Kia Farhang

kfarhang0@gmail.com | kiafarhang.com | github.com/KiaFarhang

Skills

Back End: Golang, Node.js, Java, GraphQL
Dev Ops: Kubernetes, Terraform
Front End: TypeScript, React, Cypress, Jest

Experience

Senior Software Engineer - GraphQL Platform, The New York Times – Remote Oct 2022 – Present

- One of 7 engineers owning the company's GraphQL layer, which serves > 1 billion requests daily and powers the NYT site, mobile apps and dozens of other reader-facing and internal applications
- Planned and led 2024 migration of GraphQL gateway app from Node.js to Rust + Go:
    - Moved from Node.js to open-source Apollo Router, a Rust binary that unlocks new features like GraphQL subscriptions and field-level authorization
    - Designed and led creation of Golang companion microservice that handles business logic like authn/authz, client-aware routing, error handling, etc.
    - Top contributor of commits and pull request reviews
    - On track to save $200k annually in cloud compute vs. the Node app
- Co-led the team's 2024 election resilience effort, 6 months of work including:
    - Improvements in end-to-end tracing, dashboards and documentation to reduce time to detect issues across our system
    - Replacing over-the-internet traffic with cluster-local and private-connectivity routing to reduce latency
    - Helping client teams carve user-critical data out of large GraphQL queries to better prioritize traffic
    - Using K6 load tests to identify bottlenecks in the company's custom Kubernetes networking layer
- Mentored engineers across the experience spectrum:
    - Helped our 2023 summer intern design and build an automated regression test suite (Node.js and Jest) that has prevented multiple major incidents. This intern now works full-time at NYT
    - Guided our team's only mid-level engineer through design + implementation of a system for reconciling conflicting HTTP headers in upstream responses in our Go microservice
    - Paired with a mid-level data engineer through NYT's formal mentorship program. Focusing on communication and leadership skills, helped her get promoted to senior data engineer in late 2024
    - Served an 18-month term on the company's architecture review board, weighing in on proposals for major new systems and significant changes to existing ones

Platform Engineer, DataStax – Remote   Feb 2022 – Oct 2022

- Added functionality to + fixed bugs in the Go microservices powering Astra, the company's Cassandra-as-a-service product
- Supported Astra infrastructure running across dozens of Kubernetes clusters in AWS, GCP and Azure
- Started an initiative to reduce unnecessary spend on stale development images in Elastic Container Registry repos
- Created a disaster-recovery plan for a critical internal database after an incident revealed it had no documentation or clear recovery process

Full-Stack Engineer, DataStax – Remote   Feb 2021 – Feb 2022

- Part of 6-engineer team that owned + supported Astra UI, the front-end portal to the Cassandra-as-a-service product (React front end with Node.js GraphQL layer)
- Improved reliability and observability in the GraphQL server with tools like HTTP retries, standardized logging and improved error handling for better user experience
- Introduced Sonar code coverage and quality gates to the UI codebase to improve delivered product and reduce bugs shipped to production
- Led a successful effort to increase codebase unit test coverage from 15% to 45% over three months
- Added integration and end-to-end tests to our application pipelines with the Cypress testing framework
- Created a Node.js gRPC client for Stargate, the open-source data gateway used and developed at DataStax
- Identified and squashed cross-cutting bugs in back-end Go microservices owned by other teams

Software Engineer, USAA – San Antonio, TX   May 2018 – Feb 2021

- Designed, built and tested React/Redux applications, Java REST APIs and Java batch processes as part of the bank's checking + savings division.
- Led and developed projects around debit/credit card activation, account origination and account closure that served thousands of USAA members daily
- Part of a tiger team tasked with designing, prototyping and standardizing the future state of the checking + savings technology portfolio
- Spent extensive time on call and in high-pressure outage scenarios during a three-month rotation on the divisions's maintenance and production support team

Full-Stack Developer, San Antonio Express-News – San Antonio, TX   June 2017 – Apr 2018

- Built a library of reusable components in React for use in showcasing the paper's strongest stories
- Wrote Node.js web scrapers and other tools to automate and simplify newsroom tasks
- Designed, created and tested Node.js apps to serve data like election results and top-rated restaurants to public-facing pages

Education

University of Minnesota – BA in Journalism   May 2014