

Jesse Heady

Site Reliability, Performance, & Observability Engineering Leader

Profile

With over 15 years of technical leadership and a decade at the forefront of Site Reliability and Performance Engineering, I have driven significant reliability, performance, and operational improvements at 37signals, Realtor.com, and Cox Media Group. Performed an integral role at 37signals during the cloud to on-premise hardware migration, anticipated to save \$1.5 million annually. While working successfully as a remote-first technical leader I've effectively implemented advanced SRE practices, conducted detailed performance analyses, developed load testing frameworks and performance budgets, and championed operational health projects.

As a technical and empathetic leader, I strive to bridge gaps in strategy, communication, planning, and technical specifications, while fostering a team-first culture and empowering future leaders. My experience is rooted in quality, efficiency, and favoring measurements over guesses, and covers a broad spectrum of performance, reliability, and security challenges. I have driven initiatives that enhance system performance and prioritize customer success, resulting in delightful and highly performant user experiences.

Key Highlights:

- Site Reliability & Performance Engineering leader for \$2.5B+ industry-leading real estate & integrated media & broadcasting companies with over 100/50M unique users. Transitioned 37signals to on-premise hardware from AWS cloud, projected to save \$1.5M annually, demonstrating leadership in highly available and massively scaled environments.
- Lead performance architect for 100+ web services CDN optimization and security compliance migration. Achieved a 50% reduction in back-end transactions, service offload above 95%, and an average cost reduction of 40%. Enhanced system resilience and optimized resource allocation for Basecamp and HEY services at 37signals.
- Advanced SRE practices, performance optimizations, and tooling at 37signals through the development of load testing frameworks and performance analysis tools; effectively managing critical security operations during a major DDoS attack.
- Cultivated testing, continuous integration, and observability cultures focused on performance and reliability engineering best practices, leading to the development of comprehensive operational health projects and disaster recovery protocols.
- Technical lead and manager of progressively enhanced Responsive Web Design projects, significantly improved user experience and engagement—performance enhanced by 50% for subscription users and 30% for mobile users. Managed SEO-focused migrations and enhancements of content, maintaining brand equity.

Links

[Website](#)

[LinkedIn](#)

[GitHub](#)

Skills, Tools, & Environments

Site Reliability Engineering

Performance Engineering

Remote Management & Leadership

Agile, Kanban, Lean, & Scrum

Performance Budgets & Load Testing

New Relic, Datadog, Grafana stack

AWS & Cloudflare

CDN, DNS, & WAF

Lambda, API Gateway, & Edge

CI/CD & build automation

Docker & Kubernetes

Terraform & Chef

Apache & nginx

SQL, NoSQL, & Time Series db

Node.js, Ruby, Python, PHP, & Java

CWV, SEO, PWA & Accessibility

Lighthouse, SpeedCurve,

SiteSpeed.io, WebPageTest, K6

Photoshop, Illustrator, & Premiere

HTML, CSS, & JavaScript

Linux/Unix, Windows, Mac

Git version control

Hobbies

Art, Photography, Videography,
Broadcast Streaming (Twitch, OBS),
Writing, Video Games, Tabletop
Gaming

Languages

English, German

Employment History

Senior Site Reliability Engineer at 37signals, Chicago, IL (Remote)

November 2022 — Present

Assisted in the strategic migration of 37signals from AWS to on-premise hardware, aligning with cloud-exit vision and estimated to save \$1.5M annually. Regular participant in SRE follow-the-sun on-call rotation, ensuring 24/7 coverage with additional regional ad hoc support. Responded to a major DDoS attack, managing 1100 PagerDuty incidents over 3 hours; defended authentication service against 80k RPS, successfully blocked 97% of 840M requests via Cloudflare Web Application Firewall (WAF); coordinated DDoS mitigation project after the incident.

Developed K6 load testing tooling; leveraged for ONCE Campfire chat application, enabling scalability tests up to tens of thousands of users. Supported anycast routing tests, confirming high availability service configuration for user routing to regional data centers. Completed performance analysis of HEY Core Web Vitals, providing integral measurements before/after, enabling HA and high-performance email service for European users. Led the Operational Health project, refined the incident response process and developed disaster recovery team drills Terraform PagerDuty template. Developed biannual disaster recovery checkpoints, enhancing response capabilities across the organization. Led development of Chef-managed hosts for Basecamp's mail services, integrating advanced spam/blacklist filtration, conducted end-to-end testing. Coordinated zero downtime maintenance of critical services including production MySQL clusters.

Managed the SEO-focused migration of the Signal vs. Noise blog and Kamal docs site to Cloudflare Pages, ensuring brand integrity. Managed TLS certificates for multiple services using RapidSSL and Cloudflare. Engineered new KVM and Docker host servers and optimized resource allocation for services including Basecamp and HEY. Overhauled operations documentation and developed a client-side search endpoint for improved internal access. Pitched Service Level Objectives, Synthetic and RUM monitoring enhancements across flagship products. Created Chef-managed service clusters for VPN, NFS, and GlusterFS backup hosts. Developed improvements to SLOs, service monitoring with Prometheus and Nagios, integrated synthetic alerting with PagerDuty, and in-house open source chatops tools. Utilized Sentry, DataDog, Grafana, Thanos, and Elastic/Kibana logs for regular performance and reliability analysis.

Senior Manager, Site Reliability Engineering at Realtor.com, Morgantown, WV

August 2021 — October 2022

Focused on operational efficiency and overall health of services for Realtor.com. Managed and mentored remote Site Reliability Engineering team during a prolonged period of organizational change and global pandemic. Collaborated across-org and introduced weekly Operational Health reviews with Technology organization, developed Manager On Call tiered rotation for 90+ SVP/Directors and Managers, and created high visibility and accountability through a Quality of Service process which led to improved focus on quality and Bug SLA, strengthening overall organizational commitment to transparency, accountability, reliability, and quality.

Led blameless review of production incidents, performance issues, resolutions and lessons learned; and reviewed industry leading best practices for the organization to follow or exceed. Fostered knowledge and understanding of Content Delivery Network and capabilities for improved gateway architecture, end user experience, and service offload. CDN offload of 85% was achieved for critical services and improved reliability and resiliency through geo-distribution of requests, reduction of load in service back-end equaling ~40% potential cost savings, and improvement of Time To First Byte (TTFB, an important performance metric) over 80%.

Oversaw incident response, on-call, and post-mortem processes and analysis; observed 18+ month over month improvement of core services SLA and uptime of 99.95%, improving Mean Time to Restore and Change Failure Percentage rates. Provided project and product management of SRE projects, tools, and services. Developed Mobile app monitoring plan to improve operational maturity, observability, and accountability.

Manager, Site Reliability Engineering at Realtor.com, Morgantown, WV

March 2021 — August 2021

Developed and advocated strategic plan and vision for Site Reliability Engineering team at Realtor.com. Enhanced and improved development processes, throughput, tools, and knowledge across organization. Led and delivered security and performance analysis, technical requirements, and release plan of transition from Imperva Distil to PerimeterX edge-based bot mitigation solution. Coordinated zero downtime release of multiple front-end projects concurrent with gateway/edge service tier solution. Led the delivery of a second-tier Web Application Firewall solution, further enabling service security.

Initiated migration planning, strategy, and budget from legacy Neoload load testing tool toward a shift-left, developer friendly K6 load testing solution; supported existing teams' use of Neoload while advocating and supporting test migrations to K6. Established SRE & Performance guild monthly meeting, a forum for discussing reliability and performance knowledge, tools, best practices and other topics across Realtor.com.

Led ad hoc SRE Leadership team which focused on a quarters-long effort of auditing teams' overall resiliency & reliability maturity; produced Maturity Model providing an overall risk assessment scorecard based on Release Process, Alarms & Monitoring, Runbooks, Service Level Agreement, Disaster Recovery, Support, Skill Coverage, Dashboards, and System Resilience for which teams self-assess on a quarterly basis.

Staff Performance Engineer at Realtor.com, Morgantown, WV

April 2020 — March 2021

Led performance engineering efforts at Realtor.com. Enabled visibility and knowledge of standards & best practices, tools, quality, and analysis; embedded with teams and provided high- and low-touch performance consultancy. Fostered a collaborative, performance and reliability focused environment through advocacy, presentations, office hours, and 1:1s across teams. Completed performance analysis and consulted on projects at a deep level to ensure quality across services (WebPageTest, SiteSpeed.io, K6, New Relic, Grafana, Influxdb).

Embedded with teams and proactively assessed, analyzed, and provided decision criteria for overall performance and health of applications and services. Developed SLI, SLO, and SLA baselines and standards; helped teams understand how to focus on Golden Signals for scaled applications. Consolidated documentation of performance tools and standards into company wiki and enabled teams with knowledge of quality standards for highly performant and reliable products.

Championed adoption of Core Web Vitals a year prior to Google's roll out of CWV as an SEO ranking factor. Improved alignment of performance metrics with higher business visibility around Google's Core Web Vitals and common performance metrics; normalized real user measurements (New Relic) and created executive & operational dashboards across standardized tools & CI/CD pipeline (SiteSpeed.io, SpeedCurve). Developed performance budgets and tests for front-end web applications and load tests for service backends (APIs) using SiteSpeed.io and K6.

Consultant at Self-Employed, Morgantown, WV

January 1997 — March 2020

Web performance engineering and site reliability analysis and consulting; graphic and web design services; digital photography and photo manipulation; video and audio mixing; web architecture, networking and IT services.

Lead Performance Engineer at Cox Media Group, Atlanta, GA

August 2015 — October 2019

Established and managed a team of Site Reliability Engineers focused on performance monitoring and analysis, operational efficiency, and security of consumer websites and enterprise services. Provided organizational leadership, mentorship, and defined technical best practices and standardized processes of performance engineering for technical and business teams. Developed education resources, documentation, and training of site reliability tools & automation. Identified problem areas via analysis, prioritized improvements and triaged production issues as they occurred. Provided comprehensive performance engineering leadership, design, and quality guidance to project and product teams developing new features, services, and web applications. Worked with peer management staff and senior leadership to plan and coordinate the implementation of moderate to complex system and software changes.

Solutions Architect at Cox Media Group, Atlanta, GA

[June 2014 — August 2015](#)

Fulfilled principal solutions architect role for newspaper business unit providing technical solutions architecture for 4 major U.S. markets across dozens of high volume applications. Responsibilities included leading technological recommendations for the business and technology teams, drafting and presenting proposals and solutions, reviewing acceptance criteria and requirements, monitoring application performance, developing standards documentation and processes, ensuring overall stability of platform, and reinforcing best practices for user experience.

Manager, Software Development at Cox Media Group, Atlanta, GA

[October 2009 — June 2014](#)

Manager of 7 full time developers. Primary responsibilities include resource allocation, project planning, effort assessments, establishing development standards, facilitating code reviews, and career advancement of direct reports. Additional responsibilities include UI development utilizing web standards compliant HTML, CSS, and JavaScript, JSON, Django, Python, Node.js and XML. Internal and external support queue management and resolution, group leadership, task delegation and peer-review. W3C, SEO, usability and accessibility standards compliance.

Lead Web Developer at COXnet, Atlanta, GA

[September 2007 — October 2009](#)

Web Development utilizing XHTML, CSS, JavaScript (standard libraries such as jQuery), database management, XML, ASP, JSP, and e-commerce platform management. Primary duties include website mock-up from provided site or element designs, site implementation and internal support queue management and resolution. Lead web developer capacity in an agile team environment (scrum methodology). CMS web standards compliance integration utilizing W3C compliant methods, search engine optimized pages, and 508c accessible implementations.

Web & Social Media Manager at Heston Farm, Fairmont, WV

[January 2011 — Present](#)

Developed and maintained brand & e-commerce websites and social media for Heston Farm Winery & Pinchgut Hollow Distillery. Improved initial brand recognition and social media audience through organic and paid marketing by 50%. Maintained network and computer equipment at brick and mortar location in Fairmont, WV.

Technical Solutions Manager at Wicked Wench, LLC, Atlanta, GA

[January 2008 — December 2013](#)

Developed initial branding, website, social media, print, and e-commerce solutions for retail clothing and accessory shops. Implemented the physical point of sale solutions for events and trade show sales.

Web Developer at Speartek, Inc., Atlanta, GA

[March 2006 — September 2007](#)

E-commerce web site design and engineering. Strong use of dynamic-HTML methods, CSS and JavaScript. SEO configuration and management. System administration of MS SQL, IIS, name servers, and mail servers. Direct client interaction via web and telephone regarding high-level technical support issues, CMS training/management and project management.

QA Software Tester at T-Mobile Wireless, Sandy Springs, GA

[August 2005 — March 2006](#)

QA tester for T-Mobile.com redesign, Vesta prepaid refill application and Product Catalog Manager in-house web inventory management tool.

Education & Internships

Computer Science, West Virginia University, Morgantown, WV

August 1998 — May 1999

Apprentice at Slackworks, Inc., Morgantown, WV

January 1995 — December 1998

This Company provided commercial Internet services. Services included website design, CGI scripting, Java, Visual Basic, and C++ programming, network installations and consulting on hardware and software. In this apprenticeship, received training and gained experience in website development, multiple programming languages and software tools, network installation, and hardware maintenance.

Extra-curricular activities

Chair of Public Art, Arts Council of Greater Morgantown, Morgantown, WV

September 2018 — Present

The Arts Council of Greater Morgantown is dedicated to empowering artists, fostering creativity and improving economic vitality, through inclusive art partnerships for a vibrant creative community. The council leads the way for artist advocacy by connecting our community's artisans to economic opportunities, shaping Greater Morgantown into a thriving arts haven, defined by talented individuals and an aspirational creative community. As the chair of the Public Arts Committee, I've assisted with advocacy and facilitation of public works of art such as murals, sculptures, and public events; I also sit on the grants committee and support the community and project grant facilitation role that the council performs with the city, county, and other partners.

Community Leader at tech304, Morgantown, WV

February 2017 — Present

The tech304 group was started in 2017 as an extension of traditional technology meetup groups. One of the main focuses of the group is to build and grow an inclusive, technology-focused community in north-central West Virginia. Our members are technical and web professionals who share their passion and dedication to their craft with one another and the community.

tech304 is a community of technology entrepreneurs, engineers, developers, designers, and product leaders who collaborate and talk about the technologies we use, our successes and failures, job opportunities, collaborative projects, and common goals. The community meets virtually via Slack and also in physical settings, while also supporting and promoting other community groups, causes, events, and goals.

Founder at Rural Mural Project, Morgantown, WV

December 2015 — Present

Founded and established The Rural Mural Project, which promotes public arts for communities throughout the north central region of West Virginia. Public art, such as murals in highly visible public spaces, are an asset to growing communities and a reflection of their vibrant and unique cultures.

The project aligns with place-making best practices to promote arts, community, well-being initiatives, and economic growth. This project focuses on identifying and completing public art projects in cities and rural areas in north central West Virginia and draws inspiration from large scale urban programs to bring public arts to blighted city-scapes,

The goals of the project include advocacy, coordination, funding, and support of regional public arts and local artists in residence, providing uplifting and inspirational art to those communities, and seek to deliver positive benefits of public art to Appalachian communities. The project ultimately seeks to invite national artists to participate in residency and conferences & events series and to create an interactive digital map and photography archive of public art.