ANDREW SUNADA

Senior Staff Software Engineer · Browser Platform · Distributed Systems · AI Engineering

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SUMMARY

Senior Staff engineer with 15 years on the web, the last six building the capture-and-replay platform behind **billions of user sessions a month** for Fortune 500 customers. I work across the full depth of the stack, from DOM and iframe internals in the browser to Go services, Kubernetes, and multi-region data pipelines. Teams send me the problems with no clear owner or no clear path. I also bring AI-native engineering into how teams ship: about half of my engineering org uses my standards and Claude Code tooling.

EXPERIENCE

2020 – Now

Quantum Metric Digital analytics & session replay · Remote

Jan 2026 – Present

Senior Staff Software Engineer

- Led a data governance platform from a single-region prototype to **production in all 5 regional clusters in 5 weeks**: a modular detector framework, shared Go packages, per-customer BigQuery results, data-residency routing, an authenticated API, and Helm/Terraform. A new detector now takes about 760 lines and no infra changes, versus 2,100–3,100 before.
- Core builder across the **Replay product**: **Interactions** (page-overlay foundations and API), the **Renderer** (including a rendering service that feeds the company's AI product), and **Download/Export**. Much of it was delivered through AI-native agent workflows.
- Architect of the **replay platform separation**. Traced the capture → ingest → storage → replay path across 5 services, defined the storage contract as the boundary, and designed the extraction of a ~50k-LOC frontend behind enforced import boundaries and API contracts.
- Cut peak replay memory **10× (7 GB → 700 MB)**, ending freezes and out-of-memory crashes, by reworking the active-page model and isolating injected SVG from the DOM path walker.
- Turned a cross-frame focus bug into an **architectural boundary**. The analytics UI now reaches replay only through the session API.
- Built the team **Claude Code plugin** (skills, agents, debugging workflows) and an agent groom → gate → dispatch pipeline. About half of engineering uses them.
- Owner of the capture/ingest logging service. Standardized log payloads after auditing ~370 SDK call sites across web, iOS, Android, and Flutter.

Jan 2023 – Jan 2026

Staff Software Engineer

- Built replay's quality foundation from scratch: a staging environment, real-user error and performance telemetry, and a Playwright E2E suite with a synthetic-site data-mocking harness.
- Wrote a codebase-wide ESLint rule that banned an expensive data pattern and **removed a class of dashboard data-loss bugs**.
- Re-architected the session-details API with a phased rollout. Rewrote event-collapse as an O(n) algorithm.
- Owned the page-overlay visualization layer and its integrator API. Led replay download and export, including native-app replay.
- Go-to engineer across teams for iframe, webview, shadow-DOM, and selector-generation problems.

Nov 2020 – Jan 2023

Senior Software Engineer

- **Delivered the Visible product launch.** Built backend integrations, OAuth, and security, and solved element-visibility detection. The manager said it "would not have been released on time if it were not for his efforts."
- Acting tech lead during the manager's leave. Mentored three engineers. Won a 2022 Hack Week category.

Jul 2019 – Oct 2020

Mozilla Senior Frontend Software Engineer · Portland, OR

- Built a serverless **HLS/WebRTC video streaming service** on AWS (Lambda, S3, DynamoDB, Elemental, API Gateway) with a Vue frontend.
- Contributed to Mozilla's internal **IAM application**, a Vue frontend over microservices.
- Created a shared component framework shipped as both Vue components and framework-agnostic Web Components. Served on the org-wide release and standards team.

Jun 2018 – Jun 2019

Conexess Group → Cigna JavaScript Developer · Portland, OR

- Built Angular/NgRx and Node services for internal content management and a public flow serving ML-driven personalized content. Wrote internal VS Code extensions.

Oct 2017 – Jun 2018

Beyondsoft → HP Front End Developer · Vancouver, WA

- Took a React/Redux/Node/PHP product from half-built to **MVP release** across two stacks with a small team.

Aug 2015 – Oct 2017

AltSource Front End Developer · Portland, OR

- Frontend architect across client teams in a .NET consultancy: AngularJS, KnockoutJS, D3, and TypeScript. Wrote architecture docs and UI mockups and ran client demos.

May 2013 – Jul 2015

Abacast / WideOrbit Web Developer · Vancouver, WA · acquired by WideOrbit

- Built and scaled Clarity, an ad-scheduling platform for digital audio streams (clients included ESPN), and a web radio player. Optimized reporting performance.

2010 – 2013

Earlier Experience

Encapsys (JasperServer reporting, Java/Spring) · MotoSport (PHP, 3-domain e-commerce, on-call) · Hybrid Industries · Business Solutions Group (C#/.NET)

SKILLS

Languages: TypeScript, JavaScript, Go, Python, SQL

Browser platform: DOM capture/replay, MutationObserver, shadow DOM, iframes & postMessage, webviews, SVG, headless rendering, extensions, Web Components

Infrastructure: Kubernetes, Helm, Terraform, Docker, GCP, BigQuery, AWS, Postgres, MariaDB, MongoDB, message bus, caching, SSO/IAP

AI engineering: Claude Code (plugins, agents, skills, MCP), agent workflow design, Cursor

Quality & ops: Playwright, ESLint rule authoring, Grafana/Loki/Prometheus, ADRs

Frameworks: React, Svelte, Vue, Angular, Node, Express, Bun

PROJECTS

Live

Meeko (meekoapp.com): a multi-tenant SaaS for nanny pay tracking, built and run solo: Svelte 5, Express 5, MariaDB, Stripe billing.

Live

TK Wallet (tkwallet.me): a self-hosted household finance app with incremental Plaid bank sync, an AES-256-GCM credential vault, Auth0, and multi-tenant households: React, Express + TypeScript, MongoDB, Linode.

EDUCATION

2012

Oregon State University: B.S. Computer Science · Senior capstone with McAfee