

Josh Keller

Software Engineer

📍 Kalamazoo, MI ✉ jrkeller@gmail.com 🖱 joshkeller.dev 🌐 josh-keller

PROFILE

A full-stack software engineer who loves collaborating to solve tough problems, learning new things, and believes in the power of software to change the world. Most recently I built Hypha (<https://teamhypha.com>), an open-source observability framework for distributed systems.

PROFESSIONAL EXPERIENCE

Software Engineer, Co-Creator, Hypha 2022 – present

- Created Hypha, which makes debugging distributed systems easier by correlating logs and traces in a single tool
- Built a telemetry data pipeline for generating (OpenTelemetry SDK), processing (OTel Collector, Jaeger, Loki), storing (Elasticsearch & MinIO), and visualizing (Grafana) logs and traces
- Containerized backend services using Docker (network, images, docker-compose)
- Automated deployment to AWS Elastic Container Service on Fargate with Docker Compose ECS integration
- Led resolution of a gRPC error arising from a service publishing the IP address of a network interface that was in use by Fargate, unblocking deployment to AWS ECS
- Increased system scalability by splitting services into read/write/store components using Nginx reverse-proxy for service discovery, allowing for a 10x increase in log ingestion rate
- Developed Hypha Agent script to automatically install and configure OTel Collector to collect logs and traces
- Collaborated closely with a remote team of 4 engineers, including daily standups and pair programming.
- Co-authored the Hypha technical case study. (<https://teamhypha.com/case-study>)

Software Engineer, Self-Employed 2020 – 2022

- RekwstBin: RequestBin-like webhook and HTTP request inspection tool built with GoLang and MongoDB, deployed on DigitalOcean Droplet.
- Reaction: Trello-like project management application built using React/Redux, a Node.js/Express RESTful API, and MongoDB.
- ContactsApp: a simple contacts app built using vanilla JavaScript, Node.js/Express and PostgreSQL. Deployed on Digital Ocean Droplet using Nginx as reverse Proxy.

Music Therapist, Centrica Care Navigators and Self-Employed 2014 – 2020

- Collaborated with interdisciplinary team to plan and deliver music therapy to hospice patients and families.
- Planned, implemented and continuously improved new music therapy programs in several settings.

SKILLS

Back End (Node.js, Ruby, GoLang, Express.js, Sinatra, PostgreSQL, MongoDB, Restful APIs)

Front End (Javascript - ES6, React/Redux, HTML/CSS, Jest)

Other Technologies (Git/GitHub, Linux, Docker, AWS EC2, ECS, Fargate, Heroku, Digital Ocean)

EDUCATION

Launch School, Software Engineering, (A+ average) 2020 – 2022

Multi-year, full-stack software engineering curriculum emphasizing mastery of core development skills and fundamentals of programming, networks, and databases.

Western Michigan University, MM (Music Therapy) 2010 – 2015

Conducted research and authored master's thesis. Taught courses independently as a graduate assistant.

University of Maryland, BA (Music) 2000 – 2005

Included 3 semesters as C.S. Major (C++, Linear Algebra, Discrete Mathematics)