSTAL PITTMAN

Full-Stack Software Engineer

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PROFESSIONAL SUMMARY

Full-Stack Software Engineer with 11+ years of experience building scalable, compliant systems for regulated industries. Expertise in clinical drug testing platforms, logistics solutions, and data-intensive applications. Proven track record of architecting enterprise-level software, leading technical teams, and delivering production systems that meet FDA and GxP compliance standards.

TECHNICAL SKILLS

Languages & Frameworks:	JavaScript/TypeScript, Python, React, Next.js, Node.js, C++, HTML5, CSS3
Databases & Data:	PostgreSQL, MongoDB, MySQL, Supabase, Redis, SQL Optimization
Cloud & DevOps:	AWS, Vercel, Docker, CI/CD Pipelines, Linux/Unix
APIs & Integration:	RESTful APIs, GraphQL, Stripe, Webhooks, OAuth/JWT
Tools & Platforms:	Git/GitHub, Jest, Postman, Figma, Agile/Scrum

PROFESSIONAL EXPERIENCE

Lead Software Development Engineer

Talcada / Temecula, CA (Hybrid)

May 2018 – Present

- Lead design, development, and delivery of software systems supporting clinical drug testing and regulated research operations ensuring FDA, GxP, and 21 CFR Part 11 compliance
- Define system architecture and establish engineering standards across full software development lifecycle, conducting code reviews and mentoring engineering teams
- Build and maintain applications for clinical data capture, laboratory information management (LIMS), and trial reporting with 99.9% uptime
- Integrate internal systems with laboratory instruments and third-party platforms ensuring data integrity, traceability, and auditability
- Collaborate cross-functionally with quality assurance, regulatory affairs, clinical operations, and data management teams to deliver secure, scalable solutions
- Implement secure authentication, audit trails, and access controls supporting system validation and audit readiness

Provo Supervisor

Southwest Airlines / Remote

August 2018 – September 2021

- Supervised operational teams and coordinated logistics for flight operations across multiple airports
- Audited databases for efficiency improvements and implemented process optimizations that reduced manual processing time
- Created data reporting systems that streamlined operational workflows and improved decision-making
- Managed cross-functional teams ensuring compliance with FAA regulations and company safety standards
- Led training initiatives for new team members on operational procedures and systems

Full-Stack Software Engineer

DATLA Logistics / Remote

January 2014 – May 2018

- Designed and developed comprehensive freight load board platform from the ground up, connecting brokers, carriers, and dispatchers nationwide
- Architected entire system including role-based dashboards, real-time messaging infrastructure, and complex negotiation workflows
- Implemented subscription management with Stripe integration and built geolocation-enabled truck posting features
- Maintained production systems with 99.9% uptime and optimized database queries for high-volume transactions
- Developed automated data reporting systems reducing manual processing time by 75%
- Managed complete deployment pipeline and provided ongoing system maintenance supporting company growth

FEATURED PROJECTS

Talcada - Drug Testing Marketplace

- Built nationwide marketplace platform serving 1,000+ testing locations across all 50 states
- Implemented real-time geolocation search with 60-mile radius filtering using Haversine algorithm
- Integrated Stripe payment processing with webhook automation for order management
- Developed admin dashboard and customer portal with comprehensive reporting capabilities

Tech Stack: Next.js, TypeScript, Supabase, Stripe, Tailwind CSS, Google Maps API

Coding Sprout - Education Platform

- Developed comprehensive SaaS application for coding education (TK-12th grade)
- Built student progress tracking, parent dashboards, and administrative tools
- Implemented secure authentication and payment processing for course enrollments

Tech Stack: Next.js, React, TypeScript, Supabase, Stripe

DATLA Logistics Platform

- Created sophisticated logistics platform with role-based dashboards for brokers, carriers, and dispatchers
- Implemented real-time messaging, negotiation workflows, and subscription management
- Built load acceptance workflows and comprehensive admin capabilities

Tech Stack: Next.js, React, TypeScript, Supabase, Stripe

EDUCATION & CERTIFICATIONS

Master of Computer Application Certificate

U.S. Army - Logistics Clerk (Honorable Discharge)