# **Zach Kerner**

## Software Engineer

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zachkerner.dev 

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### **PROFILE**

I'm a full stack software engineer with extensive experience in JavaScript and Ruby. I'm proficient in Go, TypeScript and the AWS cloud infrastructure. I'm a culture builder with a talent for reading the emotional states of teammates and colleagues. This has enabled me to work with a wide range of personalities.

### PROFESSIONAL EXPERIENCE

## Creator, Software Engineer

2023 - present

Mayfly &

- Developed a multi-tier architecture for the automated deployment of containerized applications as running instances made accessible through endpoint URLs. (Docker, AWS EC2, AMI, EBS, Lambda, AWSCLI)
- Solved a tricky DNS problem that was preventing communication between drones and running instances.
- Scaled the number of running drones from 1 to 20 allowing us to greatly expand the number of concurrent connections.
- Grasped a challenging, open-source codebase in a foreign language with little documentation. This was critical for solving the scaling problem. (**Rust**).
- Constructed a database schema that halved the number of round trips compared to the original. (**PostgreSQL**)
- Architected a RESTful API in **Node** and **Express** to enable communication between NATS, a pub/sub message queue, the database tier and 3rd party software.
- Designed a UI for streamlining user experience with **React** and Tailwind CSS.
- Authored an in-depth case study *⊘* that provides a comprehensive analysis of Mayfly's problem domain and use case.
- Collaborated with a team of diverse personalities and communication styles. Strong professional rapport was built and maintained.

Software Engineer 2021 – 2023

Self-employed

Developed freelance and open-source applications with a variety of languages and technologies.

- HasBin an application for pooling and debugging webhooks (DO Droplet, MongoDB, Node.js, Express, React, Nginx)
- Pubs an app for rated pickup basketball games (Ruby, Heroku, Sinatra, PostgreSQL)

## **SKILLS**

- Back End Node.js, Express, Ruby, Go, PostgreSQL, MongoDB, REST, APIs
- Front End JavaScript, React, TypeScript, HTML/CSS
- Cloud Digital Ocean, AWS (Lambda, EC2, EBS, ECS, CLI, SDK), Heroku
- Other Docker, GitHub, Bash, Linux, Nginx, OOP, Jest, Postman, Prompt Engineering

## **EDUCATION**

**Launch School** 2021 – 2023

Multi-year, mastery-based software engineering curriculum. Read more at launchschool.com/employers  $\mathscr O$ 

#### **BA Math/BS Economics** 2008 – 2012

Binghamton University

Dual degree in stats based economics and math.

#### Shapell's Rabbinical College 2015 – 2018

Completed a rigorous curriculum in Talmud, Bible and other classical texts in the original Hebrew and Aramaic.