

Platform Engineering Lead

(801) 687-8317
tyler.r.wall@gmail.com
linkedin.com/in/tylerrwall

SUMMARY

Principal Platform Engineer who builds infrastructure engineers actually choose to use. Paved roads with measured outcomes, not top-down directives.

Platform Core: Kubernetes, Docker, AWS/Azure, Terraform, Service Mesh, Load Balancing

Observability: Datadog, Redis, BPF/Tracing, Log Aggregation, Alerting Systems

Practices: Cost Optimization, SRE Principles, DR Planning, Capacity Planning

EXPERIENCE

Staff Software Engineer | AI Systems Architect, Unicity International | Provo, Utah Jan 2025 – Jan 2026

Tech Stack: GenAI, LLMs, TypeScript, Python, AST Parsing, PHP, AWS, Kubernetes, GitHub Actions, CI/CD, Context Engineering, MCP

- Built multi-agent AI migration system with 5 specialized sub-agents, reducing endpoint migration time from hours to under 10 minutes—enabled 289 endpoint migrations at unprecedented velocity.
- Reverse-engineered legacy compiled Acucobol systems without source access, producing 45+ migration specifications (1.75MB/50,000+ lines) through AI-assisted bytecode analysis with 99%+ query accuracy.
- Orchestrated 34 parallel AI agents for migration validation framework, achieving 90% error reduction in schema mapping (validation suite, before/after comparison).
- Designed Truth Source Architecture enabling AI agents to consume documentation and refactor code without hallucination—patterns now adopted organization-wide.
- Built AI sprint intelligence system using historical transcripts as knowledge base—benchmarked against human estimates at +/-1 story point (blind comparison, 6 sprints), achieving 2.5x throughput (story points over 6 sprints) and 13% sprint efficiency gain.
- Designed AI governance framework—read-only agent accounts, DevOps approval workflows, failure-as-state design principles—after identifying blast radius from an unscoped agent action.

Engineering Manager / Technical Lead, Unicity International | Provo, Utah Nov 2023 – Jan 2026

Tech Stack: Redis, Datadog, LaunchDarkly, PHP, Laravel, Docker, AWS, CI/CD, TravisCI, BPF

- **Migration at Scale:** Led 289-endpoint migration to Laravel: 96% production traffic, 34% faster response times, 4x order processing (300 to 1,300 orders/5min), zero major incidents.
- **Cost Optimization:** Delivered \$336K+ annual savings: cloud infrastructure (\$278K), DataDog 62.5% reduction (\$12K to \$4.5K/month), RDS consolidation (\$32K). Removed 500,000 lines legacy code.
- **Observability Platform:** Built real-time debugging system (Redis/Xdebug/BPF) that cut MTTR by 95%. Diagnosed Redis pooling issue: 95% DNS resolution restored, 97-98% OTP auth improvement.
- **Load Testing Pioneer:** Led first load test in company history—5 sessions, zero system failures, 85-90% confidence for peak traffic. Zero-downtime migration with 99.99% uptime.

Principal Engineer, ButcherBox | Remote Feb 2022 – Oct 2023

Tech Stack: OpenAI GPT-3, React, TypeScript, Node.js, Azure, Kubernetes, CI/CD, GitHub Actions, Shopify, Instacart

- Led teams processing \$2B+ in transactions while scaling platform architecture 100x over four years, handling 50% month-over-month order volume spikes.
- Pioneered GPT-3 implementation (2022, pre-ChatGPT) automating support workflows and saving ~2 hours/week/employee with NPS of 57—one of earliest enterprise GPT deployments.
- Single-handedly led and delivered Instacart integration—company's flagship partnership initiative—owning architectural design, cross-team coordination, and executive visibility end-to-end.
- Spearheaded migration and integration to Shopify, prototyping the approach and driving adoption across engineering and operations teams.
- Architected environment-agnostic test data seeding framework, accelerating CI/CD pipeline velocity by 3x through configurable scenario generation.
- Transitioned proof-of-concept customer support platform (Zendesk dashboard app) into production-grade React application serving 12-person operations team.

Senior Lead Software Engineer, ButcherBox | Boston, Massachusetts

Jul 2019 – Feb 2022

Tech Stack: Kubernetes, Helm, Docker, Event-Driven Arch, Microservices, Azure, TypeScript, CI/CD, GitHub Actions, Zendesk

- **Hyper-Growth Scaling:** Built backend optimizations handling 10x traffic surge during COVID with zero scaling incidents while competitors went down.
- **Cloud-Native Migration:** Led migration from monolithic architecture to Event-Driven Microservices on Azure and Kubernetes. The patterns became the company standard.
- **DR-Tolerant SDK:** Self-initiated Azure Service Bus SDK development, now deployed across all compatible microservices for disaster-resilient messaging.

VP of Engineering & Lead Systems Architect (Founder), O2O HQ | O2O Global Marketplace | American Fork, Utah

Jun 2015 – Nov 2018

Tech Stack: AWS, Aliyun, PHP, Rest API, Fintech

- Designed distributed architecture spanning AWS (US) and Aliyun (China), solving 'Great Firewall' latency and enabling seamless cross-border e-commerce.
- Architected unified logistics engine integrating 8+ international providers, automating bonded/free-trade import logic across 3 countries.

Principal Engineer, Janeiro Digital | Boston, Massachusetts

Jan 2019 – Apr 2019

Tech Stack: Solid Protocol, React, Node.js, Decentralized Web

- Rescued failing insurance platform 6 months behind schedule by restructuring architecture and coordinating 6-8 remote developers—delivered on-time with zero regulatory compliance issues.
- Delivered real-time quoting engine handling complex state-specific regulations for all 50 states, processing quotes in under 2 seconds across 200+ rule variations.
- Coordinated blended remote/on-site team under pressure, maintaining stakeholder confidence through transparent communication and consistent weekly delivery milestones.

Senior Software Engineer & Team Lead, Modernized Media | Draper, Utah

2014 – 2015

Tech Stack: Marketplace APIs, Automation, SQL

- Led development of multi-channel sales automation achieving +1,700% YOY sales and -44% overhead reduction (shipping -44%, labor -17%) within 1 month of deployment.
- Designed centralized inventory orchestration engine integrating Amazon, Overstock, NewEgg, and 6+ additional marketplaces into unified platform.

Software Engineer, InsideSales.com | Provo, Utah

Jul 2014 – Oct 2014

Tech Stack: AngularJS, Symfony 2, Doctrine, PHP, Salesforce, Git

- Delivered the only two new features for PowerStandings in 90 days while prior developers performed only maintenance—demonstrating high productivity in short tenure.
- Implemented linter, test pass requirements, and minimum coverage commit blockers—establishing code quality gates that raised engineering bar for entire team.

EDUCATION

Computer Software Engineering

Utah Valley University

2010 - 2013

Associate's Degree, Pre-Professional Associate in Science

Utah Valley University

2007 - 2009

PATENTS

Optimized Caching and Updating of Custom Assets RSS Algorithm (2012)

Process Patent for a native asset caching system that significantly improved load speeds across fragmented mobile platforms.

HONORS & AWARDS

Eagle Scout + 3 palms | New Century Scholarship | Dean's List