# **Ethan Weiner**

# **SKILLS**

#### Languages

JavaScript (ES6), TypeScript, Ruby, Go, Python 3, SQL

#### Cloud

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

#### Frameworks & Libraries

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

#### Other

Git, Github, Node.js, PostgreSQL, MongoDB, Docker, HTML5, CSS, Nginx, Prisma, Bash, Jest, Cypress, HTTP, REST, WebSockets

# **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.
- Set up a WebSockets API to facilitate near real-time status updates and log streaming to a React UI hosted on S3.
- Created RESTful APIs with Express.js and Node, 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.
- Built a CLI (published as an npm package) with CDK infrastructure-as-code that deploys 13 CloudFormation stacks with one command that would take over 50 API calls to AWS to accomplish.
- 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.
- Implemented a relational data model using RDS for PostgreSQL and the Prisma ORM to facilitate migrations.
- Authorized secure access to private user repositories by implementing Github's OAuth web flow.
- Automated manual deployments of microservices, cutting deployment times from hours to under 20 minutes.
- Led the authoring of a technical case study on Seamless' problem domain, architecture, and design decisions.
- Collaborated closely with a distributed team of 3 engineers across 2 time zones using agile workflow.

#### Full Stack 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 (JavaScript, Vue.js, Ionic, Firebase).
- Transformed the company's internal processes, saving over 500 hours of manual record-keeping and invoicing.

## **RELEVANT PROJECTS**

Developed open-source software; selected projects include:

- JaguarBin: A real-time webhook debugging tool (Socket.io, Nginx, PostgreSQL, MongoDB, Digital Ocean Droplet).
- BloomShare: A plant inventory manager and query tool for searching 300,000+ species (Ruby, Sinatra, PostgreSQL).
- The Smooches: A Dockerized slideshow application built with Docker Compose (MERN, EC2, S3, CloudFront).
- 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).

## **TECHNICAL CONTENT CREATION**

- Maintained educational Youtube channel focused on full-stack development with 800+ subscribers and 500k views.
- Published technical articles on programming and learning, helping 500+ students improve assessment performance.

#### **EDUCATION**

## **Core and Capstone Program,** *Launch School*

Sep 2021 - Apr 2023

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

Northeastern University

Sep 2020 - Jan 2021