

Cole Koester

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Summary: Software developer with 5 years of experience in full-stack programming and cloud architectures, migrations, and operations. Improves and debugs large scale systems while minimizing user disruptions.

PROFESSIONAL EXPERIENCE

Lyft Inc.

New York, NY

Software Engineer, Production Infrastructure

11/2021 - Present

Zone Aware Routing: Improved intra availability zone routing with ROI of \$2 million.

- Reduced inter-AZ production traffic by 40%.
- Migrated 1416 microservices to envoy load balancing subsets.
- Deprecated error prone load balancing components in favor of configuring load balancing subsets in Envoy.
- Wrote design spec and grafana/kibana dashboards. Communicated with customer teams to debug load balancing edge cases.

No More Yaml (NoMoYa): Decreased time-to-deploy networking settings from 15 minutes to less than 30 seconds.

- Implemented new configuration API server (GoLang) and user interface (TypeScript + React) handling circuit breakers, health check endpoints, traffic migrations, and network dependency allow lists.
- Improved team operations through self-service SEV mitigation, preventing context switching from team members.

Control Plane Backend Sharding: Collaborated with tech lead to simplify endpoint discovery.

- Transitioned from leader-elected writers to independent writers, enhancing service reliability and simplifying the deployment pipeline.
- Implemented new data layer on control plane frontend and backend with 0 downtime, and a 99.95% mesh availability SLA.
- Parallelized service discovery queue reducing endpoint query latency by roughly 50%.

Networking Day-to-Day

- Participated in debugging and mitigating more than 100 incidents through analyzing various kibana and prometheus queries, and SSHing into hosts themselves to validate networking components.
- Performed technical deep dives on load balancing, did 30+ candidate interviews, actively helped in team planning, and acted as mentor for both interns and new-hires.

iManage LLC

Chicago, IL

Software Engineer, API

11/2019 - 08/2021

IP Whitelisting and Subdomains: Implemented requirements with ROI of \$1.8 M / Year.

- Implemented new authorization service in GoLang scaling to roughly 10M requests / day. Authorization service handled: vanity subdomains, IP whitelisting, and proxying to core auth service.

API Gateway: Deployed new API gateway edge proxy serving 30M requests / day with a 99.95% success rate SLA.

- Defined and deployed envoy edge proxy configures separate listeners for internal/external clients, and multi-region traffic.
- Deployed ratelimit service with a centralized configuration repo, reducing DDOS risk and putting backpressure on noisy internal services.

EDUCATION

Tufts University

Somerville, MA

Bachelor of Science in Mathematics | QuestBridge Scholar

SKILLS & INTERESTS

- **Languages:** GoLang, TypeScript, Python, Bash, Java, C++, C, Rust
- **Tools:** Envoy, Kubernetes, Terraform, Docker, React, Prometheus, Grafana, Kibana, AWS