

ANDREW BECKWITH

Senior Staff Software Engineer | Technical Lead | AI Orchestration, Distributed Systems & Platform Engineering

Denver, CO | andy@elevationcraft.ai | (612) 849-7369 | elevationcraft.ai

SUMMARY

Senior Staff Software Engineer and technical lead with 24+ years designing, building, and operating large-scale backend and full-stack systems across SaaS, ecommerce, and financial platforms. Operating at principal scope: organization-level standards, multi-team architecture, and agentic delivery workflows adopted across engineering teams.

Currently focused on agentic systems engineering: designing and operating AI orchestration workflows with custom guardrails, live data integration, and measurable impact on engineering velocity and operational safety. This work was built hands-on at Zendesk.

Previously led architectural direction for core email ingestion, HTML parsing, routing, and ticketing infrastructure at Zendesk supporting tens of millions of customer interactions daily.

Recognized for driving platform reliability improvements, mentoring senior engineers, coordinating multi-team initiatives, and delivering AI-augmented workflows that improve development velocity and operational safety.

Driven by a passion for building AI-native delivery systems, with aspirational goals centered on orchestrating agentic delivery of enterprise-grade AI technology solutions — an ambition grounded in hands-on work at Zendesk crafting fully agentic implementation, testing, and rollout workflows that measurably improve engineering velocity and operational safety.

Brings real-world operational leadership experience as a structural and wildland firefighter and EMT, informing disciplined system design in high-risk and mission-critical environments.

CORE SKILLS

AI & Orchestration: Agentic Systems & LLM Orchestration • AI Workflow Integration • MCP (Model Context Protocol) • Prompt Engineering & Guardrails • Local Model Experimentation

Infrastructure & Systems: Distributed Systems • Large-Scale Data Processing • Backend Infrastructure • Email & Ticketing Platforms • HTML Parsing & Classification • API Architecture • Event Processing • Reliability Engineering • RAG • DAG

Languages & Frameworks: Ruby • Python • Go • TypeScript • Java • Node.js • React • Ember • Backbone

Leadership: Technical Lead • System Design • Mentorship • Incident Response • Cross-team Coordination

EXPERIENCE

Zendesk — Denver Metropolitan Area

Senior Staff Engineer / Technical Lead

Mar 2023 – Mar 2026

- Designed agentic JIRA story implementation workflows enforced by custom team-persona rules and guardrails; reduced story review time by 60 to 70 percent, measured by sprint metric scripts and prompted agent skills pulling live JIRA data. Adopted by four engineering teams.
- Built a cross-tool agentic delivery system spanning implementation, automated testing, and feature rollout monitoring, integrating Datadog and PagerDuty-backed skills directly into rollout workflows to surface reliability signals in real time. The rollout-monitoring approach was folded into the support organization's shared Claude-skill tooling.
- Delivered a top-40 Support-wide project in 10 business days against a 4-month estimate: two engineers running parallel workstreams on the agentic implementation workflows and guardrails above.
- Worked with platform teams ingesting and evaluating new generative-AI models for internal use, standing up access, guardrails, and evaluation paths so product teams could adopt them safely (AWS Bedrock, SageMaker, internal ChatGPT; agentic coding tools including Cursor and Antigravity).
- Technical lead for a core engineering team responsible for large-scale backend email ingestion, HTML decomposition, classification, routing, and ticket creation systems operating at Gmail levels of scale.
- Owned architectural direction, delivery strategy, and operational reliability posture for customer interaction processing infrastructure.

- Led design reviews, sprint execution planning, and incident response coordination across multiple engineering teams.
- Reduced production incidents approximately 50 percent year over year through proactive observability investment and Datadog-integrated rollout monitoring, reaching a steady baseline of fewer than 5 incidents per quarter, the majority attributable to upstream/downstream system issues rather than introduced defects.
- Mentored senior engineers and emerging tech leads on system decomposition, tradeoff analysis, and execution discipline.
- Contributed to full-stack platform evolution including backend services, APIs, and frontend system integration points.

Staff Engineer / Technical Lead

Jul 2018 – Mar 2023

- Led backend architecture initiatives increasing resilience and performance of ticket ingestion and notification systems.
- Designed a new email parsing library that eliminated 'robotic' quote delimiters for more than 90 percent of users, measured against production settings data, delivering a vastly improved, more human-like ticket email from Zendesk.
- Coordinated multi-team migrations and performance optimization efforts across distributed pipelines.
- Influenced engineering standards and long-term architectural strategy beyond immediate team scope.
- Partnered closely with product and frontend teams to enable new customer interaction features.

Senior Software Engineer

Oct 2015 – Jul 2018

Minneapolis at hire; relocated to the Denver Front Range in 2017; regular San Francisco onsites throughout.

- Senior contributor on email infrastructure platform handling inbound/outbound processing at mega scale.
- Solved complex parsing challenges involving deeply nested HTML and inconsistent client-generated email formats.
- Built full-stack functionality using Ruby/Rails services and modern frontend frameworks including Ember and React/Redux.

Best Buy

Web Application Developer, Core UI & Checkout

Feb 2015 – Oct 2015

- Built Node.js applications supporting server-side rendering and client experiences in high-traffic ecommerce flows.

Architect, Developer APIs & Platform

Feb 2014 – Feb 2015

- Architected external Developer API ecosystem and portal enabling scalable third-party integrations.
- Defined service patterns, onboarding workflows, and operational standards.

Ruby Developer / Integration Engineering (Independent Contractor)

Oct 2012 – Feb 2014

- Designed and built a Rails/Postgres marketplace automation platform integrating Best Buy product APIs with eBay listing systems.
- Enabled \$40M plus annual incremental revenue through automated pricing and inventory synchronization, with particular focus on open-box item sell-through.
- Implemented batch and event-driven processing pipelines for marketplace operations.
- Helped start eBay's in-store pickup option for large retail sellers.

Wells Fargo

Senior Web Developer

Jul 2009 – Dec 2012

- Selected as Wells Fargo Technology Operations Group (TOG) Top Performer, recognized among the top 1 percent of the technology organization for sustained technical excellence, with 5 of 5 performance ratings and multiple merit advances.
- Led modernization of legacy SOAP and JPF-based services to a RESTful Spring MVC architecture; introduced team-wide coding, testing, and delivery standards that made production incidents a rare event.
- Modernized CI/CD infrastructure by introducing CruiseControl pipelines, Maven dependency management, and Gradle-based deployment scripting, enabling coordinated near-zero-click deployments with integrated monitoring across the team.
- Grew from junior contributor to trusted technical mentor over 5 years; coached engineers within and beyond the team on architecture, testing discipline, and delivery practices.

Web Application Developer

Jan 2007 – Jun 2009

- Contributed to design and build of the internal Wealth Management CRM platform (Private Banking) covering sales, leads, opportunities, and referrals for high-value products including commercial real estate loans, private aircraft financing, and trust instruments; built the Banker Loan Information System as an integrated companion product.
- Developed full-stack functionality across Java/Spring MVC backend services and Backbone.js frontend applications consuming RESTful and SOAP APIs in a regulated banking environment.

EARLIER CAREER

Software Consultant, Modis International (contracted to Wells Fargo)

2003 – 2006

- Consulting engineer on Wells Fargo web applications ahead of converting to a full-time role in 2007.

Intern, TCF Bank

~2002

- Built an intranet CMS on ColdFusion MX.

VOLUNTEER SERVICE

Elk Creek Fire Protection District — Conifer, Colorado

Lieutenant | Structural Firefighter | Wildland Firefighter | EMT-IV

2021 – Present

Certifications: CO FF1 (Structural), FFT2 (Wildland), Haz Mat Ops, EMR (2021 – 2023), EMT-IV (2023 – present).

- Respond to structure fires, wildland fires, and medical calls alongside varied crews and agencies: interior attack, defensive operations, progressive hose lays and fireline construction on initial attack, and emergency medical care across many calls.
- A volunteer lieutenant leads when ranking on scene and follows when scope or experience ranks first; a paramedic runs an ALS medical. The discipline that informs system design also runs the fire ground.

EDUCATION

University of Wisconsin, Madison — Computer Science, AI Concentration. Neural networks and backpropagation, image recognition, heuristics, fuzzy logic, LLMs.

St. Cloud State University — Computer Science.