# **Ethan Weiner**

## **TECHNICAL EXPERIENCE**

#### **Software Engineer & Creator,** Seamless CI/CD

Jan 2023 – Apr 2023

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

- Architected a CI/CD pipeline workflow, using a serverless state machine (AWS Step Functions) to orchestrate tasks, enabling robust control flow and parallel execution.
- Composed CDK infrastructure-as-code to provision all pipeline AWS resources as 13 CloudFormation stacks.
- Adapted pipeline to fit eight different CI/CD workflows and Git branching strategies (GitHub flow, trunk-based development) by implementing various auto-merging, staging, and continuous deployment options.
- Containerized seven TypeScript apps which constitute the pipeline stages; configured Task Definitions for ECS, a shared Docker Volume on EFS, and IAM policies.
- Developed 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.
- Designed and built a React UI for pipeline management, using a WebSocket API for real-time status and log streaming to the dashboard, Zod for form validation, and GitHub OAuth for web app flow.
- Built an integration testing feature to validate inter-service functionality using Docker Compose.
- Collaborated with a remote team of three developers using an agile workflow.
- Led the authoring of a technical case study  $\mathscr{D}$  on Seamless' problem domain, architecture, and design decisions.
- Produced our tech talk, watchable here: https://www.youtube.com/watch?v=L-WulpvBv38 €.

### Full Stack Software Engineer, Self-Employed

May 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 2021 – Jan 2022

• Built 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 (EC2, ECS, API Gateway, IAM, CDK, CloudFormation, CloudFront, S3), Digital Ocean Droplets, Firebase, Heroku

#### Other

Git/Github, PostgreSQL, MongoDB, Docker, HTML/CSS, Nginx, Prisma, Bash, Jest, Cypress, RESTful APIs

## 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

A mastery-based education program focused on software engineering fundamentals

#### Northeastern University

Sep 2020 - Jan 2021

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