

Ethan Weiner Software Engineer

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TECHNICAL EXPERIENCE

Software Engineer & Co-Creator, *Seamless CI/CD*

Jan 2023 – present

Seamless (seamless-cicd.com [🔗](#)) is an open-source, low-config CI/CD pipeline for containerized microservices on ECS.

- Architected a serverless state machine (AWS Step Functions) for orchestrating tasks and running pipelines in parallel.
- Developed 7 TypeScript apps with ECS Task Definitions so each pipeline stage can run and scale independently; configured auto-scaling metrics, a shared Docker volume on EFS, and IAM policies.
- Composed CDK infrastructure-as-code to automated resource provisioning with a CLI (published as an npm package [🔗](#)) that performs a one-command deployment of 13 CloudFormation stacks.
- Transformed a linear pipeline flow into an adaptable system supporting 8 different CI/CD workflows and Git branching strategies (GitHub flow, trunk-based) with various merging, staging, and continuous deployment options.
- Created a RESTful API with Express.js, allowing users to link microservices to pipelines and set up webhooks for automatic triggers; used Octokit for GitHub interaction and an API Gateway to handle requests.
- Implemented a relational data model using RDS for PostgreSQL and the Prisma ORM to facilitate migrations.
- Set up a WebSockets API to facilitate near real-time status updates and log streaming to a React UI hosted on S3.
- Designed an integration testing feature to validate inter-service functionality using Docker Compose.
- Optimized for scale by configuring auto-scaling cloud infrastructure, including Elastic Load Balancer, ECS, Fargate, and ElastiCache; load-tested with AWS and k6.
- Authorized secure access to private user repositories by implementing Github's OAuth web flow.
- Led the authoring of a technical case study [🔗](#) on Seamless' problem domain, architecture, and design decisions.

Full Stack Software Engineer, *Self-Employed*

Jan 2020 – Jan 2023

Developed open-source software; selected projects include:

- JaguarBin: A real-time webhook debugging tool (Socket.io, Nginx, PostgreSQL, MongoDB, Digital Ocean Droplet).
- BloomShare: A community-oriented plant query tool and inventory manager (Ruby, Sinatra, PostgreSQL, Heroku).
- The Smooches: A Dockerized slideshow application (MERN, Docker Compose, EC2, S3).
- Visualize the Web: A geographic simulator and visualizer of packet transmission between IP addresses for an HTTP request/response cycle (Python, Flask, JavaScript).
- Playlist Blender: An app that combines playlists from music streaming services (Vue, JavaScript, RESTful APIs).

Software Engineer, *Reelin' Landscaping*

May 2020 – May 2022

- Built and maintained JobItinerary, a cross-platform progressive web application (PWA) for tracking employee work, compensating employees, and invoicing customers; used to manage 20+ clients (Vue.js, Ionic, Firebase).

SKILLS

Languages

JavaScript, TypeScript, Ruby, Go, Python, SQL

Frameworks & Libraries

React/Redux, Express, Vue, Sinatra, Zod, Flask, Ionic

Cloud

AWS CDK, SDK, API Gateway, EC2, ECS, EFS, RDS, Step Functions, S3, CloudFront, SNS, Digital Ocean Droplets, Firebase, Heroku

Other

Git, Github, Node.js PostgreSQL, MongoDB, Docker, HTML/CSS, Nginx, Prisma, Bash, Jest, Cypress, HTTP, REST, WebSockets

TECHNICAL CONTENT CREATION

- Maintained an active Youtube channel [🔗](#) posting videos on web development, networking, algorithms, and more.
- Published comprehensive blog posts [🔗](#) on a range of technical subjects, including programming and learning.

EDUCATION

Core and Capstone Program, *Launch School* [🔗](#)

Sep 2021 – Apr 2023

Multi-year full-stack software engineering curriculum emphasizing mastery of fundamentals

Northeastern University

Sep 2020 – Jan 2021

Completed Coursework: Fundamentals of Computer Science, Discrete Structures, Intro to Mathematical Reasoning