

# Isaak Krautwurst

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## Profile

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Software engineer with years of experience in Ruby, JavaScript, Go, and a variety of frameworks and cloud technologies. I'm passionate about learning, creative thinking, and collaborative development. I am the co-creator of Hypha, an open-source observability framework for distributed systems.

## Professional Experience

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**Co-Creator, Software Engineer, Hypha** [🔗](#) 2021 – present

- Designed, prototyped, and built Hypha: an automated, end-to-end telemetry pipeline that sets up distributed tracing, aggregates existing logs, and correlates logs with traces.
- Engineered the automated instrumentation of Node.js applications to emit logs and traces using OpenTelemetry SDK and Collector.
- Implemented the containerization and configuration of backend services including OpenTelemetry Gateway Collector, Jaeger, Grafana Loki, and Grafana using Docker Compose.
- Developed a custom UI powered by Grafana, providing an intuitive and focused debugging interface.
- Implemented the scaling of Loki and Jaeger services with read/write/store multi-service deployments using Nginx as a reverse proxy for service discovery.
- Engineered the automated provisioning and teardown of AWS cloud infrastructure via AWS CLI, ECS Fargate, and Docker Compose ECS integration.
- Collaborated closely with a remote team of 4 engineers, including daily standups and pair programming.
- Authored Hypha's technical case study [🔗](#)

**Software Engineer, Self-Employed** 2020 – 2021

- Rekwest Bin - A tool for receiving and debugging webhooks (Go, Nginx, Digital Ocean Droplet, MongoDB, PM2)
- Reaction - A trello-inspired Kanban board for project management (React, Redux, Express, MongoDB, Node.js)

**Tutor, Academic Approach** 2016 – 2021

- Worked closely with hundreds of students to improve problem-solving skills and academic knowledge
- Designed and taught curricula for grades 6-12, customized for individual learning styles and needs

## Skills

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### Languages

Ruby, JavaScript, Go, SQL, HTML, CSS

### Frameworks

Express, React, Redux, Sinatra, jQuery, Handlebars

### Cloud

DigitalOcean, Heroku, AWS (EC2, IAM, ECS, ECR, Fargate, EFS)

### Other Technologies

Docker, PostgreSQL, Node.js, MongoDB, HTTP, REST APIs, WebSocket, Webhooks, SSH, Git/GitHub

## Education

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**Software Engineering & Web Development, Launch School** [🔗](#)

Multi-year, mastery-based software engineering curriculum, with progression gated by written exams and live coding interviews to develop problem solving and technical skills.

**B.A. Linguistics, University of North Carolina at Chapel Hill**

2008 – 2012