

Matt Zandstra — RESUME

Staff Engineer, Enterprise Kubernetes Platform

5+ Years at Lululemon Athletica | Infrastructure Architect | Technical Leader

EXECUTIVE SUMMARY

Staff Engineer with 5+ years building Lululemon's Enterprise Kubernetes platform into foundational infrastructure supporting 80+ teams, 6,000+ active deployments, and 99.99%+ uptime. Deep technical expertise spanning Kubernetes, AWS, infrastructure-as-code, and multi-region architecture, combined with strategic leadership in team development, cross-organizational alignment, and inclusive engineering practices. Demonstrated ability to execute complex infrastructure changes (zero-downtime CNI transitions, multi-region architectural redesigns) while building high-performing teams and driving organizational impact through reliable, scalable systems.

Remote-First Professional: 13 years of entirely remote work (since 2013). Experienced in distributed team coordination, async communication, autonomous execution, and self-directed problem-solving across multiple organizations and time zones.

Work Authorization: Canadian and American dual citizen with full work authorization in both countries.

KEY ACCOMPLISHMENTS & IMPACT

Platform Transformation & Reliability

- Built Kubernetes platform from ground up; grew to support 80+ teams with 6,000+ active deployments across organization
- Maintained 99.99%+ uptime consistency across 5 years of operation, continuous feature development, and large-scale infrastructure changes
- Designed multi-region cluster pair architecture (now organizational standard) enabling latency-based routing with region-level failover for improved resilience

Major Technical Initiatives

- **Kubernetes CNI Transition (Cilium → VPC-CNI):** Led zero-downtime migration of entire production platform affecting 6,000+ deployments with zero pod impact, automated validation, and pre-built rollback. Eliminated specialized vendor dependency while reducing hiring barriers and improving long-term team sustainability.
- **IP Target Group Optimization:** Redesigned NLB ingress architecture to route directly to pod IPs, reducing network hops and latency while resolving conntrack exhaustion issues affecting API Management reliability across all consuming teams.
- **Multi-Region Architecture Design:** Designed latency-based routing with Route53 traffic policies and cluster-level failover, enabling seamless regional transitions and foundation for future service-mesh failover capabilities.
- **IP Space Planning Initiative:** Architected secondary CIDR strategy for long-term pod IP efficiency, enabling continued platform growth to support 3-5x more workloads without exhaustion of address space.

Operational Excellence & Security

- Maintained critical and high-level vulnerabilities below 25 through accelerated patching, node rotation, and security policy enforcement (Kyverno)
- Completed Terraform Cloud migration for full infrastructure-as-code coverage, eliminating manual provisioning steps
- Established observability patterns using Datadog metrics, alerting, and incident response procedures; defined EPIC design template embedding reliability and security requirements before features reach production

Team Development & Organizational Leadership

- Mentored senior and principal engineers across organization on platform patterns and reliability practices
- Developed runbooks and architectural change operational procedures (ACOPs) reducing single-point-of-knowledge risk across team
- Contributed to equitable hiring practices and candidate assessment for platform engineer and senior engineer roles
- Participated in Tech IDEA Committee and People Network initiatives, promoting inclusive technical culture and belonging

Cost Efficiency & Growth Enablement

- Delivered cost-efficiency initiatives enabling platform to support 6,000+ deployments without proportional cost increases, unlocking significant organizational savings
- Enabled self-service adoption patterns reducing per-team operational overhead while increasing platform ecosystem

PROFESSIONAL EXPERIENCE

Staff Engineer, Enterprise Kubernetes Platform | Lululemon Athletica

May 2024 - Present

Technical Leadership & Strategic Direction

- Provide vision and architectural guidance for Enterprise Kubernetes platform evolution supporting 80+ teams and 6,000+ deployments
- Own high-impact technical decisions with documented rationale; mentor senior engineers on platform design, code review, and operational excellence
- Drive execution through roadmap communication, effective delegation, and technical problem-solving
- Sustain platform reliability (99.99%+) and security while advancing AI/GPU workload support and platform enablement

Senior Engineer, Enterprise Kubernetes Platform | Lululemon Athletica

November 2021 - April 2024

Platform Build & Growth

- Built platform from ground up using Terraform/CloudFormation with reproducible clusters and standardized onboarding
- Grew platform from proof-of-concept to organizational foundation: 4 → 12 production clusters; zero → 80+ teams; zero → 6,000+ deployments
- Architected multi-region cluster pair design, led zero-downtime Cilium to VPC-CNI migration, redesigned NLB for direct pod IP routing
- Deployed multi-primary Istio service mesh, Vault secret management, Kyverno policy enforcement, EFS/EBS storage drivers
- Established Datadog monitoring and incident response; maintained 99.99%+ uptime while continuously evolving platform
- Mentored senior engineers on platform patterns; developed runbooks and architectural documentation; contributed to hiring and team onboarding

Senior Engineer (Remote Contractor) | Lululemon Athletica

May 2021 – October 2021

- Assessed infrastructure requirements and began foundational platform work
- Began foundational work on Terraform-based infrastructure provisioning and cluster standardization
- Established initial patterns for observability, monitoring, and operational reliability
- Transitioned to full-time remote employment when company policy shifted in October 2021

Senior Infrastructure Engineer | Spire Digital (Remote)

July 2019 – February 2020

- Built scalable user-facing applications with cloud infrastructure and automated CI/CD pipelines
- Supported legacy system integrations utilizing CloudFormation, AWS DirectConnect, and serverless APIs

Team Lead & Systems Developer | Tesera Systems (Remote)

November 2015 – July 2019, February 2020 – May 2021

- Led team planning, story pointing, and development prioritization across product and engineering teams
- Built serverless React applications with Docker containerization and automated CI/CD testing
- Optimized data-heavy workflows processing millions of records, reducing computation time from years to hours

Project Architect & Developer | childcarepro.ca (Remote)

2012 – November 2015

- Led Agile development from requirements through production support; organized releases with business alignment
- Built highly scalable JavaScript frontends (MVVM pattern) with automated deployment via Bash/Perl/Ruby scripts
- Implemented TDD/BDD practices on legacy Java and WebObjects applications

Web Application Developer & Web Infrastructure Administrator | AvenirIT

2010 – 2012

- Developed SaaS application (SidekickCRM) using PHP, MongoDB, and frontend frameworks
- Managed Rackspace cloud infrastructure and provided technical support

Web Application Developer | Leinco Technologies (Saint Louis, MO)

2008 - 2010

- Developed web portals using PHP, MySQL, Linux; provided IT infrastructure support

TECHNICAL EXPERTISE

Expert Expertise

Infrastructure & Platform: Kubernetes (multi-cluster, multi-region, advanced networking) • AWS Infrastructure (VPC, EC2, EKS, NLB, Route53, IAM) • Terraform & Infrastructure-as-Code • Multi-Region Architecture • Service Mesh (Istio) • Platform Reliability & Operations

Advanced: Container Networking (Cilium, AWS VPC CNI) • Kubernetes Security & Policy Enforcement • Incident Response & SRE • Cost Optimization • Cross-Organizational Leadership

Technologies: Kubernetes (EKS) • Terraform • CloudFormation • AWS (EC2, VPC, Route53, S3, ECS, DynamoDB) • Istio Service Mesh • Vault • Kyverno • Datadog • Docker • Bash • Python • YAML • JSON

Domain Expertise: Large-scale Kubernetes platform operations (80+ teams, 6,000+ deployments) • Zero-downtime infrastructure migrations • Multi-region architecture • Kubernetes security and compliance • Cost efficiency • Team mentoring • Incident response

EDUCATION & PROFESSIONAL DEVELOPMENT

Education

- Computer Analyst Programmer, Red River College (Winnipeg, MB) — June 2012
- AWS Certified Cloud Practitioner, AWS Technical Professional
- KubeCon 2023, AWS re:Invent 2016
- Pursuing: Certified Kubernetes Security Specialist (CKS) — H2 FY26

Performance (FY25)

- Exceptional rating: Exceeded expectations for staff engineer; drove cost-reduction initiatives enabling significant organizational growth

ORGANIZATIONAL IMPACT & LEADERSHIP

Cross-Functional Leadership

- Build trusted partnerships with Security, FinOps, Cloud Foundations, and Developer Experience teams
- Lead Communities of Practice (COP) sharing platform patterns, reliability practices, and cost efficiency insights

- Mentor senior engineers through coaching and career development; support recruiting and candidate evaluation
- Foster psychological safety and equitable participation in technical discussions and design reviews
- Drive technical decision-making on platform choices with documented rationale and strategic execution

PERFORMANCE & CAREER TRAJECTORY

Career Progression

- **May 2021:** Remote Contractor initiating Enterprise Kubernetes platform work
- **November 2021:** Transitioned to Senior Engineer (FTE) as founding team member building the platform
- **May 2024:** Promoted to Staff Engineer; role evolution toward strategic leadership and team enablement

Performance Recognition

- FY25 Rating: Exceptional — Exceeded performance expectations for staff engineer; drove cost-reduction initiatives enabling significant organizational growth
- Strong team relationships and outside-role support; recognized for supporting peers and team members beyond defined responsibilities
- Cross-organizational relationships built with engineers across platform and product teams