

Staff Engineer (Flagship)

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

SUMMARY

Staff Engineer who parachutes into the hardest delivery situations and makes them boring. I've rescued a 6-month-behind insurance platform, survived a 10x COVID traffic surge, and deployed GPT-3 in enterprise before most teams had heard of it.

Execution: High-Stakes Delivery, Project Rescue, Zero-Downtime Ops, Crisis Management, Turnaround Leadership

Technical: Load Testing, Performance Tuning, Microservices, Kubernetes, AWS/Azure

Process: Risk Mitigation, Stakeholder Comms, Timeline Management, Cross-Team Coordination

EXPERIENCE

Staff Software Engineer | AI Systems Architect, Ucity 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.

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

- **Flagship Integration:** Single-handedly led and delivered Instacart integration, the company's highest-profile partnership initiative. Owned architectural design, cross-team coordination, and executive visibility end-to-end.
- **Zero-Tolerance Delivery:** Selected as top performer to lead initiatives where failure wasn't an option: ERP integration, ECOM migrations, new business line launches.
- **Executive Trust:** Became the engineer leadership called for critical initiatives. Complex projects, tight timelines, minimal surprises.

Principal Engineer, Janeiro Digital | Boston, Massachusetts Jan 2019 – Apr 2019

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

- **6-Month Turnaround:** Diagnosed failing architecture in week one. Over-abstraction couldn't handle state-specific variations. Restructured to rules-engine approach, delivered 50-state compliance on deadline.
- **Zero Regulatory Defects:** Real-time quoting engine handling insurance regulations for all 50 states. When compliance is non-negotiable, architecture must be right the first time.
- **Post-Mortem Discipline:** Documented root cause analysis for client. The original architecture optimized for developer convenience over regulatory flexibility. Learning transferred to prevent repeat.

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

- **Team Building & Execution:** Built Operations team from 0 (solo) to 9 engineers across 3 specialized squads (Operations backend, CS Support, API migration), then led all 3 teams (12 engineers total) through 10x COVID surge with zero scaling incidents.
- **Platform Stability:** Built platform that became the internal reliability benchmark. When orders grew 50% MoM and competitors went down, we had uneventful days.
- **Performance Under Fire:** In first 90 days, refactored critical paths boosting performance 87%. Established credibility that led to expanded scope and Principal promotion.

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

- **Uneventful Cutover:** Led 289-endpoint migration at 96% production traffic. 99.99% uptime during 50% global traffic cutover. The goal isn't exciting deployments; it's boring ones.
- **Deployment Confidence:** Led first load test in company history—5 sessions, zero system failures. Created culture where teams trust their releases because they've proven them.
- **Structural Capital Recovery:** Delivered \$336K+ annual savings under pressure while maintaining mission-critical reliability. Finance loved the numbers; engineering loved the stability.
- **Predictable Performance:** Achieved 4x order processing (300 to 1,300/5min) through systematic optimization, not heroics. Sustainable velocity, not sprints.

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.

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.

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