Kal Krueger

Software Engineer

kalkrueger.dev | kkrueger19@gmail.com | Bozeman, MT

EXPERIENCE

2022 Co-creator, Software Engineer - QMantis, Remote

An open-source, easy to set up observability solution for GraphQL APIs that enables seamless analysis of slow requests, errors, and resolver performance

- Created telemetry data pipelines: generating (OpenTelemetry), exporting (OpenTelemetry Collector, Prometheus), storing (Promscale/TimescaleDB), and visualizing (Grafana) metrics and trace data
- Designed custom express-graphql middleware to collect real-time request rate, error rate, and latency
- Captured and stored real-time metrics and traces data into Promscale/TimeScaleDB
- Configured Grafana dashboards for visualizing and analyzing request and error data
- Built and deployed qmantis-express, an NPM package that abstracts instrumentation of metrics and traces using OpenTelemetry SDKs
- Prototyped two additional/alternative Node.js GraphQL servers: a framework-agnostic apollo-server with observability plugins and a custom-built server for Express-based backends
- Automated deployment of QMantis architecture using Docker
- Co-authored technical case study and documentation: qmantis.co
- Collaborated with a remote team of 4 engineers across 3 time zones using agile workflow

2020 - 2022 FULL-STACK WEB DEVELOPER - SELF EMPLOYED, REMOTE

 Created open-source and personal web applications using Javascript, Ruby, React/Redux, NodeJS, SQL, MongoDB, and HTML/CSS

2015 - 2020 Operations & Strategic Management - Vogt's Flowers & Gifts, Flint, MI Largest retail floral operation in Mid-Michigan

 Part of an upper management team that oversaw all departments of the business as well as the direction and well being of the ~50 individuals who make up those departments

EDUCATION

2010 - 2015 THE UNIVERSITY OF WASHINGTON FOSTER SCHOOL OF BUSINESS

Bachelor of Arts in Business Administration, Dual Focus in Finance and Entrepreneurship

2020 - 2022 Launch School

Rigorous software engineering program focused on mastery of fundamentals launchschool.com/employers

SKILLS

FRONTEND

Javascript, React, Redux, Handlebars, HTML, CSS

Tools

Git/Github, Docker, Grafana

BACKEND

Ruby, Express, Go, PostgreSQL, MongoDB, REST APIs, GraphQL

CLOUD

Digital Ocean, Heroku, AWS