

Ian Perkins

SENIOR SOFTWARE ENGINEER

6 Cresswell Ln, Bella Vista, AR 72714

📞 (479)-802-1667 | ✉ ian.r.perkins@protonmail.com | 📱 irperkin | 🌐 ianperkins1

Education

University of Arkansas - Fayetteville

Fayetteville, AR, USA

B.S. IN COMPUTER SCIENCE

Aug. 2014 - May 2018

- Minor in mathematics and graduated with honors.

Skills

Languages (in order of proficiency)

Ruby on Rails, Lua, JavaScript (React.js), Go

Backend Technologies

Openresty, NGINX, Phusion Passenger, Redis, AWS, Azure

DevOps Tools

Docker, Jenkins, GitHub Actions, Kubernetes, Gatling, New Relic, Splunk, Terraform

Work Experience

Fountain

San Francisco, CA, USA

SENIOR SOFTWARE ENGINEER

Sept. 2021 - Jan. 2023

- Improved CI/CD (CircleCI and Github Actions) workflow speed by 66% and 50% for the two most frequently changed and tested repositories.
- Replicated our AWS cloud infrastructure in Azure using Terraform to ensure a resilient and fault tolerant multi-cloud application.
- Led an implementation of a centralized and secured environment variable management service (Doppler) for all deployed services/applications.
- Implemented a runtime analysis tool for unused code that led to the removal of close to 100,000 LOC from our primary application repository.

Cerner

Kansas City, MO, USA

ASSOCIATE SENIOR SOFTWARE ENGINEER

Feb. 2021 - Sept. 2021

- Developed and maintained an organization-wide Ruby on Rails API platform that handled 365 million requests per week for hospitals and clinics worldwide, aggregated across multiple geographical and logical zones.
- Designed and developed a Ruby on Rails rate limiting service to protect the platform and the services behind it due to a high volume of requests, increasing overall availability across the platform.
- Improved monitoring and observability to our web platform by creating a Lua library to communicate telemetry data from the platform to New Relic for analysis and alerts on platform health.
- Answer questions and drive discussion regarding adherence to platform standards like the OpenAPI Specification, Ruby on Rails best practices, and applicable RFCs.
- Mentor new engineers and evaluate whether they are prepared for their permanent team assignment.
- Created a frontend UI in React.js for internal consumers to easily manage how they rate limit their individual APIs.

Cerner

Kansas City, MO, USA

SOFTWARE ENGINEER

Aug. 2018 - Feb. 2021

- Led initiative to decouple the weekly platform deployment testing from the functional validation, integration testing, and prototyping of our contributors' APIs via a Jenkins job and loadbalancer configuration, saving thousands of engineering hours to date.
- Implemented a distroless Docker image that eliminated hundreds of CVEs from unused system packages provided by default in the OS image.
- Transitioned from a WEBrick server to the Openresty web platform with an NGINX web server in order to remove a bottleneck for high volume POST endpoints and streaming resources (upload and download).
- Identified and managed Service Level Objectives (SLOs) and Service Level Indicators (SLIs) to set a baseline expectation for all APIs incorporated into our platform.
- Monitor, support, and resolve metrics alerts from various telemetry sources, scheduled tenant migrations, and incidents related to the platform.
- Maintain and curate platform and services' documentation for external consumers.
- Simplified and centralized our API Developer Guide and platform contribution process to eliminate unnecessary paperwork.
- Developed New Relic dashboard and alert templates using Terraform modules to improve monitoring scalability when deploying to new cloud region zones.
- Responsible for platform health, support, and incident response while on-call and as escalation manager.

Writing

- Discusses the property of rigidity in folding tile assembly models (FTAM) by devising a simple definition of rigidity using a 3SAT reduction to determine its complexity leading to a co-NP-complete result.