Ethan Weiner

TECHNICAL EXPERIENCE

Software Engineer, Seamless CI/CD

Jan 2023 - Apr 2023

Created Seamless (seamless-cicd.com \mathcal{O}), an open-source, low-config solution that streamlines the continuous integration and continuous delivery (CI/CD) of containerized microservices

- Architected the CI/CD pipeline workflow, using a serverless state machine (AWS Step Functions) to orchestrate tasks
- Containerized seven TypeScript apps which constitute the pipeline stages; configured Task Definitions for ECS, a shared Docker Volume on EFS, and IAM policies
- Developed an Express backend with API endpoints for creating pipelines and linking microservices; used an HTTP API Gateway to handle requests, Octokit to create webhooks, and Fargate for horizontal scaling
- Adapted pipeline to fit diverse CI/CD workflows and Git branching strategies (GitHub flow, trunk-based development) by implementing various auto-merging, staging, and continuous deployment options (Octokit, state machine)
- Engineered a solution to push containerized microservices to ECR and deploy them to Fargate in a fully decoupled fashion
- Built a React GUI that uses a WebSockets API Gateway to stream pipeline statuses and log feeds in near-real-time; used Zod for schema validation, Github OAuth for security, Tailwind CSS, and Figma
- Published an npm package *⊘* with a CLI to automate AWS infrastructure deployment and teardown (Cloud Development Kit, CloudFormation Templates)
- Optimized for scale using an auto-scaling EC2 group, load balancer (ALB), Fargate cluster, and Redis cache
- Authored a comprehensive technical case study on Seamless's problem domain, architecture, and design decisions, readable at seamless-cicd.com/case-study &

Full Stack Software Engineer, Self-Employed

2020 - 2023

- JaguarBin: A real-time webhook debugging tool (Socket.io, Nginx, PostgreSQL, MongoDB, Digital Ocean Droplet)
- BloomShare: A community-focused plant encyclopedia search tool and inventory manager (Ruby, Sinatra, PostgreSQL, HTML/CSS, Heroku)
- The Smooches: A minimal slideshow application (MERN, Docker Compose, EC2, S3)
- JobItinerary: An application designed for small companies to track employee work and invoice 20+ clients (Vue.js, Ionic, Firebase)
- Visualize the Web: Simulates and visualizes the geographic transmission of data between IP addresses using greedy search algorithms (Python, Flask, JavaScript)
- Playlist Blender: An app that algorithmically blends users' playlists from third-party music services (Vue, JavaScript, REST APIs)
- BHS Scholarship Portal: A platform for submitting and reviewing scholarship applications (Vue, Firebase)
- Published technical and educational content on a Youtube channel @ and Medium blog @ discussing programming, web development, networking, algorithms, and learning

SKILLS

Languages

JavaScript/TypeScript, Ruby, Go, SQL, HTML, CSS

Cloud

AWS CDK, SDK, API Gateway, EC2, IAM, CloudFront, CloudWatch, IAM, RDS, ECS, S3, Lambda, SNS, Digital Ocean Droplets, Firebase, Heroku, Fly.io

Frameworks & Libraries

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

Other

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

EDUCATION

Launch School Sep 2021 – Apr 2023

A mastery-based education program focused on software engineering fundamentals.

Computer Science, Northeastern University

Sep 2020 - Jan 2021

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