

Experience

Frame.io

Worked primarily on backend web services to power Frame.io's collaborative video management platform. Used: Elixir, Erlang/OTP, PostgreSQL (via AWS Aurora RDS), Kubernetes (via AWS EKS), AWS S3, AWS ECS, Elasticsearch, ORY Hydra, Memcached, React, and Redux.

Senior Backend Engineer

New York City / May 2019 – Present

- Led backend engineering efforts on multiple cross-functional teams to design and implement backend systems for high priority product features. Example projects: secure content sharing via Frame.io; a complete rewrite of Frame.io's memberships and permissions system.
- Successfully took ownership of underinvested backend services and led long running system refactors to completion. Example projects: S3 storage management tooling for media data; account usage tracking for Frame.io subscriptions; automated cache invalidation tooling.
- Led maintenance of Frame.io's proprietary pub/sub system, which is used to process up to 4,000 events per second in our event-driven API service. Used Distributed Erlang to horizontally scale the service across multiple Kubernetes Pods. Reworked event publishing to minimize and isolate spikes in latency during peak usage. Implemented comprehensive instrumentation and monitoring.
- Led backend engineering efforts on a cross-functional team coordinating a multiphase, zero downtime migration from Amazon ECS to Amazon EKS for our primary backend services.
- Frequently led backend engineering response to outages. Used deep domain knowledge to quickly identify incident resolution, wrote postmortems to diagnose root causes, and managed later work to improve resiliency.
- Regularly worked with Support Team colleagues to identify and resolve bugs. Frequently wrote documentation and authored new tools to enable Support Team members to better troubleshoot customer issues.
- Active contributor to the growth of the Backend Engineering Guild at Frame.io. Regularly interviewed candidates, ran onboarding for new team members, and participated in code review of our shared Elixir monorepo.

Senior Full-Stack Engineer

New York City / November 2018 – May 2019

- Built and maintained the core backend services for Frame.io's public developer platform. Exposed a subset of our internal API to the general public via OAuth and individual access tokens. Maintained an OAuth 2 compliant authorization system built with Phoenix and ORY Hydra. Migrated our custom webhook delivery service from Erlang Hackney to Elixir Mint to reduce intermittent dropped webhook requests to zero.
- Designed and built [Rolodex](#), an open-source Elixir package for generating OpenAPI 3 compliant documentation for RESTful APIs built with Phoenix. Used within Frame.io to document all internal and public REST APIs.
- Built the Frame.io Developer website, a Gatsby.js web application used by all developer platform customers to manage their access credentials and custom extensions.
- Regularly worked with external clients to debug issues with extensions built on Frame.io's public API.
- Designed and implemented a system for external developers to publish custom Frame.io extensions for use on any Frame.io account.

Vox Media

Worked across the stack to build features and services for Vox Media's CMS products. Used: Node.js, Ruby on Rails, Ractive, Vue, Elasticsearch, Redis, MySQL, and Fastly.

Full-Stack Engineer 2

New York City / July 2017 – October 2018

- Led engineering efforts on a custom search service for Vox Media's CMS. Work included building the frontend search UI, a parsing layer for a custom keyword search DSL, and an Elasticsearch index versioning system for managing zero downtime breaking changes to our search indices.
- Led engineering efforts on a multi-month project to migrate the user authentication system for Vox Media's CMS services while ensuring zero user downtime.
- Built command-line tooling for managing long-running data migrations for frequent changes to our CMS's strict rich-text content schemas.
- Designed a new user permissions authorization framework used by multiple CMS services.
- Refactored Fastly edge caching for article page metadata tags to improve page load performance.
- Regularly onboarded new team members to Vox Media's CMS services, including writing detailed documentation of our rich-text content modeling tools.
- Mentored a software engineering intern in summers 2016 and 2018.

Full-Stack Engineer

New York City / February 2016 – June 2017

- Core team member that helped rewrite the editor application for Vox Media's CMS from a basic WYSIWYG tool into a rich-text-driven system with concurrent editing support. Owned many core features, designing and implementing both frontend components and backend systems.
- Maintained Chorus' operational transformation autosave pipeline, used for concurrent, conflict-free editing. Updates included: improved conflict resolution, extended change validation to work with multiple content schema types.

Education

M.S. Information Management

Syracuse University / December 2015

B.S. Information Management & Technology

B.A. Political Science

Syracuse University / May 2014 (Summa Cum Laude)

Internships

Fall 2014 – Fall 2015 — BITS Lab / Research Developer

Summer 2015 — Made by Many / Product Engineering

Summer 2014 — Twitter / Program Management

Summer 2013 — Evernote / Developer Relations

Speaking & Events

NYC Elixir Meetup / Co-Organizer

New York City / March 2019 – Present

EMPEX 2019 / Speaker

["Is Elixir Just a Lisp? Metaprogramming in Elixir and Beyond"](#)

New York City / May 2019